

Appendix B Arborist Report and City Approval

Contains:

- Arborist Report prepared by Arbor Resources, dated May 27, 2021
- City of Saratoga Arborist Approval, dated May 16, 2022

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ARBOR RESOURCES

professional consulting arborists and tree care

ARBORIST REPORT

SARATOGA RETIREMENT COMMUNITY

14500 FRUITVALE AVENUE

SARATOGA, CALIFORNIA

Submitted to:

Ankrom Moisan Architects, Inc.
38 NW Davis, Suite 300
Portland, OR 97209

Prepared by:

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Current: May 27, 2021
Prior: March 18, 2020
Initial: February 22, 2019

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	INTRODUCTION	1
2.0	TREE COUNT AND COMPOSITION	2
3.0	SUITABILITY FOR PRESERVATION	4
4.0	PROPOSED TREE DISPOSITION	5
4.1	Tree Disposition Summary	5
4.2	Removal of Protected Trees	9
4.3	Retention of Protected Trees	13
4.4	Relocation of Protection Trees	14
5.0	APPRAISED VALUES AND BONDING	14
6.0	TREE PROTECTION MEASURES	15
6.1	Design Guidelines	15
6.2	Before Demolition, Grading and Construction	18
6.3	During Demolition, Grading and Construction	20
7.0	ASSUMPTIONS AND LIMITING CONDITIONS	23

LIST OF TABLES

<u>TABLE</u>	<u>TITLE</u>	
1	TREE COUNT AND COMPOSITION	2
2	PROPOSED DISPOSITION FOR PROTECTED TREES	5
3	TREE REMOVAL REASONS	10

EXHIBITS

<u>EXHIBIT</u>	<u>TITLE</u>
A	TREE INVENTORY TABLE (21 sheets)
B	SITE MAPS (4 sheets)
C	PHOTOGRAPHS (21 sheets)

1.0 INTRODUCTION

The Saratoga Retirement Community is planning to construct five new structures on their property at 14500 Fruitvale Avenue, Saratoga. Of these, three will be independent living units (Buildings A thru C), one an auditorium, and the other a new fitness building. I have been retained by Ankrom Moisan Architects to prepare this *Arborist Report* (updated from my prior 3/18/20 one), and specific tasks assigned to execute are as follows:

- Visit the site on 2/1/19, 2/12/19, 2/19/19 and 3/13/20 to identify 138 trees presented on a *Tree Removal Plan* (Sheets CS-1.2 thru CS-1.4), prepared by Ankrom Moisan Architects, dated 3/30/20. Revisit the site on 5/20/21 to identify 10 additional trees within or adjacent to the EVA shown on civil plans prepared by Underwood & Rosenblum, dated 4/28/21. Photos¹ were also captured and are presented in Exhibit C.
- Determine each tree's trunk diameter, outside bark, at 54 inches above grade or as appropriate to obtain the most representative sample of trunk size (pursuant to the *Guide for Plant Appraisal, 9th Edition*²). All diameters are rounded to the nearest inch, and trees listed with more than diameter are formed by multiple trunks.
- Ascertain each tree's health and structure, and assign an overall condition rating.
- Rate each tree's suitability for preservation (e.g. high, moderate or low).
- Identify which are defined by the City of Saratoga as a protected tree pursuant to Section 15-50.050(a)(b) of the City's Municipal Code.
- Appraise the monetary value of each protected tree and identify the bond amount.
- Utilize the 3/30/20 *Tree Removal Plan* (three sheets) and 4/28/21 EVA grading layout (one sheet) to identify the trees' assigned numbers, locations and protection fencing zones (hereinafter referred to as the site maps).
- Nail round, silver tags with engraved corresponding numbers onto each tree (not to be confused with old, rectangular aluminum tags affixed by others).
- Review the conceptual demolition and utility plan sets prepared by Underwood & Rosenblum, dated 3/13/20; the above-mentioned *Tree Removal Plan*; and the two sheets of civil plans showing the proposed EVA layout and grading.
- Develop measures to help mitigate or avoid impacts to retained trees during demolition, grading and construction. Also include all items specified on the "City of Saratoga Arborist Report checklist."
- Prepare a written report presenting the above information, and submit via email as a PDF document.

¹ Photos for #1, 3-55 & 57-135 were obtained Feb. 2019; #136-139 on 3/13/20; and #140-149 on 5/20/21.

² Authored by the Council of Tree & Landscape Appraisers and published by the ISA.

2.0 TREE COUNT AND COMPOSITION

One-hundred forty-eight (148) trees of 23 various species were inventoried for this report. They are sequentially numbered as #1-55 and 57-149,³ and Table 1 below, continued on the next page, identifies their names, assigned numbers, counts and overall percentages.

Table 1 - Tree Count and Composition

NAME	TREE NUMBER(S)	COUNT	% OF TOTAL
American sweetgum	28-30	3	2%
Arroyo willow	16	1	1%
Blackwood acacia	107	1	1%
California fan palm	1, 3-7	6	4%
Canary Island date palm	8, 9, 139	3	2%
Cork oak	136	1	1%
Mexican fan palm	53, 149	2	1%
Chinese pistache	65, 68, 69, 132	4	3%
Coast live oak	41-43, 79-83, 85-89, 92-100, 111, 112, 135, 142	26	18%
Coast redwood	2, 10, 11, 67, 72, 73, 75, 84, 90, 91, 101-106, 108-110, 118-126	28	19%
Tuscarora Crape myrtle	50, 52, 55, 57-59, 64, 70, 77, 78, 115-117, 130, 131, 134	16	11%
Deodar cedar	49, 51, 54	3	2%

³ The break in sequential numbering is due to #56, a small 3-inch diameter deodar cedar, having been removed at some point during my tree inventory site work in 2019.

Table 1 continued:

NAME	TREE NUMBER(S)	COUNT	% OF TOTAL
Italian cypress	127, 128	2	1%
Japanese flowering crabapple	60, 61	2	1%
Japanese maple	62, 63	2	1%
London plane tree	13-15, 17-20, 36, 37, 40, 44, 46-48, 137, 138, 140	18	12%
Marina madrone	113, 114	2	1%
Purple-leaf cherry plum	144-147	4	3%
Rotundiloba sweetgum	71, 74, 76	3	2%
Smoke tree	66	1	1%
Tulip tree	21-27, 31-35, 38, 39	14	9%
Valley oak	12, 129, 133, 141, 143, 148	6	4%
Total		148	100%

Specific information regarding each tree is presented within the *Tree Inventory Table* in Exhibit A. The trees' numbers and approximate locations can be viewed on the site maps in Exhibit B, and photographs are shown in Exhibit C.

As illustrated in the table, the site is populated predominantly by coast redwoods and coast live oaks, followed by London planes, crape myrtles and tulip trees.

Eight-five (85) are governed and defined as protected trees per City Code Section 15-50.050(a)(b); they include #1-15, 17-19, 21, 23, 24, 26, 31, 32, 34, 38, 39, 41-43, 46, 48, 53, 67, 72, 73, 75, 79-81, 89-112, 115-122, 126, 129, 133, 136-139, 141-144, 148 and 149.

The locations of #140 and 144 are not shown on the civil plans for the EVA. I represent their trunks on the fourth site map in Exhibit B, but note those locations are only roughly approximate and should not be construed as having been surveyed.

3.0 SUITABILITY FOR PRESERVATION

Each tree has been assigned either a “high,” “moderate” or “low” suitability for preservation rating as a means to cumulatively measure its health (e.g. live crown ratio, vigor, shoot growth, foliage density and color, etc.); structural integrity (e.g. limb and trunk strength, taper, defects, root crown, etc.); remaining life expectancy; location; size; species; tolerance to construction impacts; growing space; and safety to property and persons within striking distance. Descriptions of these ratings and corresponding trees are presented below, the high category consisting of 8 trees (or 6%), the moderate category 116 (or 78%), and the low category 24 (or 16%).

High: Applies to #10, 12, 41, 67, 73, 123, 124 and 133.

These trees appear relatively healthy and structurally stable; have no apparent, significant health issues or structural defects; present a 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.

Moderate: Applies to #1-9, 11, 13-15, 17, 19, 21-28, 30-40, 42, 43, 46, 47, 49-55, 57-60, 62-66, 68-70, 72, 74-79, 81, 84-92, 94-96, 99-106, 108-122, 125-132, 136, 137, 139, 141-143, 148 and 149.

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.

Low: Applies to #16, 18, 20, 29, 44, 45, 48, 61, 71, 80, 82, 83, 93, 97, 98, 107, 134, 135, 138, 140 and 144-147.

These trees have significant health and/or structural defects expected to worsen regardless of tree care measures employed (i.e. beyond likely recovery). As a general guideline, they are not suitable for incorporating into the future landscape, and removal at this time is the appropriate action regardless of future site development. 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 #107, its immediate removal is recommended due to extensive, advanced internal decay and a pronounced lean towards the adjoining street.

4.0 PROPOSED TREE DISPOSITION

4.1 Tree Disposition Summary

The following proposed disposition considers all 148 inventoried trees, and is based on the proposed design and my assessment of their condition and suitability for preservation:

- **Remove** (124 in total): #1-9, 11-37, 44-55, 57-65, 66, 68-72, 74-100, 109-122, 127, 128, 130-132, 134-142 and 144-149.
- **Retain in Place** (21 in total): #10, 38-43, 101-108, 123-126, 129 and 143.
- **Relocate** (3 in total): #67, 73 and 133.

A summary of the proposed disposition for the 85 protected trees is as follows:

- **Remove** (65 in total): #1-9, 11-15, 17-19, 21, 23, 24, 26, 31, 32, 34, 46, 48, 53, 72, 75, 79-81, 89-100, 109-112, 115-122, 136-139, 141, 142, 144, 148 and 149.
- **Retain in Place** (17 in total): #10, 38, 39, 41-43, 101-108, 126, 129 and 143.
- **Relocate** (3 in total): #67, 73 and 133.

Table 2 below, and continued on the following three pages, summarizes the proposed disposition of protected trees and includes their appraised values.

Table 2 - Proposed Disposition for Protected Trees

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
1	California fan palm	-	X	18	-	\$240
2	Coast redwood	-	X	81	-	\$21,800
3	California fan palm	-	X	21	-	\$270
4	California fan palm	-	X	20	-	\$290
5	California fan palm	-	X	20	-	\$290
6	California fan palm	-	X	18	-	\$290
7	California fan palm	-	X	17	-	\$290

Table 2 continued:

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
8	Canary Island date palm	-	X	28	-	\$3,100
9	Canary Island date palm	-	X	27	-	\$2,880
10	Coast redwood	X	-	89	\$43,900	-
11	Coast redwood	-	X	51	-	\$14,700
12	Valley oak	-	X	27	-	\$14,000
13	Columbia London plane	-	X	11	-	\$990
14	Columbia London plane	-	X	14	-	\$1,430
15	Bloodgood London plane	-	X	23	-	\$2,550
17	Columbia London plane	-	X	11	-	\$760
18	Columbia London plane	-	X	11	-	\$0
19	Columbia London plane	-	X	10	-	\$710
21	Tulip tree	-	X	10	-	\$320
23	Tulip tree	-	X	10	-	\$290
24	Tulip tree	-	X	11	-	\$570
26	Tulip tree	-	X	11	-	\$340
31	Tulip tree	-	X	14	-	\$600
32	Tulip tree	-	X	12	-	\$540
34	Tulip tree	-	X	12	-	\$450
38	Tulip tree	X	-	10	\$210	-
39	Tulip tree	X	-	14	\$660	-
41	Coast live oak	X	-	27	\$7,400	-
42	Coast live oak	X	-	15, 12, 11	\$2,800	-
43	Coast live oak	X	-	10	\$580	-
46	Columbia London plane	-	X	13	-	\$880
48	Columbia London plane	-	X	8	-	\$750
53	Mexican fan palm	-	X	16	-	\$200
67	Coast redwood	X*	-	12	\$1,720	-

Table 2 continued:

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
72	Coast redwood	-	X	16	-	\$2,790
73	Coast redwood	X*	-	12	\$2,090	-
75	Coast redwood	-	X	19	-	\$3,780
79	Coast live oak	-	X	24	-	\$3,970
80	Coast live oak	-	X	6	-	\$310
81	Coast live oak	-	X	7	-	\$730
89	Coast live oak	-	X	18	-	\$3,030
90	Coast redwood	-	X	48	-	\$12,900
91	Coast redwood	-	X	45	-	\$10,100
92	Coast live oak	-	X	12, 11	-	\$2,010
93	Coast live oak	-	X	6	-	\$0
94	Coast live oak	-	X	12	-	\$1,060
95	Coast live oak	-	X	16	-	\$2,210
96	Coast live oak	-	X	9	-	\$630
97	Coast live oak	-	X	7	-	\$0
98	Coast live oak	-	X	9	-	\$0
99	Coast live oak	-	X	13	-	\$1,090
100	Coast live oak	-	X	20, 13	-	\$4,060
101	Coast redwood	X	-	37	\$10,200	-
102	Coast redwood	X	-	15	\$1,880	-
103	Coast redwood	X	-	49	\$8,100	-
104	Coast redwood	X	-	30	\$5,900	-
105	Coast redwood	X	-	21	\$2,740	-
106	Coast redwood	X	-	22, 21, 20	\$6,800	-
107	Blackwood acacia	X	-	20	\$0	-
108	Coast redwood	X	-	27	\$4,020	-
109	Coast redwood	-	X	25	-	\$2,850

Table 2 continued:

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
110	Coast redwood	-	X	26	-	\$4,620
111	Coast live oak	-	X	24	-	\$4,250
112	Coast live oak	-	X	38	-	\$8,700
115	Tuscarora crape myrtle	-	X	5, 4(4), 3(3), 2	-	\$780
116	Tuscarora crape myrtle	-	X	3(3), 2, 1	-	\$200
117	Tuscarora crape myrtle	-	X	6, 5, 4, 3, 2	-	\$640
118	Coast redwood	-	X	25, 22	-	\$7,100
119	Coast redwood	-	X	21, 17	-	\$5,400
120	Coast redwood	-	X	33	-	\$8,400
121	Coast redwood	-	X	27	-	\$4,970
122	Coast redwood	-	X	45	-	\$9,400
126	Coast redwood	X	-	26	\$2,700	-
129	Valley oak	X	-	36	\$21,200	-
133	Valley oak	X*	-	13	\$5,600	-
136	Coast live oak	-	X	56	-	\$18,900
137	Columbia London plane	-	X	16	-	\$1,990
138	Columbia London plane	-	X	12	-	\$780
139	Canary Island date palm	-	X	24	-	\$2,340
141	Valley oak	-	X	15	-	\$3,600
142	Coast live oak	-	X	19	-	\$2,700
143	Valley oak	X	-	19	\$4,800	-
144	Purple-leaf cherry plum	-	X	10	-	\$0
148	Valley oak	-	X	31	-	\$17,200
149	Mexican fan palm	-	X	20	-	\$320

LEGEND

* = Retained and relocated

RMV = Remove

DIAM. = Diameter

TOTALS: \$133,300 \$223,340

Additional information regarding the proposed relocation of trees #67, 73 and 133 is provided in Section 4.4 of this report.

Refer to Section 5.0 for the recommended tree security deposit related to trees proposed for retention and relocation.

I suggest efforts are being made to preserve the maximum number of protected trees based on the proposed design and adherence to measures presented within Section 6.0 of this report.

The retention of a few additional protected trees, namely #89 and 102, appears possible. If pursued, sufficient protection dictates a 15-foot setback in all directions from their trunks for any grading, trenching, compaction, excavation or other soil disturbance activity.

Note that any of the 63 non-protected trees can be removed at any time without involvement or approval by the City; they include #16, 20, 22, 25, 27-30, 33, 35-37, 40, 44, 45, 47, 49-52, 54, 55, 57-66, 68-71, 74, 76-78, 82-88, 113, 114, 123-125, 127, 128, 130-132, 134, 135, 140 and 145-147.

4.2 Removal of Protected Trees

As previously identified, the following 65 protected trees are proposed for removal: #1-9, 11-15, 17-19, 21, 23, 24, 26, 31, 32, 34, 46, 48, 53, 72, 75, 79-81, 89-100, 109-112, 115-122, 136-139, 141, 142, 144, 148 and 149.

Section 15-50.080 of the Saratoga Municipal Code presents specific criteria to determine findings for issuing a protected tree removal permit. Based on my review, Criteria 3 thru 9 seemingly apply to removing the 65 protected trees for site development purposes, whereas Criteria 1 also applies to #1, 18, 48, 80, 93, 97, 98 and 144.

On the next and subsequent two pages is a table summarizing each tree's specific number, name, their trunk diameter, underlying reason(s) for removal, City criteria supporting removal, and appraised value. The combined total of the trees' values.

Table 3 - Tree Removal Reasons

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
1	California fan palm	18	Grading, w/in wlkwy, joint trench, storm drain	1, 3 thru 9	\$240
2	Coast redwood	81	Grading, w/in wlkwy, Bldg B	3 thru 9	\$21,800
3	California fan palm	21	w/in Bldg B footprint	3 thru 9	\$270
4	California fan palm	20	w/in Bldg B footprint	3 thru 9	\$290
5	California fan palm	20	w/in Bldg B footprint	3 thru 9	\$290
6	California fan palm	18	w/in Bldg B footprint	3 thru 9	\$290
7	California fan palm	17	w/in Bldg B footprint	3 thru 9	\$290
8	Canary Island date palm	28	w/in future drive aisle	3 thru 9	\$3,100
9	Canary Island date palm	27	w/in future drive aisle	3 thru 9	\$2,880
11	Coast redwood	51	Grading, w/in Colfax Ln	3 thru 9	\$14,700
12	Valley oak	27	Grading, wlkwy, Colfax Ln, bioswale	3 thru 9	\$14,000
13	Columbia London plane	11	Grading, Colfax Ln, Bldg C	3 thru 9	\$990
14	Columbia London plane	14	w/in Bldg C footprint	3 thru 9	\$1,430
15	Bloodgood London plane	23	w/in Bldg C footprint	3 thru 9	\$2,550
17	Columbia London plane	11	w/in Bldg C footprint	3 thru 9	\$760
18	Columbia London plane	11	w/in Bldg C, low SFP	1, 3 thru 9	\$0
19	Columbia London plane	10	w/in Bldg C footprint	3 thru 9	\$710
21	Tulip tree	10	Grading, wlkwy	3 thru 9	\$320
23	Tulip tree	10	Grading	3 thru 9	\$290
24	Tulip tree	11	Grading, wlkwy	3 thru 9	\$570
26	Tulip tree	11	Grading	3 thru 9	\$340
31	Tulip tree	14	Grading, wlkwy	3 thru 9	\$600
32	Tulip tree	12	Grading, wlkwy	3 thru 9	\$540
34	Tulip tree	12	Grading, w/in wlkwy	3 thru 9	\$450
46	Columbia London plane	13	W/in Bldg C footprint	3 thru 9	\$880
48	Columbia London plane	8	w/in drive aisle, at Bldg C, low SFP	1, 3 thru 9	\$750

Table 3 continued:

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
53	Mexican fan palm	16	w/in future street alignment	3 thru 9	\$200
72	Coast redwood	16	Grading, at Meeting Room	3 thru 9	\$2,790
75	Coast redwood	19	w/in Meeting Room footprint	3 thru 9	\$3,780
79	Coast live oak	24	Grading, wlkwy, poor condition	3 thru 9	\$3,970
80	Coast live oak	6	Grading, wlkwy, low SFP	1, 3 thru 9	\$310
81	Coast live oak	7	Grading, w/in wlkwy	3 thru 9	\$730
89	Coast live oak	18	Grading	3 thru 9	\$3,030
90	Coast redwood	48	w/in Bldg A footprint	3 thru 9	\$12,900
91	Coast redwood	45	w/in Bldg A footprint	3 thru 9	\$10,100
92	Coast live oak	12, 11	w/in Bldg A footprint	3 thru 9	\$2,010
93	Coast live oak	6	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
94	Coast live oak	12	w/in Bldg A footprint	3 thru 9	\$1,060
95	Coast live oak	16	w/in Bldg A footprint	3 thru 9	\$2,210
96	Coast live oak	9	w/in Bldg A footprint	3 thru 9	\$630
97	Coast live oak	7	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
98	Coast live oak	9	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
99	Coast live oak	13	w/in Bldg A footprint	3 thru 9	\$1,090
100	Coast live oak	20, 13	w/in Bldg A footprint	3 thru 9	\$4,060
109	Coast redwood	25	Grading, Bldg A, w/in wlkwy	3 thru 9	\$2,850
110	Coast redwood	26	w/in Bldg A footprint	3 thru 9	\$4,620
111	Coast live oak	24	w/in Bldg A footprint	3 thru 9	\$4,250
112	Coast live oak	38	w/in Bldg A footprint	3 thru 9	\$8,700
115	Tuscarora crape myrtle	5, 4(4), 3(3), 2	Near edge of Bldg A	3 thru 9	\$780
116	Tuscarora crape myrtle	3(3),2,1	w/in Bldg A footprint	3 thru 9	\$200
117	Tuscarora crape myrtle	6, 5, 4, 3, 2	w/in Bldg A footprint	3 thru 9	\$640
118	Coast redwood	25, 22	Grading, w/in wlkwy	3 thru 9	\$7,100

Table 3 continued:

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
119	Coast redwood	21, 17	New wlkwy, grading	3 thru 9	\$5,400
120	Coast redwood	33	New wlkwy, grading, storm drain and water lines	3 thru 9	\$8,400
121	Coast redwood	27	Grading, w/in wlkwy	3 thru 9	\$4,970
122	Coast redwood	45	Grading, weak structure	3 thru 9	\$9,400
136	Cork oak	56	Grading, w/in wlkwy, bioswale	3 thru 9	\$18,900
137	Columbia London plane	16	w/in future street/parking area	3 thru 9	\$1,990
138	Columbia London plane	12	w/in future street/parking area	3 thru 9	\$780
139	Canary Island date palm	24	Fire dept. road width clrnce	3 thru 9	\$2,340
141	Valley oak	15	Grading for secondary EVA	3 thru 9	\$3,600
142	Coast live oak	19	Grading for secondary EVA	3 thru 9	\$2,700
144	Purple-leaf cherry plum	10	Nearly dead, grading for wlkwy	1, 3 thru 9	\$0
148	Valley oak	31	Grading for secondary EVA	3 thru 9	\$17,200
149	Mexican fan palm	20	w/in secondary EVA	3 thru 9	\$320

LEGEND

DIAM. = Diameter

SFP = Suitability for preservation

BLDG = Building

wlkwy = walkway

clrnce = clearance

TOTAL: \$223,340

For conformance to City standards, replacements to mitigate removals are required and shall adhere to the following:

- a. The size and amounts of new trees must equate to the combined value of **\$223,340**, and the City replacement values for determining the new trees are as follows: \$350 for a 15-gallon; \$500 for a 24-inch box; \$1,500 for a 36-inch box; \$5,000 for a 48-inch box; \$7,000 for a 60-inch box; and \$15,000 for a 72-inch box.

- b. The new trees should be installed within property limits, or where approved by the City, within the public right-of-way; be beyond canopies of retained trees; and be at least 10 feet from any future wall, hardscape or utility line. For any planted beneath or immediately adjacent to high-voltage wires, I suggest short-growing trees unable to reach within 10 feet from the wires at maturity.
- c. The new tree(s) should be installed, including necessary irrigation, by an experienced state-licensed landscape contractor (C-27) or a state-licensed tree service company (D-49), and performed to professional industry standards. Only if necessary to stand upright, they should be double-staked (no cross-brace) with rubber tree ties or equivalent, and the support stakes cut below the first main lateral branch.
- d. Apply irrigation through an automatic timer, preferably separate from other plant material, and supply through one to two bubblers (minimum two for a 48-inch box). Place and stake the bubblers on the rootball's surface (and not against a trunk, in a sleeve, or on mulch), at around the one-half the distance between the trunk and rootball edges. Additionally, form an 8-inch tall, circular soil berm around the rootball's perimeter, and spread a 3-inch layer of mulch over the rootball's tops, keeping 1-inch from the trunks or bases.

4.3 Retention of Protected Trees

My review of plans listed in Section 1.0 of this report reveals the 17 trees proposed for retention can be adequately protected by adhering to recommendations presented within 6.0 of this report; they include #10, 38, 39, 41-43, 101-108, 126, 129 and 143. Note that, per City specifications, any tree damaged beyond repair during construction will require replacement according to its appraised value.

My review of the existing civil demolition and utility plans reveals no significant impacts to retained trees. In the instance of #101, a section of an existing electrical line within its protection zone will be abandoned and capped a favorable distance of nearly 30 feet away. Also, for #10, I recommend increasing protection by shifting the proposed hydrant and BFP's as far from the trunk as possible.

4.4 Relocation of Protected Trees

I identify three protected trees assigned a high suitability for preservation and appear suitable for relocation; they include two coast redwoods #67 and 73, and one valley oak #133. Redwoods #67 and 73 both have 12-inch trunk diameters, and are vigorous with full crowns and dense canopies. Valley oak #133 has a 13-inch trunk diameter, appears healthy, and has a balanced crown. The design team is reviewing whether this course of action is practical and/or feasible based on numerous factors, such as: future site conditions, sufficient planting space, relocation costs, access to regular and potable irrigation, and storage and ongoing maintenance expenses.

5.0 APPRAISED VALUES AND BONDING

The monetary value of each protected tree, as defined within Section 15-50.050(a)(b) of the City Code, was appraised, and those values are listed within the last column in Exhibit A. Combined, the value for trees proposed for removal equals \$223,340, and the value for those proposed for retention/relocation is \$133,300.

Values were calculated using the *Trunk Formula Method* derived from the *Guide for Plant Appraisal, 9th Edition*, 2000, and in conjunction with the *Species Classification and Group Assignment*, 2004 (published by the Western Chapter of the ISA).

Pursuant to City Code Section 15-50.080(d), in an effort to promote protection of retained/relocated trees, the City requires the owner to obtain and file with the Community Development Director a Tree Protection security deposit equal to 100-percent of their combined value, which is \$133,300. This deposit shall remain in place for the entire construction duration, and following completion of construction and landscape installation, this bond subsequently becomes released after the City Arborist performs a final inspection and provides approval (once any outstanding items are addressed).

6.0 TREE PROTECTION MEASURES

Recommendations presented within this section serve as protection measures to help mitigate or avoid impacts to protected trees being retained, both inventoried and not inventoried for this report. They are subject to revision upon reviewing project plans, and I ("project arborist" hereinafter) 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.

6.1 Design Guidelines

1. Assign each with Tree Protection Zone (TPZ) to represent the specific area of ground where all disturbance and activities shall be excluded, to include but not necessarily limited to, the following: trenching, soil surface scraping, compaction, mass and finish-grading, overexcavation, subexcavation, tilling, ripping, swales, bioswales, storm drains, dissipaters, equipment cleaning, removal of underground utilities and vaults, altering existing water/drainage flows, stockpiling and dumping of materials, and equipment and vehicle operation. For this project, TPZs for all non-redwoods shall be the section of ground contained within an existing planter and beneath a particular tree's entire dripline (i.e. excludes existing parking lots and existing building foundations). TPZs for coast redwoods shall be horizontal distances in all directions from their trunks, linear distances equivalent to 5 to 7 times the trunk diameter. Where an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis to determine appropriate mitigation measures.
2. For trees being retained, review setbacks proposed on plans for grading, utility, hardscape, compaction, trenching, subexcavation and overexcavation, and compare to the TPZ parameters specified above. Where conflicts exist, consult with the project arborist to identify opportunity for increasing setbacks and/or possibly mitigating impacts to achieve a reasonable assurance of protection.
3. Ensure tree numbers and locations are shown on the architectural, civil and landscape site-related plans.

4. Shift the proposed hydrant and BFP's as far from tree #10's trunk as possible.
5. To more thoroughly identify whether retaining oak #129 is an appropriate and safe option, engage a tree service utilizing a pneumatic air device (such as an AirSpade®) to expose the root mass opposite its lean. This work should be performed under supervision by the project arborist, to begin near the base and project outward (the total area is best determined at the time of operation).
6. Specify on the demolition plan to abandon and cut off at existing soil grade all existing, unused lines, pipes and manholes within a TPZ.
7. The permanent and temporary drainage design, including downspouts, should not require water being discharged within the trees' driplines.
8. Bioswales, storm drains and swales shall be established well-beyond TPZs.
9. Route all underground utilities and services (e.g. electrical) beyond TPZs. Where this is not feasible, the section of line(s) within a TPZ should be directionally-bored by at least 4 feet below existing grade, tunneled using a pneumatic air device (such as an AirSpade®), or installed by other means (e.g. pipe-bursting) to avoid an open trench. The ground above any tunnel must remain undisturbed, and access pits and above-ground infrastructure (e.g. splice boxes, meters and vaults) established beyond TPZs.
10. On the final site plan, represent the future staging area and route(s) of access beyond unpaved areas beneath or near canopies.
11. The erosion control design for demolition and construction should represent silt fence and/or straw rolls away from a tree's trunk (not against it), and as close to the canopy edges as possible. Additionally, where within a TPZ, the material should be embedded into the ground by no more than 2 inches deep, and not require the severance of shallow roots.
12. Where within 10 feet from a TPZ overexcavation, subexcavation and compaction shall not exceed 24 inches beyond foundations and retaining walls, 6 inches beyond

inside of curbs (including for gutters), and avoided for trenches. Where needed, shoring shall be required for any underground feature or utility trench to avoid excavation into a TPZ.

13. Ensure specifications by the geotechnical, soils and structural engineers do not require compaction, overexcavation, subexcavation or fill beyond foundations, parking lots or other features where within the above-mentioned distance.
14. A copy of this entire report shall be included within the building permit plan set, excluding Exhibit C (photographs) by copying onto a plan sheet; labeled as Sheets T-1, T-2, etc.; and titled "Tree Protection Instructions." Also, on applicable plans, add the following note (or similar): "All activities shall adhere to recommendations provided within the *Arborist Report*, dated 3/18/20, prepared for this project."
15. Should a walkway be required on existing unpaved ground within a TPZ, it shall be constructed entirely above existing soil grade and surface roots (i.e. a no-dig design), including for base material, edging and forms. Also, direct compaction of soil shall be avoided (levels comparable to foot-tamping are acceptable), and soil fill used to bevel the top of walk to existing grade should not exceed 18 to 24 inches from the walk's edge, not compacted, and placed no closer than 60+ inches from a redwood's base. Tensar® BX Geogrid (www.tensarcorp.com) is a material that can be utilized to help achieve these limited excavation and compaction requirements.
16. The landscape design should conform to the following additional recommendations:
 - a. Large growing trees, such as those which can exceed the height of retained trees, should be installed beyond TPZs, as well as at least 10 to 15 feet from a future foundation, wall and hardscape.
 - b. Plant material installed within TPZs of oak and cedars must be drought-tolerant, limited in amount, and planted at least 3 feet from their trunks. Plant material installed beneath canopies of other trees should be >24 inches from their trunks.
 - c. Irrigation for any new plant material beneath canopies of oaks and cedar should be low-volume, applied irregularly (such as only once or twice per week), and temporary (such as no more than three years). Irrigation should not strike within 6 inches from trunks of existing trees, nor applied against trunks of new trees.

- d. Irrigation and lighting features (e.g. main line, lateral lines, valve boxes, wiring and controllers) should require no trenching within a TPZ. In the event this is not feasible, they may require being installed in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it). In certain instances, a pneumatic air device may be needed to avoid root damage, and any Netafim tubing placed on grade and header lines installed as mentioned above.
- e. For redwoods, the future irrigation design should incorporate Netafim hoses or bubbler emitters for an ongoing supply of potable irrigation to soil beneath and beyond the trees' canopies.
- f. Ground cover beneath canopies should be comprised of a 3-inch layer of coarse wood chips or other high-quality mulch (gorilla hair, rock, stone, gravel, black plastic or other synthetic ground cover should be avoided). Mulch should be kept off the trees' trunks or visible root collars.
- g. New fence posts (posts) should be placed at least 2 to 5 feet from a tree's trunk (depends on trunk size and growth pattern); the post layout should be guided by where large roots are likely located.
- h. Tilling, ripping and compaction within TPZs should be avoided.
- i. Bender board or other edging material proposed beneath the canopies should be established on top of existing soil grade (such as by using vertical stakes).
- j. Herbicides should be avoided within a TPZ, and where used on site, labeled for safe use near trees. Liming shall not occur within 50 feet from a trunk.

6.2 Before Demolition, Grading and Construction

17. The bonding requirements discussed in Section 5.0 of this report must be executed, dependent upon the project's COAs.
18. Per City requirements, the owner, architect and all contractors are responsible for understanding and adhering to recommendations presented in this report.
19. Several weeks prior to mobilizing equipment to the site, conduct a site meeting between the general contractor and project arborist for the purpose of reviewing tree protection fencing locations, trench routes, grading limits, staging, access routes, root pruning, supplemental watering, mulching and other items and protection measures presented in this report.

20. Manually spread, and replenish as needed, a 4- to 5-inch layer of coarse wood chips (1/4- to 3/4-inch in size) over the section of exposed ground within designated-fenced areas and possibly beyond (tbd by the project arborist). The wood chips shall be derived from a tree-service company and approved by the project arborist beforehand.
21. At applicable stages near any TPZ, stake the limits of grading, utility routes, any retaining wall locations, parking lot, curb and drive aisles for review by the project arborist prior to ground disturbance.
22. Prior to demolition, and during all dry months of the year (e.g. May through October) apply potable water to unpaved ground beneath tree canopies, every two to three weeks, or as determined by the project arborist. Further review and discussion regarding the watering methodology, frequency and amounts can be provided closer to site demolition and consultation with the general contractor. In the event dewatering is required for this site, note that the watering program shall be more intensive than otherwise needed.
23. Tree protective fencing shall be installed prior to equipment arriving to the site and demolition activity, and inspected by the City Arborist prior to permit issuance (the project arborist could satisfy inspection if designated by the City Arborist). The specific locations shall be located with the project arborist at the initial site meeting, replicate as shown on the site maps in Exhibit B, and enclose entire unpaved ground within TPZs. It shall consist of 6-foot tall chain link mounted on 2-inch diameter, galvanized steel posts that are driven about 24 inches into the ground and spaced no more than 10 feet apart.
24. Once fencing becomes installed, post warning signs of at least 8-1/2 by 11 inches in size on each fence side facing demolition and construction activities, and contain the following text: "TREE PROTECTION FENCE - DO NOT MOVE OR REMOVE WITHOUT APPROVAL FROM CITY ARBORIST."
25. Where fencing cannot be installed to enclose unpaved ground within a TPZ, a root zone buffer shall be established (e.g. between protection fencing and a new building foundation). It shall consist of a 6- to 8-inch layer of coarse wood chips (1/4- to 3/4-

inch in size) spread over unpaved ground and surfaced roots, and at the contractor's discretion, sheets of plywood could be laid on top and tied together for a steadier walking surface. Alternative buffers can also be reviewed.

26. Where applicable (see Exhibit A), clear soil to expose any buried root collars.⁴ This work must be manually and carefully performed to avoid damaging the trunk and roots during the process, and preferably by a tree-service company using an AirSpade to avoid unnecessary root and/or trunk damage.
27. Any trees which have wooden support stakes should be examined to determine if stakes can be removed (note they can adversely impact a tree's lateral root development anchoring capacity if remain too long, such are more than two years).
28. The company contracted to perform relocation shall be engaged several months or more prior to relocation occurring for purposes of reviewing the specific trees, logistics, future locations, watering program, etc. They shall be 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 adheres to the most recent ANSI A300 (Part 6) standards. The actual relocation process shall commence before any demolition occurs, whether for temporarily storing or immediately transplanting (either through boxing or utilizing a tree spade).
29. 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. I further recommend any fertilization is performed under the direction and supervision of a certified arborist, and in accordance with the most recent ANSI A300 Fertilization standards.

6.3 During Demolition, Grading and Construction

30. Great care must be taken during demolition of all existing hardscape and features within and near TPZs, to avoid excavating into the ground and disturbing roots. Great care must be taken by equipment operators to position their equipment to avoid

⁴ A "root collar" is the distinct swollen area near the ground where buttress roots and the main trunk merge.

the trunks and branches of trees, including the scorching of foliage. Contact the project arborist well in advance of any potential conflict.

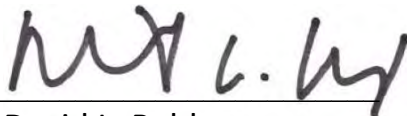
31. Approved digging or trenching within a TPZ, as well as any plant material removed from within a TPZ, shall be manually performed without the use of heavy equipment, including small tractors.
32. Where within TPZs of redwoods, the removal of existing parking lot and drive aisles avoid excavating into existing base material underlying the hardscape surface until first reviewed by the project arborist. There may be instances where existing base must be retained to avoid damaging significant roots (all to be addressed on a case-by-case basis).
33. Any necessary pruning and the removal of trees within TPZs of retained trees shall be performed under direction of the project arborist and as follows: by California state-licensed tree service company (D-49 classification) that has an ISA certified arborist in a supervisory role, carries General Liability and Worker's Compensation insurance, and abides by the most recent ANSI A300 standards. Additionally, the removal of stumps shall only be performed using a stump grinder versus excavating into the ground and inadvertently damaging roots of retained trees.
34. Roots encountered with diameters of ≥ 2 inches must be retained, buried by soil or covered by wet burlap that remains continually moist until the root is buried, and assessed by the project arborist. If authorized by the project arborist for cutting, cleanly sever at 90° to the angle of root growth against the cut line using sharp cutting tools (e.g. loppers or handsaw), and then immediately after, the cut end shall be either buried with soil or kept continually moist by burlap until the dug area is backfilled. Roots encountered with diameters < 2 inches can be cleanly severed at a 90-degree angle to the direction of root growth.
35. Spoils created during digging must not be piled or spread within a TPZ. If necessary, they can be temporarily piled on plywood or a tarp.

36. Digging holes for any new wood fence within a TPZ shall be manually performed, and in the event a root of ≥ 2 inches in diameter is encountered during the process, the hole should be shifted over by 12 inches and the process repeated.
37. Tree trunks shall not be used as winch supports for moving or lifting heavy loads.
38. Dust accumulating on trunks and canopies during dry weather periods may need to be periodically washed away (e.g. every three to four months).
39. Avoid disposing harmful products (such as cement, paint, 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. Liming shall not occur within 50 feet from a trunk.
40. Once construction is complete, and prior to removing protection fencing, the City Arborist shall be contacted to schedule a final inspection. The replacement trees should be scheduled for planting around the same time frame.

7.0 ASSUMPTIONS AND LIMITING CONDITIONS

- All information presented herein reflects my observations and/or measurements obtained from the ground and project site on 2/1/19, 2/12/19, 2/19/19, 3/12/20 and 5/20/21.
- Observations were obtained visually without probing, coring, dissecting or excavating.
- The documented condition of dormant trees are subject to change once they can be observed following complete regrowth of new leaves.
- The assignment pertains solely to trees listed in Exhibit A, and 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 the desired results may be achieved by following my recommendations and/or precautionary measures (verbal or in writing).
- 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 recommendations presented in this report.
- 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 fourth site map in Exhibit B are solely intended to represent a tree's approximate trunk location and should 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:



David L. Babby

Registered Consulting Arborist® #399

Board-Certified Master Arborist® #WE-4001B

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

Date: May 27, 2021



EXHIBIT A:

TREE INVENTORY TABLE

(21 sheets)



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
1	California fan palm (<i>Washingtonia filifera</i>)	18	70%	70%	Good	Moderate	X	\$240
<p style="text-align: center;">Comments: Trunk is a few feet from walk, and lower portion is buried by rosemary groundcover. Sinuous trunk.</p>								
2	Coast redwood (<i>Sequoia sempervirens</i>)	81	40%	50%	Poor	Moderate	X	\$21,800
<p style="text-align: center;">Comments: Trunk is within 16' of curb for drive aisle. Pronounced root crown (lignotuber). Roughly 120' tall. Notably thin canopy with dieback at top. Trunk bifurcates 70' high, the smaller leader of the two having been reduced in height many years ago. Narrow crown. Grows within a large planter.</p>								
3	California fan palm (<i>Washingtonia filifera</i>)	21	50%	80%	Fair	Moderate	X	\$270
<p style="text-align: center;">Comments: Nutrient deficiency. Fronds possibly infected by diamond scale.</p>								
4	California fan palm (<i>Washingtonia filifera</i>)	20	60%	80%	Fair	Moderate	X	\$290
<p style="text-align: center;">Comments: Nutrient deficiency. Fronds possibly infected by diamond scale.</p>								
5	California fan palm (<i>Washingtonia filifera</i>)	20	60%	80%	Fair	Moderate	X	\$290
<p style="text-align: center;">Comments: Nutrient deficiency. Fronds possibly infected by diamond scale.</p>								
6	California fan palm (<i>Washingtonia filifera</i>)	18	60%	80%	Fair	Moderate	X	\$290
<p style="text-align: center;">Comments: Nutrient deficiency. Fronds possibly infected by diamond scale.</p>								
7	California fan palm (<i>Washingtonia filifera</i>)	17	60%	80%	Fair	Moderate	X	\$290
<p style="text-align: center;">Comments: Nutrient deficiency. Fronds possibly infected by diamond scale.</p>								
8	Canary Island date palm (<i>Phoenix canariensis</i>)	28	60%	80%	Fair	Moderate	X	\$3,100
<p style="text-align: center;">Comments: Nutrient deficiency.</p>								

**TREE INVENTORY TABLE**

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			

9	Canary Island date palm (<i>Phoenix canariensis</i>)	27	50%	80%	Fair	Moderate	X	\$2,880
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Comments: Nutrient deficiency.

10	Coast redwood (<i>Sequoia sempervirens</i>)	89	70%	80%	Good	High	X	\$43,900
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Comments: Broad 70' wide canopy, and has a nearly full crown. Roughly 90' tall. Pronounced root crown (lignotuber). Grows in a large planter, slope rises along three sides beneath canopy (in a bowl). Canopy extends over existing roof.

11	Coast redwood (<i>Sequoia sempervirens</i>)	51	50%	50%	Fair	Moderate	X	\$14,700
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Comments: Grows at edge of #10's canopy. History of limb failure. Roughly 70' tall. Has somewhat of a thin canopy.

12	Valley oak (<i>Quercus lobata</i>)	27	60%	60%	Fair	Moderate	X	\$14,000
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Comments: Dormant. Within a large planter. Has a few large, old wounds along lower trunk, all closed by woundwood. Asymmetrical canopy bows north. Thin top. Considerable amount of pruning in past.

13	Columbia London plane tree (<i>Platanus × h.</i> 'Columbia')	11	70%	60%	Fair	Moderate	X	\$990
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Comments: Dormant, as is the case for all London planes at the site. Low canopy overhanging drive aisle (located along slope and above drive aisle).

14	Columbia London plane tree (<i>Platanus × h.</i> 'Columbia')	14	70%	50%	Fair	Moderate	X	\$1,430
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Comments: At top of slope above lot and with surface roots throughout planter. Has a partial girdling root. Branches encroach near security light. Excessive limb weight.

15	Bloodgood London plane tree (<i>Platanus × h.</i> 'Bloodgood')	23	60%	50%	Fair	Moderate	X	\$2,550
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Comments: Asymmetrical canopy, dominant along south side. Limb structure begins at 6' high. Within a large planter.



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
16	Arroyo willow (<i>Salix lasiolepis</i>)	9	30%	40%	Poor	Low	-	-
<p>Comments: Has a few large, torn and decaying wounds along trunk. Extremely sparse canopy. Located along slope above lot. Excessive limb weight over lot.</p>								
17	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	11	60%	40%	Fair	Moderate	X	\$760
<p>Comments: Codominant tops. At fire hydrant, and adjacent curb is cracked.</p>								
18	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	11	60%	20%	Poor	Low	X	\$0
<p>Comments: Has a pronounced westerly lean towards parking spaces, and a surfaced buttress root roughly opposite lean, an indication the tree partially uprooted sometime ago. Leggy form. In finger island and has a thin canopy.</p>								
19	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	10	70%	40%	Fair	Moderate	X	\$710
<p>Comments: Within a narrow planter, and adjacent curb is cracked in a few locations. Codominant tops. Has a few small girdling roots.</p>								
20	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	8	50%	20%	Poor	Low	-	-
<p>Comments: Within a narrow planter, and adjacent curb is raised and cracked. Trunk leans west, and has a large surfaced root crown opposite the lean and large girdling root. Excessive limb weight, particularly over lot. Leggy form and has a thin canopy.</p>								
21	Tulip tree (<i>Liriodendron tulipifera</i>)	10	60%	40%	Fair	Moderate	X	\$320
<p>Comments: Dormant, as is the case with all tulip trees at the subject site. Codominant tops begin at 22' high. Located on gentle slope, trunk being several feet uphill from walk.</p>								
22	Tulip tree (<i>Liriodendron tulipifera</i>)	<10	60%	40%	Fair	Moderate	-	-
<p>Comments: Trunk diameter of 9.6". Codominant tops begin at 5' high.</p>								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
23	Tulip tree (<i>Liriodendron tulipifera</i>)	10	60%	30%	Poor	Moderate	X	\$290
Comments: Codominant tops begins at 15' high.								
24	Tulip tree (<i>Liriodendron tulipifera</i>)	11	70%	80%	Good	Moderate	X	\$570
Comments: Ideal vertical form with a central trunk.								
25	Tulip tree (<i>Liriodendron tulipifera</i>)	9	60%	50%	Fair	Moderate	-	-
Comments: Codominant and sinuous leaders originate at 17' high.								
26	Tulip tree (<i>Liriodendron tulipifera</i>)	11	70%	30%	Fair	Moderate	X	\$340
Comments: Codominant leaders with a narrow attachment originate at 18' high.								
27	Tulip tree (<i>Liriodendron tulipifera</i>)	9	60%	30%	Poor	Moderate	-	-
Comments: Lower 2' of trunk is covered by ivy. Along slope. Codominant leaders originate at 23' high and form a weak attachment. Deadwood.								
28	American sweetgum (<i>Liquidambar styraciflua</i>)	6	60%	30%	Poor	Moderate	-	-
Comments: Codominant leaders at 13' high. Excessive limb weight. Dormant. Amongst BFPs.								
29	American sweetgum (<i>Liquidambar styraciflua</i>)	5	40%	30%	Poor	Low	-	-
Comments: Poor lateral root development. History of limb failure and has a decaying stub. Near light pole. Deadwood and broken branches in canopy. Dormant. Among BFPs.								
30	American sweetgum (<i>Liquidambar styraciflua</i>)	6	60%	40%	Fair	Moderate	-	-
Comments: Between BFPs. Has a partly buried root collar. Deadwood. Dormant.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
31	Tulip tree (<i>Liriodendron tulipifera</i>)	14	70%	30%	Fair	Moderate	X	\$600
Comments: Codominant leaders at 23' high and form a very narrow, weak attachment.								
32	Tulip tree (<i>Liriodendron tulipifera</i>)	12	60%	60%	Fair	Moderate	X	\$540
Comments: Excessive limb weight, including over lot. Small girdling roots.								
33	Tulip tree (<i>Liriodendron tulipifera</i>)	<10	40%	30%	Poor	Moderate	-	-
Comments: Trunk diameter of 9.6". Sinuous and leggy crown.								
34	Tulip tree (<i>Liriodendron tulipifera</i>)	12	70%	30%	Fair	Moderate	X	\$450
Comments: Codominants form a weak attachment at 24' high.								
35	Tulip tree (<i>Liriodendron tulipifera</i>)	6	60%	50%	Fair	Moderate	-	-
Comments: Sinuous lower mid-trunk.								
36	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	<10	60%	50%	Fair	Moderate	-	-
Comments: Trunk diameter of 9.8". Slight easterly lean. Large surface roots throughout planter. Deadwood.								
37	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	8	60%	40%	Fair	Moderate	-	-
Comments: Leggy crown with deadwood. Surface roots throughout planter.								
38	Tulip tree (<i>Liriodendron tulipifera</i>)	10	60%	30%	Poor	Moderate	X	\$210
Comments: Base is within several feet of building, and trunk grows at a pronounced lean away from, then sweeps back towards and reaches over roof. Large surface root mass downslope.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
39	Tulip tree (<i>Liriodendron tulipifera</i>)	14	70%	40%	Fair	Moderate	X	\$660
Comments: Located along slope. Surface roots throughout planter. Codominant leaders at 30' high.								
40	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	7	60%	40%	Fair	Moderate	-	-
Comments: Leggy form and excessive limb weight over drive aisle. Buttress roots are surfaced in planter. Branches cover security light. Among four irrigation valves and one meter.								
41	Coast live oak (<i>Quercus agrifolia</i>)	27	70%	40%	Fair	High	X	\$7,400
Comments: Located w/in sewer easement. Structure formed by three codominant leaders originating 3.5' high. Unmaintained with no immediate targets. Deadwood throughout lower crown. Western sycamore damage along lower crown and trunk.								
42	Coast live oak (<i>Quercus agrifolia</i>)	15, 12, 11	40%	30%	Poor	Moderate	X	\$2,800
Comments: Located within sewer easement. Buried root collar. Unmaintained within no immediate targets beneath. History of limb failure and has deadwood. Significant western sycamore borer damage, as well as Hypoxylon canker along 15" & 12" trunks. Has an old and large decaying wound at union to grade, to the extent woundwood has formed along the decayed margins. Internal exam seems needed should any targets become introduced. Formed by three trunks having a weak attachment at their union 1' above grade.								
43	Coast live oak (<i>Quercus agrifolia</i>)	10	40%	40%	Poor	Moderate	X	\$580
Comments: Located within sewer easement. Buried root collar. Sinuous trunk, and canopy grows at fringe of #41's and 42's. Trunk is a few feet from curb.								
44	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	3	50%	20%	Poor	Low	-	-
Comments: Lanky trunk. Deadwood. Poor lateral root development.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
45	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	6	60%	20%	Poor	Low	-	-
<p>Comments: Within a narrow planter. Has an old decaying wound from an old tear. Large girdling root surrounds nearly the entire circumference.</p>								
46	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	13	60%	30%	Poor	Moderate	X	\$880
<p>Comments: Leans west. Has a large girdling root, and buttress roots are surfaced throughout narrow planter. Leggy codominant crown with a history of limb failure. Excessive limb weight. Weak attachment at union of multiple leaders at 18' high.</p>								
47	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	8	70%	60%	Fair	Moderate	-	-
<p>Comments: Multi-leader crown. Located within a narrow planter.</p>								
48	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	12	60%	30%	Poor	Low	X	\$750
<p>Comments: Poor form comprised of codominant leaders being leggy and a wide, sinuous attachment. Broken branch dangling from lower canopy. Several old decaying wounds in lower crown. Large buttress in narrow planter and leans SW. Adjacent to fire hydrant.</p>								
49	Deodar cedar (<i>Cedrus deodara</i>)	5	60%	80%	Good	Moderate	-	-
<p>Comments: Full crown and buried root collar.</p>								
50	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3	50%	20%	Poor	Moderate	-	-
<p>Comments: Pollarded (headed back) at some point since photos for this report were taken; pertains to all crape myrtles which are identified in this report as currently being pollarded. Also dormant, which pertains to all crape myrtles inventoried for this report. Single-staked.</p>								
51	Deodar cedar (<i>Cedrus deodara</i>)	6	70%	80%	Good	Moderate	-	-
<p>Comments: Full crown.</p>								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
52	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3	50%	20%	Poor	Moderate	-	-
Comments: Pollarded. Double-staked. Buried root collar.								
53	Mexican fan palm (<i>Washingtonia robusta</i>)	16	70%	30%	Poor	Moderate	X	\$200
Comments: Roughly 25% of the trunk's base has grown over curb, creating a situation where the tree's structural stability is reliant on the curb. Moderate to low suitability.								
54	Deodar cedar (<i>Cedrus deodara</i>)	5	50%	30%	Poor	Moderate	-	-
Comments: Full crown. Guy wires and stakes are affixed in tree. Moderate suitability if roots are anchored, low if reliant on guy wires.								
55	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3	50%	20%	Poor	Moderate	-	-
Comments: Pollarded. Double-staked. Buried root collar.								
57	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3	50%	20%	Poor	Moderate	-	-
Comments: Pollarded. Single-staked.								
58	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	50%	30%	Poor	Moderate	-	-
Comments: Pollarded. Double-staked. Buried root collar.								
59	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	1	50%	20%	Poor	Moderate	-	-
Comments: Pollarded. Double-staked. Buried root collar.								
60	Japanese flowering crabapple (<i>Malus floribunda</i>)	4	70%	50%	Fair	Moderate	-	-
Comments: Dormant. Multiple leaders originate at 3' high. Limbs encroach slightly into walkway, but most of canopy overhanging walk is elevated at 6' high.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
61	Japanese flowering crabapple (<i>Malus floribunda</i>)	2	60%	20%	Poor	Low	-	-
Comments: Dormant. Small tree within a raised and very narrow planter. Central leader cut in past and has poor lateral root development.								
62	Japanese maple (<i>Acer palmatum</i>)	3	70%	50%	Fair	Moderate	-	-
Comments: Multiple leaders at 3.5' high. Buried root collar with an asymmetrical canopy.								
63	Japanese maple (<i>Acer palmatum</i>)	2	70%	60%	Fair	Moderate	-	-
Comments: Narrow form and buried root collar.								
64	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	60%	40%	Fair	Moderate	-	-
Comments: Double-staked. Pollarded in past.								
65	Chinese pistache (<i>Pistacia chinensis</i>)	7	70%	50%	Fair	Moderate	-	-
Comments: Broad canopy. Rootball planted in basin lower than surrounding grade on all four sides. Multiple leaders originate at 5.5' high.								
66	Smoke tree (<i>Cotinus coggygria</i>)	3, 3, 2, 1	50%	40%	Poor	Moderate	-	-
Comments: Four trunks at grade. Buried root collar. Pollarded in past.								
67	Coast redwood (<i>Sequoia sempervirens</i>)	12	70%	70%	Good	High	X	\$1,720
Comments: Full crown. Planted on a tall mound.								
68	Chinese pistache (<i>Pistacia chinensis</i>)	6	70%	60%	Fair	Moderate	-	-
Comments: Small girdling roots. Has a somewhat asymmetrical canopy growing along #67's. Rootball planter in basin lower than surrounding grade on all four sides.								



TREE INVENTORY TABLE

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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
69	Chinese pistache (<i>Pistacia chinensis</i>)	6	60%	50%	Fair	Moderate	-	-
Comments: Rootball planter in basin lower than surrounding grade on all four sides.								
70	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	60%	40%	Fair	Moderate	-	-
Comments: Pollarded in past. Double-staked.								
71	Rotundiloba sweetgum (<i>Liquidambar s.</i> 'Rotundiloba')	6	30%	20%	Poor	Low	-	-
Comments: Has a large decaying wound where top broke off many years ago, and remaining foliage originates from watersprouts.								
72	Coast redwood (<i>Sequoia sempervirens</i>)	16	90%	60%	Good	Moderate	X	\$2,790
Comments: Full crown on a very high, pronounced mound (too high). Moderate to high suitability.								
73	Coast redwood (<i>Sequoia sempervirens</i>)	12	90%	80%	Good	High	X	\$2,090
Comments: Full crown. Excessive limb weight.								
74	Rotundiloba sweetgum (<i>Liquidambar s.</i> 'Rotundiloba')	6	60%	40%	Fair	Moderate	-	-
Comments: Multi-leader crown. Buried root collar.								
75	Coast redwood (<i>Sequoia sempervirens</i>)	19	70%	60%	Fair	Moderate	X	\$3,780
Comments: Full crown. Has a somewhat asymmetrical canopy with a sinuous top. Near top of a gentle slope.								
76	Rotundiloba sweetgum (<i>Liquidambar s.</i> 'Rotundiloba')	7	70%	50%	Fair	Moderate	-	-
Comments: Excessive limb weight.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
77	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3	60%	40%	Fair	Moderate	-	-
Comments: Double-staked. Top of slope. Pollarded in past.								
78	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	60%	40%	Fair	Moderate	-	-
Comments: Double-staked. Pollarded in past.								
79	Coast live oak (<i>Quercus agrifolia</i>)	24	40%	30%	Poor	Moderate	X	\$3,970
Comments: Leans NW towards street, and buttress root mass opposite lean is pronounced, perhaps from slightly uprooting sometime ago. Sparse with some dieback at top. Located within a basin below three sides. Old decaying wounds throughout. Further examination of roots opposite lean is needed, such as by an AirSpade, to verify a partial uproot (and if so, its appraised value will reduce and suitability for preservation becomes low).								
80	Coast live oak (<i>Quercus agrifolia</i>)	6	60%	20%	Poor	Low	X	\$310
Comments: Dense canopy, however has a tall, vertical decay column/wound along nearly the entire trunk, begins 4" high and ascends vertically to 4.5'. Dense woundwood has developed around margins, but long-term, the extent of decay presents a significant risk of failure.								
81	Coast live oak (<i>Quercus agrifolia</i>)	7	60%	70%	Fair	Moderate	X	\$730
Comments: Has a slight easterly lean. Low canopy. Sinuous crown.								
82	Coast live oak (<i>Quercus agrifolia</i>)	3	30%	30%	Poor	Low	-	-
Comments: Single-staked. Base is either grafted to large root of a prior tree, or the root is this tree's main buttress root and unusually grows at 90° away from base (and is surfaced). Dieback throughout canopy.								
83	Coast live oak (<i>Quercus agrifolia</i>)	4	40%	30%	Poor	Low	-	-
Comments: Poor lateral root development. Dieback throughout canopy. Significant root decay and planted too high.								



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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
84	Coast redwood (<i>Sequoia sempervirens</i>)	5	80%	70%	Good	Moderate	-	-
Comments: Near toe of slope. Full crown.								
85	Coast live oak (<i>Quercus agrifolia</i>)	<6	50%	50%	Fair	Moderate	-	-
Comments: Trunk diameter is 5.8". Double-staked and located along slope. Multi-leader crown. Main, dominant buttress root surfaced towards downhill side by nearly 9' from trunk.								
86	Coast live oak (<i>Quercus agrifolia</i>)	2	60%	60%	Fair	Moderate	-	-
Comments: Double-staked and located along slope.								
87	Coast live oak (<i>Quercus agrifolia</i>)	2	30%	50%	Poor	Moderate	-	-
Comments: Significant dieback. Double-staked and along slope. Planted where prior redwood was located (adjacent surface roots are from that redwood).								
88	Coast live oak (<i>Quercus agrifolia</i>)	5	60%	40%	Fair	Moderate	-	-
Comments: Double-staked and located at top of steep slope. Crown arches towards drive aisle, away from adjacent larger trees.								
89	Coast live oak (<i>Quercus agrifolia</i>)	18	60%	60%	Fair	Moderate	X	\$3,030
Comments: Sparse canopy and a multi-leader crown. Crowded-growing conditions adjacent to #90.								
90	Coast redwood (<i>Sequoia sempervirens</i>)	48	40%	60%	Poor	Moderate	X	\$12,900
Comments: Canopy grows alongside #91's. Abundant deadwood, some quite large. Low canopy and nearly a full crown. Unmaintained. Very top broke years ago. Extensive water-sprouts along branches. Sparse/thin and excessive limb weight throughout.								



TREE INVENTORY TABLE

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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
91	Coast redwood (<i>Sequoia sempervirens</i>)	45	30%	60%	Poor	Moderate	X	\$10,100
<p>Comments: Canopy grows alongside #90's. Abundant deadwood, some quite large including at its top. Extensive amount of watersprouts along branches. Unmaintained. Sparse/thin and excessive limb weight throughout.</p>								
92	Coast live oak (<i>Quercus agrifolia</i>)	12, 11	70%	30%	Poor	Moderate	X	\$2,010
<p>Comments: Leans east and has poor form. Two trunks originate at grade and form weak attachment containing nearly 18" of included bark. Low canopy and excessive limb weight. Crowded-growing conditions.</p>								
93	Coast live oak (<i>Quercus agrifolia</i>)	6	20%	30%	Poor	Low	X	\$0
<p>Comments: Large dead limb (is now decaying stub). Significant dieback with deadwood. Crowded-growing conditions.</p>								
94	Coast live oak (<i>Quercus agrifolia</i>)	12	60%	30%	Poor	Moderate	X	\$1,060
<p>Comments: Leans SE. Codominant leaders at 17' high. Crowded-growing conditions and excessive limb weight.</p>								
95	Coast live oak (<i>Quercus agrifolia</i>)	16	30%	70%	Poor	Moderate	X	\$2,210
<p>Comments: Very sparse/thin canopy, perhaps from oak worm damage (monitor during this year to identify any improvement). Extensive sapsucker damage. Has a few small girdling roots. Crowded-growing conditions.</p>								
96	Coast live oak (<i>Quercus agrifolia</i>)	9	60%	30%	Poor	Moderate	X	\$630
<p>Comments: One-sided canopy growing away from #95 (due to crowded-growing conditions).</p>								
97	Coast live oak (<i>Quercus agrifolia</i>)	7	10%	20%	Poor	Low	X	\$0
<p>Comments: Nearly entirely defoliated canopy (possibly from oak worm). Large deadwood.</p>								



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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
98	Coast live oak (<i>Quercus agrifolia</i>)	9	30%	10%	Poor	Low	X	\$0
<p>Comments: Suppressed, very poor form. Top broke from the tree many years ago, leaving a wound having decayed across the entire diameter, and branches originating immediately below are sprouts and weakly attached.</p>								
99	Coast live oak (<i>Quercus agrifolia</i>)	13	40%	40%	Poor	Moderate	X	\$1,090
<p>Comments: Sparse canopy, possibly from oak worm infestation. Codominant leaders originate at 20' high. Low growing branches.</p>								
100	Coast live oak (<i>Quercus agrifolia</i>)	20, 13	40%	60%	Poor	Moderate	X	\$4,060
<p>Comments: Buttress of large trunk grafts at base of smaller trunk. Leans SW. Roots surface around trunk. Large deadwood w/in the multi-leader crown. Very sparse canopy, perhaps from oak worm infestation. Monitor to identify any improvement this year.</p>								
101	Coast redwood (<i>Sequoia sempervirens</i>)	37	50%	80%	Fair	Moderate	X	\$10,200
<p>Comments: Full and sparse canopy with deadwood.</p>								
102	Coast redwood (<i>Sequoia sempervirens</i>)	15	80%	50%	Fair	Moderate	X	\$1,880
<p>Comments: Full crown. Crowded-growing conditions.</p>								
103	Coast redwood (<i>Sequoia sempervirens</i>)	49	40%	30%	Poor	Moderate	X	\$8,100
<p>Comments: Codominant leaders originate at 9' high. Extensive decay along upper leaders due to historical large limb failure, which have left depressions. Full crown with large deadwood and a sparse canopy.</p>								
104	Coast redwood (<i>Sequoia sempervirens</i>)	30	60%	40%	Fair	Moderate	X	\$5,900
<p>Comments: Base is 1' from/above retaining wall. Small deadwood and excessive limb weight.</p>								



TREE INVENTORY TABLE

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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
105	Coast redwood (<i>Sequoia sempervirens</i>)	21	60%	40%	Fair	Moderate	X	\$2,740
Comments: Notable thin canopy along its mid-trunk. Crowded-growing conditions.								
106	Coast redwood (<i>Sequoia sempervirens</i>)	22, 21, 20	50%	40%	Poor	Moderate	X	\$6,800
Comments: Three trunks originate at grade and have somewhat of a wide union. Deadwood at top and excessive limb weight.								
107	Blackwood acacia (<i>Acacia melanoxylon</i>)	20	40%	10%	Poor	Low	X	\$0
Comments: Remove asap. Has a pronounced lean towards street and a large fruiting body at base opposite the lean, revealing advanced levels of internal decay. Encroaches on light pole.								
108	Coast redwood (<i>Sequoia sempervirens</i>)	27	50%	40%	Poor	Moderate	X	\$4,020
Comments: Depression along upper trunk (possible prior limb failure). Crowded conditions and extensive watersprouts. Majority of buttress roots directed to sideslope and downhill.								
109	Coast redwood (<i>Sequoia sempervirens</i>)	25	30%	50%	Poor	Moderate	X	\$2,850
Comments: Very sparse/thin canopy with deadwood throughout. Pinched between #108 and 110.								
110	Coast redwood (<i>Sequoia sempervirens</i>)	26	60%	60%	Fair	Moderate	X	\$4,620
Comments: Nearly full crown. Asymmetrical canopy growing away from #109.								
111	Coast live oak (<i>Quercus agrifolia</i>)	24	60%	30%	Poor	Moderate	X	\$4,250
Comments: Leans south, and has advanced root decay at north side of base. Excessive limb weight and deadwood. Crown sweeps south. History of limb failure. Low canopy nears ground. Inspect further through AirSpade work and perhaps internal examination; if significant decay found, then consider having a low suitability and a reduced appraised value.								



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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
112	Coast live oak (<i>Quercus agrifolia</i>)	38	30%	40%	Poor	Moderate	X	\$8,700
<p>Comments: Entire crown sweeps south, likely away from a prior tree. Extensive amount of sprouts along limbs. Western sycamore borer attacks. Old decaying wounds throughout. Multiple leaders originate at 15' high. Three steel support cables in crown. Sparse, and low canopy along the east side.</p>								
113	Marina madrone (<i>Arbutus</i> 'Marina')	6	60%	60%	Fair	Moderate	-	-
<p>Comments: Large old decaying wound along lower trunk. Multiple leaders begin at 5.5' high. Guy wire strap nearly embedded in trunk. Leans south. Deadwood.</p>								
114	Marina madrone (<i>Arbutus</i> 'Marina')	6	70%	50%	Fair	Moderate	-	-
<p>Comments: Double-staked. Leans SE. Large buttress root surfaces opposite lean. Multiple leaders originate at 5.5' high. Deadwood.</p>								
115	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	5, 4(4), 3(3), 2	50%	30%	Poor	Moderate	X	\$780
<p>Comments: Multi-trunk and pollarded in past.</p>								
116	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	3(3), 2, 1	50%	20%	Poor	Moderate	X	\$200
<p>Comments: Multi-trunk and recently pollarded. At 54" high, multi-leaders exceed 10" in diameter.</p>								
117	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	6, 5, 4, 3, 2	50%	30%	Poor	Moderate	X	\$640
<p>Comments: Multi-trunk and pollarded in past.</p>								
118	Coast redwood (<i>Sequoia sempervirens</i>)	25, 22	70%	40%	Fair	Moderate	X	\$7,100
<p>Comments: Two trunks originate at grade and form a weak attachment (14" of included bark). At top of steep slope, and base is several feet from curb.</p>								



TREE INVENTORY TABLE

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119	Coast redwood (<i>Sequoia sempervirens</i>)	21, 17	70%	50%	Fair	Moderate	X	\$5,400
Comments: Trunks are roughly 10" apart.								
120	Coast redwood (<i>Sequoia sempervirens</i>)	33	50%	80%	Fair	Moderate	X	\$8,400
Comments: Full crown and chlorotic canopy.								
121	Coast redwood (<i>Sequoia sempervirens</i>)	27	70%	50%	Fair	Moderate	X	\$4,970
Comments: Low canopy. Between #120 and 122.								
122	Coast redwood (<i>Sequoia sempervirens</i>)	45	60%	30%	Poor	Moderate	X	\$9,400
Comments: Two trunks w/ included bark from grade to 4.5' high (as seen along upper side). Low branching and full crown.								
123	Coast redwood (<i>Sequoia sempervirens</i>)	5	70%	80%	Good	High	-	-
Comments: Small, young redwood. Full crown.								
124	Coast redwood (<i>Sequoia sempervirens</i>)	<6	90%	80%	Good	High	-	-
Comments: Small, young redwood. Trunk diameter is 5.9". Full crown.								
125	Coast redwood (<i>Sequoia sempervirens</i>)	5	60%	50%	Fair	Moderate	-	-
Comments: Small, young redwood. Full crown.								
126	Coast redwood (<i>Sequoia sempervirens</i>)	26	40%	30%	Poor	Moderate	X	\$2,700
Comments: Adjacent to building corner. Top broke or cut away many years ago. Deadwood.								



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		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
127	Italian cypress (<i>Cupressus sempervirens</i>)	5	80%	70%	Good	Moderate	-	-
Comments: Full crown. At corner of raised patio.								
128	Italian cypress (<i>Cupressus sempervirens</i>)	5	80%	70%	Good	Moderate	-	-
Comments: Full crown. At corner of raised patio.								
129	Valley oak (<i>Quercus lobata</i>)	36	70%	40%	Fair	Moderate	X	\$21,200
Comments: On mound and leans towards street (crown is dominant over street). Ground opposite lean is elevated, indicating partial uproot in past. Inspect w/ an AirSpade, and depending on observations, may have low suitability and its appraised value reduced. Dormant.								
130	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	50%	30%	Poor	Moderate	-	-
Comments: Double-staked and pollarded before.								
131	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	50%	30%	Poor	Moderate	-	-
Comments: Double-staked and pollarded before.								
132	Chinese pistache (<i>Pistacia chinensis</i>)	7	70%	60%	Fair	Moderate	-	-
Comments: Dormant.								
133	Valley oak (<i>Quercus lobata</i>)	13	80%	80%	Good	High	X	\$5,600
Comments: Dormant. Good form.								
134	Tuscarora crape myrtle (<i>Lagerstroemia</i> 'Tuscarora')	2	40%	20%	Poor	Low	-	-
Comments: Double-staked and pollarded before. Buried root collar. Narrow structure and trunk bifurcates at 3.5' high. Has a large decaying wound below bifurcation, where a leader broke or tore sometime ago.								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			
135	Coast live oak (<i>Quercus agrifolia</i>)	5	40%	20%	Poor	Low	-	-
<p>Comments: Rot within trunk's base and root collar, indicative of the swollen and discolored areas. Very sparse canopy with poor form.</p>								
136	Cork oak (<i>Quercus suber</i>)	56	40%	30%	Poor	Moderate	X	\$18,900
<p>Comments: Formed by three leaders begin at 3' high, the NE and central forming a weak attachment. Form is asymmetrical, mostly dominant towards south. Large decaying hollow at base of trunk's west side, roughly 2' tall by 10" wide at surface, and interior decay appears much wider and deeper behind screen. Dieback and sizeable deadwood along canopy's perimeter, which was reduced sometime ago. Foliage is yellowing.</p>								
137	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	16	70%	60%	Fair	Moderate	X	\$1,990
<p>Comments: Recently, highly elevated crown with numerous very large cuts along trunk. Reasonable good form. Adjacent walk is raised. Within a narrow planter strip, and roots are surfaced throughout and within adjacent lawn.</p>								
138	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	12	70%	30%	Poor	Low	X	\$780
<p>Comments: Crowded-growing conditions away from #137, having a highly asymmetrical, mostly one-sided canopy. Leggy, multi-leader limb structure and poor trunk taper. Recently, highly elevated crown with numerous large cuts along trunk. Within a narrow planter strip, and roots are surfaced throughout and adjacent lawn.</p>								
139	Canary Island date palm (<i>Phoenix canariensis</i>)	24	60%	30%	Poor	Moderate	X	\$2,340
<p>Comments: Within an ~7' diameter, 1.5' tall raised planter in center of road at entrance to property.</p>								
140	Columbia London plane tree (<i>Platanus</i> × <i>h.</i> 'Columbia')	5	60%	30%	Poor	Low	-	-
<p>Comments: Has a mostly one-sided canopy which grows and leans slightly away from #141. Leggy limb structure and some dieback in canopy. Pronounced surface roots towards south. Possibly infected with anthracnose.</p>								



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			

141	Valley oak <i>(Quercus lobata)</i>	15	50%	60%	Fair	Moderate	X	\$3,600
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Comments: Base abuts and has slightly raised curb and gutter. A surfaced buttress root grows east along curb. Low branches over street and planter. Foliage within interior consists of watersprouts. Multiple leaders emerge at 9' high. Dieback and deadwood throughout.

142	Coast live oak <i>(Quercus agrifolia)</i>	19	60%	40%	Fair	Moderate	X	\$2,700
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Comments: Limb structure begins at 4' high. Base abuts curb. Has large and small extensively decayed branches. Asymmetrical canopy directed south.

143	Valley oak <i>(Quercus lobata)</i>	19	40%	50%	Poor	Moderate	X	\$4,800
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Comments: Dieback and deadwood throughout canopy (declined). Base is setback upslope from curb by several feet. Foliage within interior consists of watersprouts. Multiple leaders emerge at 8.5' high. History of branch failure.

144	Purple-leaf cherry plum <i>(Prunus c. 'Atropurpurea')</i>	10	10%	20%	Poor	Low	X	\$0
------------	--	----	-----	-----	------	-----	---	-----

Comments: 85% dead, and its complete demise appears imminent. Extensive sunscald and discoloration along trunk. Trunk diameter is 10.4".

145	Purple-leaf cherry plum <i>(Prunus c. 'Atropurpurea')</i>	9	0%	0%	Dead	Low	-	-
------------	--	---	----	----	------	-----	---	---

Comments: 95% dead, which for all practical purposes, regard as dead. Located partly beneath #148. Sunscald and discoloration along trunk. Old basal wound. Multiple leaders emerge at 4'.

146	Purple-leaf cherry plum <i>(Prunus c. 'Atropurpurea')</i>	8	60%	30%	Poor	Low	-	-
------------	--	---	-----	-----	------	-----	---	---

Comments: Suppressed growth beneath #148. Deadwood along trunk. Multiple leaders at 4' high.

147	Purple-leaf cherry plum <i>(Prunus c. 'Atropurpurea')</i>	<10	0%	0%	Dead	Low	-	-
------------	--	-----	----	----	------	-----	---	---

Comments: 95% dead, which for all practical purposes, regard as dead. Located partly beneath #148. Some discoloration along trunk and minor amounts of sunscald. Trunk diameter is 9.6".



TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Protected Tree	Appraised Value
		Trunk Diameter (in.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)			

148	Valley oak (<i>Quercus lobata</i>)	31	60%	60%	Fair	Moderate	X	\$17,200
-----	---	----	-----	-----	------	----------	---	----------

Comments: Located adjacent to, and limbs grow beyond, #149. Canopy's interior consists of watersprouts, and there is large deadwood throughout canopy. Multiple leaders emerge at 4.5', and below their union is a large swollen area where a prior limb was pruned away.

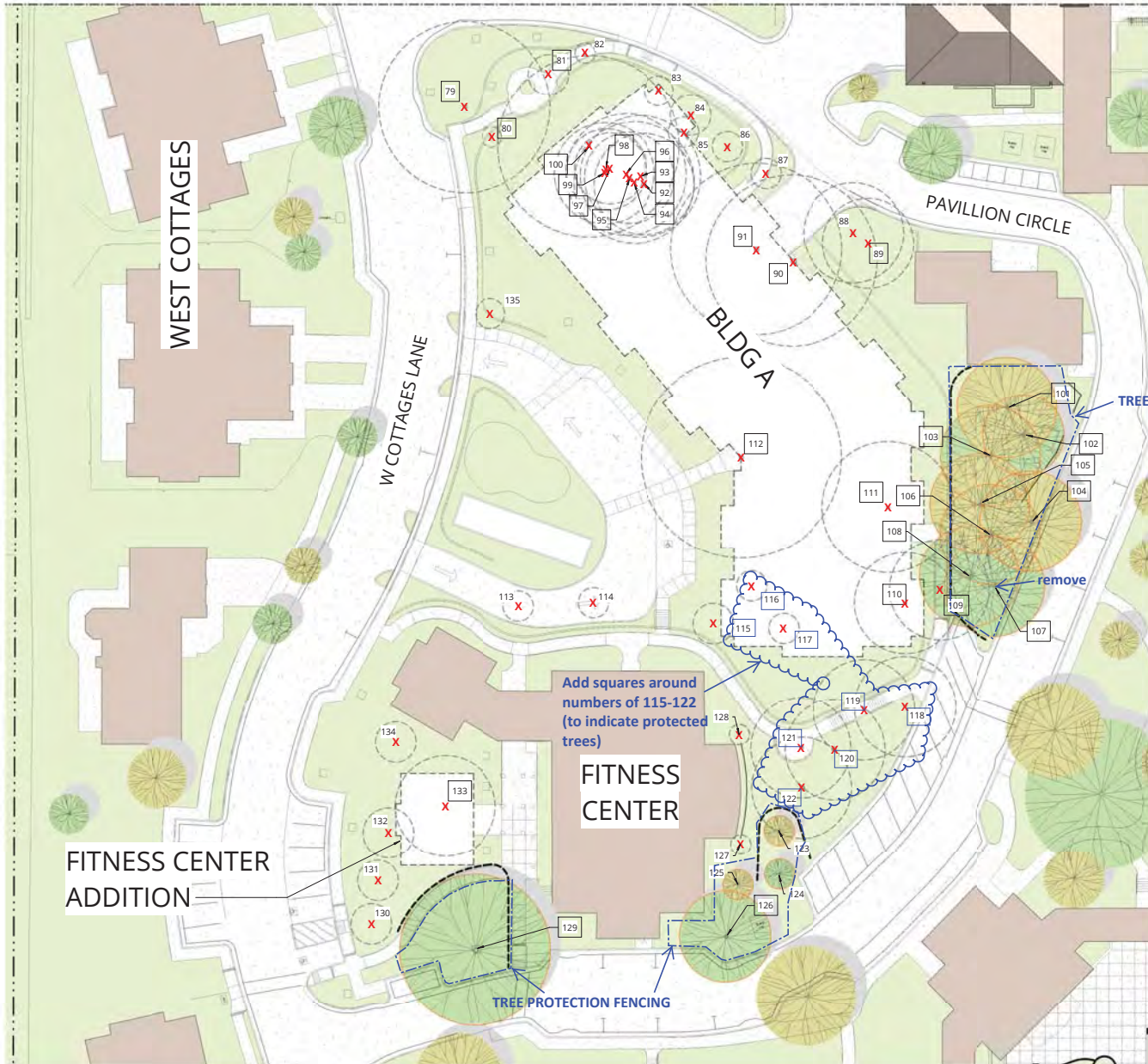
149	Mexican fan palm (<i>Washingtonia robusta</i>)	20	60%	80%	Good	Moderate	X	\$320
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Comments: Street tree along Chester Avenue side of fence. Dead fronds are along nearly the entire trunk. Roughly 65 brown-trunk feet.





EXHIBIT B:

SITE MAPS


(4 sheets)



LEGEND

-  TREE TO BE REMOVED
-  TREE TO REMAIN
-  PROTECTED TREE
-  TREE PROTECTION FENCING

NOT FOR CONSTRUCTION



Ankrom Moisan
 38 NORTHWEST DAVIS, SUITE 300
 PORTLAND, OR 97209
 T 503.245.7100
 1505 5TH AVE., SUITE 300
 SEATTLE, WA 98101
 T 206.576.1600
 1014 HOWARD STREET
 SAN FRANCISCO, CA 94103
 T 415.252.7063
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SARATOGA RETIREMENT COMMUNITY
 14500 FRUITVALE
 SARATOGA, CALIFORNIA
 PACIFIC RETIREMENT SERVICES

REVISION	DATE	REASON FOR ISSUE

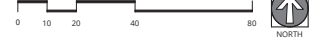
TREE REMOVAL PLAN

SCHEMATIC DESIGN

DATE: 03.30.2020 PROJECT NUMBER: 963117.6

SHEET NUMBER: CS-1.2

1 TREE REMOVAL PLAN - BUILDING A & FITNESS CENTER
1" = 20'-0"



1/17/2020 11:46:50 AM

LEGEND



NOT FOR CONSTRUCTION



38 NORTHWEST DAVIS, SUITE 300
 PORTLAND, OR 97209
 T 503.245.7100

1505 5TH AVE, SUITE 300
 SEATTLE, WA 98101
 T 206.576.1600

1014 HOWARD STREET
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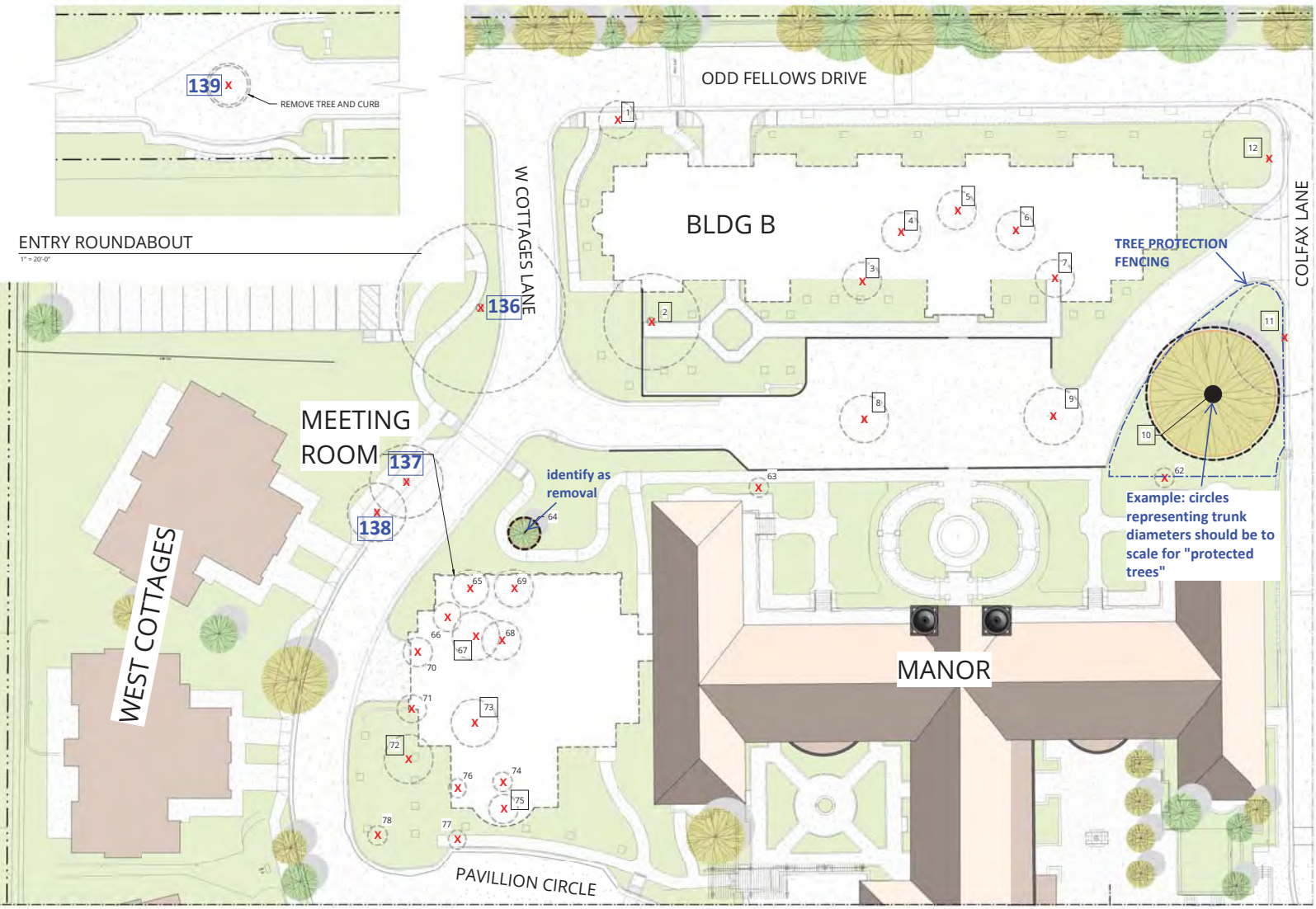
SARATOGA RETIREMENT COMMUNITY
 14500 FRUITVALE
 SARATOGA, CALIFORNIA
 PACIFIC RETIREMENT SERVICES

REVISION	DATE	REASON FOR ISSUE

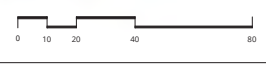
TREE REMOVAL PLAN

SCHEMATIC DESIGN

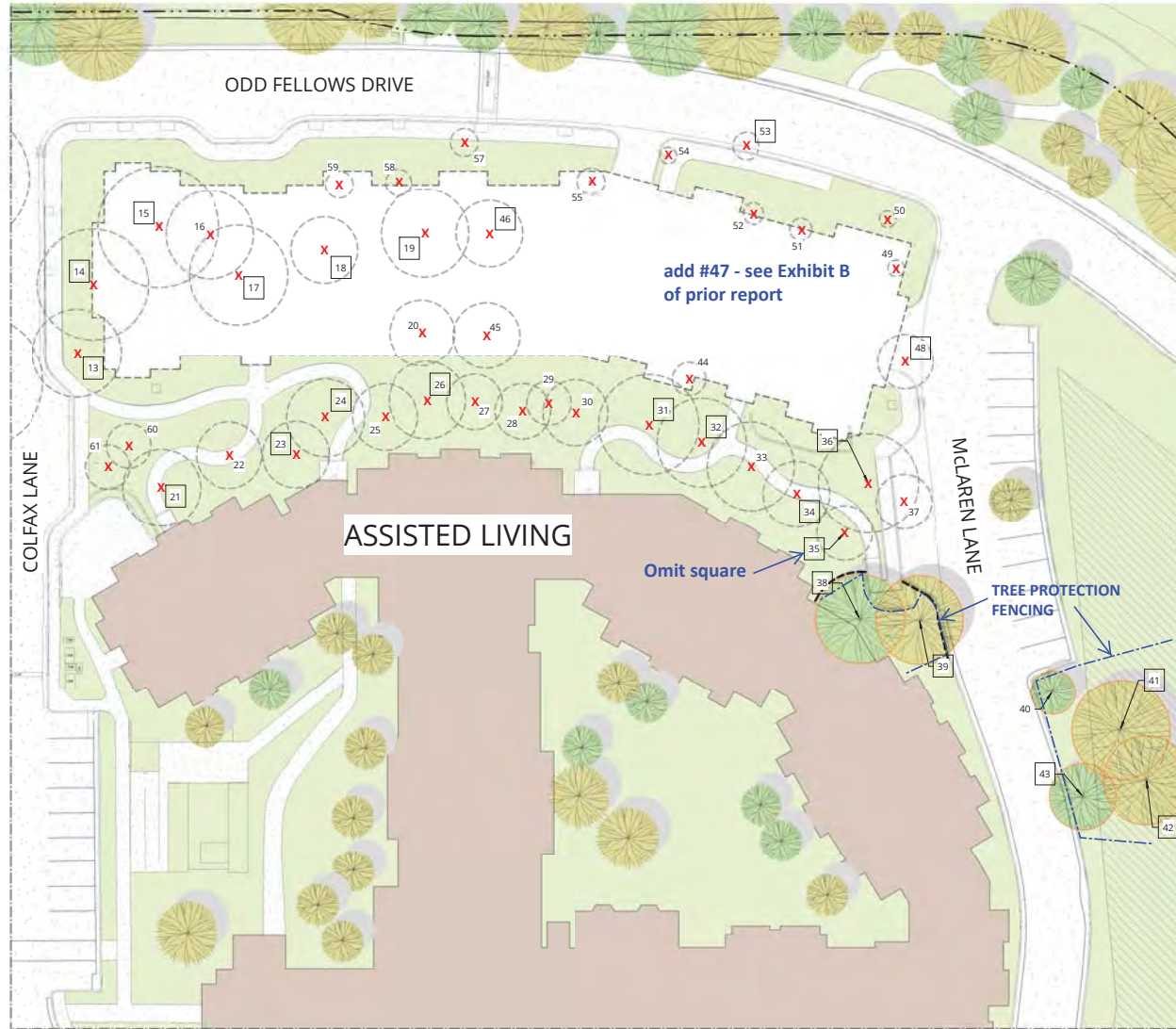
DATE: 03.30.2020 PROJECT NUMBER: 963117.8
 SHEET NUMBER: **CS-1.3**







1 TREE REMOVAL PLAN - BUILDING B & MEETING ROOM



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LEGEND

-  TREE TO BE REMOVED
-  TREE TO REMAIN
-  PROTECTED TREE
-  TREE PROTECTION FENCING

NOT FOR CONSTRUCTION



38 NORTHWEST DAVIS, SUITE 300
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SARATOGA RETIREMENT COMMUNITY
14500 FRUITVALE
SARATOGA, CALIFORNIA

PACIFIC RETIREMENT SERVICES

REVISION	DATE	REASON FOR ISSUE

TREE REMOVAL PLAN

SCHEMATIC DESIGN

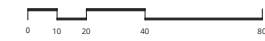
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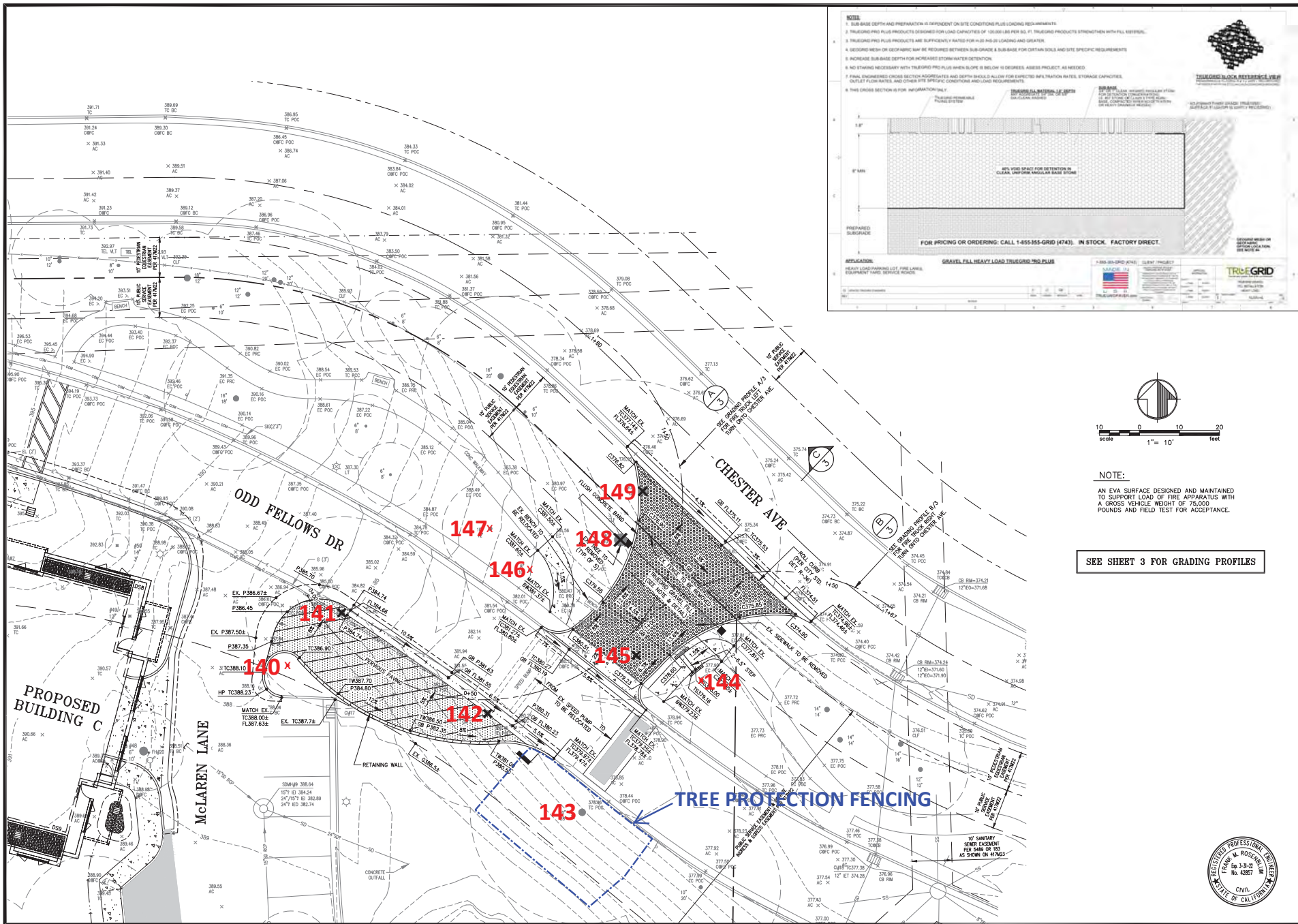
SHEET NUMBER

CS-1.4

1 TREE REMOVAL PLAN - BUILDING C

1" = 20'-0"





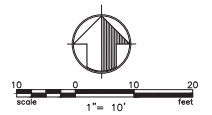
NOTE:

1. SUB-BASE DEPTH AND PREPARATION IS DEPENDENT ON SITE CONDITIONS PLUS LOADING REQUIREMENTS.
2. TRIGRID PRO PLUS PRODUCTS DESIGNED FOR LOAD CAPACITIES OF 15,000 LBS PER SQ. FT. TRIGRID PRODUCTS STRENGTHEN WITH FILL MATERIAL.
3. TRIGRID PRO PLUS PRODUCTS ARE SUFFICIENTLY RIGID FOR 100 MPH WINDS AND GREATER.
4. SECONDARY WEAR OR ESCAPEWAY MAY BE REQUIRED BETWEEN SUB-BASES & SUB-BASE FOR CERTAIN SOILS AND SITE SPECIFIC REQUIREMENTS.
5. INCREASE SUB-BASE DEPTH FOR INCREASED STORM-WATER DETENTION.
6. NO STAGING NECESSARY WITH TRIGRID PRO PLUS WHEN SLOPE IS BELOW 10 DEGREES. ASSESS PROJECT, AS NEEDED.
7. FINAL ENGINEERED CROSS SECTION AGGRAVATES AND DEPTH SHOULD ALLOW FOR EXPECTED INFILTRATION RATES, STORAGE CAPACITY, OUTLET FLOW RATES, AND OTHER SITE SPECIFIC CONDITIONS AND LOADING REQUIREMENTS.
8. THIS CROSS SECTION IS FOR INFORMATION ONLY.

APPLICATION: GRAVEL/FILL HEAVY LOAD TRIGRID PRO PLUS

FOR PRICING OR ORDERING: CALL 1-855-355-GRUD (4743). IN STOCK. FACTORY DIRECT.

TRIGRID



NOTE:
 AN EVA SURFACE DESIGNED AND MAINTAINED TO SUPPORT LOAD OF FIRE APPARATUS WITH A GROSS VEHICLE WEIGHT OF 75,000 POUNDS AND FIELD TEST FOR ACCEPTANCE.

SEE SHEET 3 FOR GRADING PROFILES



DATE	
REVISIONS	
DESC.	
1	
2	
3	
4	
5	

UNDERWOOD & ROSENBLUM, INC.
 civil engineers and surveyors
 14500 FRUITVALE
 SARATOGA, CALIFORNIA 95070

SARATOGA RETIREMENT COMMUNITY
 14500 FRUITVALE
 SARATOGA, CALIFORNIA

EMERGENCY VEHICLE ACCESS EXHIBIT "C" GRADING LAYOUT

Date: 04-28-21
 Scale: 1"=10'
 Design: BH
 Checked:
 Job: J18028
 Sheet
 2 of 2

EXHIBIT C:

PHOTOGRAPHS

(21 sheets)

Photo Index

Page C-1: Trees #1 thru 9

Page C-2: Trees #9 thru 16

Page C-3: Trees #17 thru 24

Page C-4: Trees #25 thru 32

Page C-5: Trees #32 thru 40

Page C-6: Trees #41 thru 48

Page C-7: Trees #49 thru 55

Page C-8: Trees #57 thru 63

Page C-9: Trees #64 thru 71

Page C-10: Trees #72 thru 78

Page C-11: Trees #79 thru 86

Page C-12: Trees #87 and 100

Page C-13: Trees #101 thru 110

Page C-14: Trees #111 thru 117

Page C-15: Trees #118 thru 124

Page C-16: Trees #125 thru 130

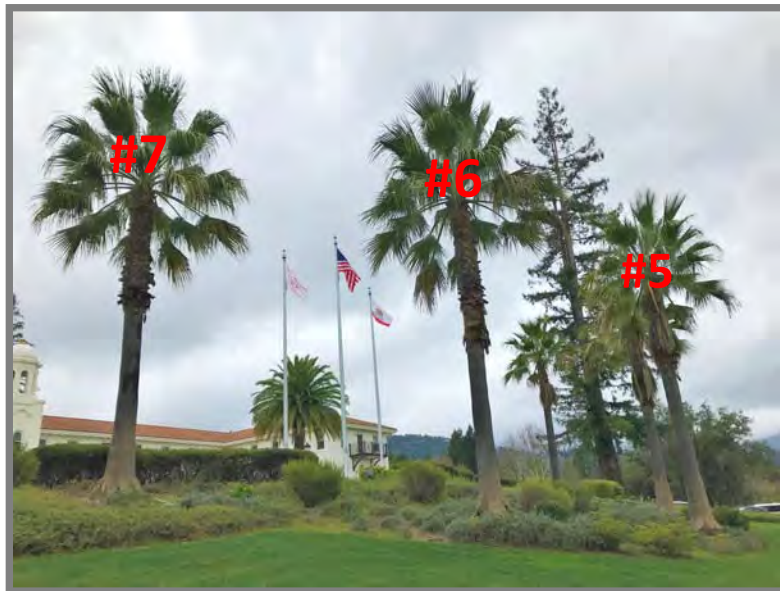
Page C-17: Trees #131 thru 135

Page C-18: Trees #136 thru 141

Page C-19: Trees #141 thru 143

Page C-20: Trees #143 thru 148

Page C-21: Trees #148 and 149













































SARATOGA

California

Community Development Department

13777 Fruitvale Avenue

Saratoga, CA 95070

www.saratoga.ca.us/171/trees

408.868.1276

CITY OF SARATOGA ARBORIST APPROVAL Conditions of Approval and Tree Protection Plan

Prepared by Christina Fusco, City Arborist
Phone: (408) 868-1276
Email: cfusco@saratoga.ca.us

Application No. **ARB19-0039**
Address: **14500 Fruitvale Avenue**
Owner: Oddfellows Home of California
APN: 397-12-012

Date: June 28, 2020

REPORT HISTORY:

Report 1: November 25, 2020
Report 2: This report replaces Report 1 June 28, 2021
Report 3: This report replaces Report 2 May 16, 2022

PROJECT SCOPE:

The applicant has submitted plans to build five new structures on the campus. They include three buildings with independent living units, an auditorium, and a fitness building. A total of **69** protected trees are requested for removal to construct the project. They include trees **1 – 9, 11 – 15, 17 – 19, 21, 23, 24, 26, 31, 32, 24, 46, 48, 53, 72, 75, 79 – 81, 89 – 100, 109 – 112, 115 – 122, 136 – 139, 140-142, and 144-149.**

PROJECT DATA IN BRIEF:

Tree security deposit –	Required - \$133,300
Tree protection –	Required – See Conditions of Approval and attached map.
Tree removals –	Trees <u>listed above</u> are approved for removal once building permits have been issued.
Replacement trees –	Required = \$223,340

ATTACHMENTS:

- 1 – Findings and Tree Information
- 2 – Tree Removal Criteria

- 3 – Conditions of Approval
- 4 – Maps Showing Tree Protection

FINDINGS:Documents Reviewed

Saratoga CCRC Independent Living and Campus Expansion plan set dated April 4, 2022.
The arborist report by David L. Babby written February 22, 2019 and revised May 27, 2021.

Tree Removals

According to Section 15-50.080 of the City Code, whenever a tree is requested for removal as part of a project, certain findings must be made and specific tree removal criteria met. Sixty (**69**) trees protected by City Code are in conflict with the project, and meet the City's criteria allowing them to be removed and replaced as part of the project, once building division permits have been obtained. They include trees **1 – 9, 11 – 15, 17 – 19, 21, 23, 24, 26, 31, 32, 24, 46, 48, 53, 72, 75, 79 – 81, 89 – 100, 109 – 112, 115 – 122, 136 – 139, 140-142, and 144-149**. Attachment 2 contains the tree removal criteria for reference.

New Construction

Based on the information provided, and as conditioned, this project complies with the requirements for the setback of new construction from existing trees under Section 15-50.120 of the City Code.

Tree Preservation Plan

Section 15-50.140 of the City Code requires a Tree Preservation Plan for this project. To satisfy this requirement the following shall be copied onto a plan sheet and included in the final sets of plans:

- 1) The tree information, recommendations and maps showing tree protection from the revised arborist report dated **May 27, 2021**;
- 2) The Project Data in Brief and the Conditions of Approval from this report May 16, 2022.

Table 1: Tree Removal Criteria that are met from May 27, 2021 report.

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
1	California fan palm	18	Grading, w/in wkwy, joint trench, storm drain	1, 3 thru 9	\$240
2	Coast redwood	81	Grading, w/in wkwy, Bldg B	3 thru 9	\$21,800
3	California fan palm	21	w/in Bldg B footprint	3 thru 9	\$270
4	California fan palm	20	w/in Bldg B footprint	3 thru 9	\$290
5	California fan palm	20	w/in Bldg B footprint	3 thru 9	\$290
6	California fan palm	18	w/in Bldg B footprint	3 thru 9	\$290
7	California fan palm	17	w/in Bldg B footprint	3 thru 9	\$290
8	Canary Island date palm	28	w/in future drive aisle	3 thru 9	\$3,100
9	Canary Island date palm	27	w/in future drive aisle	3 thru 9	\$2,880
11	Coast redwood	51	Grading, w/in Colfax Ln	3 thru 9	\$14,700
12	Valley oak	27	Grading, wkwy, Colfax Ln, bioswale	3 thru 9	\$14,000
13	Columbia London plane	11	Grading, Colfax Ln, Bldg C	3 thru 9	\$990
14	Columbia London plane	14	w/in Bldg C footprint	3 thru 9	\$1,430
15	Bloodgood London plane	23	w/in Bldg C footprint	3 thru 9	\$2,550
17	Columbia London plane	11	w/in Bldg C footprint	3 thru 9	\$760
18	Columbia London plane	11	w/in Bldg C, low SFP	1, 3 thru 9	\$0
19	Columbia London plane	10	w/in Bldg C footprint	3 thru 9	\$710
21	Tulip tree	10	Grading, wkwy	3 thru 9	\$320
23	Tulip tree	10	Grading	3 thru 9	\$290
24	Tulip tree	11	Grading, wkwy	3 thru 9	\$570
26	Tulip tree	11	Grading	3 thru 9	\$340
31	Tulip tree	14	Grading, wkwy	3 thru 9	\$600
32	Tulip tree	12	Grading, wkwy	3 thru 9	\$540
34	Tulip tree	12	Grading, w/in wkwy	3 thru 9	\$450
46	Columbia London plane	13	W/in Bldg C footprint	3 thru 9	\$880
48	Columbia London plane	8	w/in drive aisle, at Bldg C, low SFP	1, 3 thru 9	\$750

Table 1 continued: Tree Removal Criteria that are met from May 27, 2021 report.

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
53	Mexican fan palm	16	w/in future street alignment	3 thru 9	\$200
72	Coast redwood	16	Grading, at Meeting Room	3 thru 9	\$2,790
75	Coast redwood	19	w/in Meeting Room footprint	3 thru 9	\$3,780
79	Coast live oak	24	Grading, wlkwy, poor condition	3 thru 9	\$3,970
80	Coast live oak	6	Grading, wlkwy, low SFP	1, 3 thru 9	\$310
81	Coast live oak	7	Grading, w/in wlkwy	3 thru 9	\$730
89	Coast live oak	18	Grading	3 thru 9	\$3,030
90	Coast redwood	48	w/in Bldg A footprint	3 thru 9	\$12,900
91	Coast redwood	45	w/in Bldg A footprint	3 thru 9	\$10,100
92	Coast live oak	12, 11	w/in Bldg A footprint	3 thru 9	\$2,010
93	Coast live oak	6	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
94	Coast live oak	12	w/in Bldg A footprint	3 thru 9	\$1,060
95	Coast live oak	16	w/in Bldg A footprint	3 thru 9	\$2,210
96	Coast live oak	9	w/in Bldg A footprint	3 thru 9	\$630
97	Coast live oak	7	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
98	Coast live oak	9	w/in Bldg A footprint, low SFP	1, 3 thru 9	\$0
99	Coast live oak	13	w/in Bldg A footprint	3 thru 9	\$1,090
100	Coast live oak	20, 13	w/in Bldg A footprint	3 thru 9	\$4,060
109	Coast redwood	25	Grading, Bldg A, w/in wlkwy	3 thru 9	\$2,850
110	Coast redwood	26	w/in Bldg A footprint	3 thru 9	\$4,620
111	Coast live oak	24	w/in Bldg A footprint	3 thru 9	\$4,250
112	Coast live oak	38	w/in Bldg A footprint	3 thru 9	\$8,700
115	Tuscarora crape myrtle	5, 4(4), 3(3), 2	Near edge of Bldg A	3 thru 9	\$780
116	Tuscarora crape myrtle	3(3),2,1	w/in Bldg A footprint	3 thru 9	\$200
117	Tuscarora crape myrtle	6, 5, 4, 3, 2	w/in Bldg A footprint	3 thru 9	\$640
118	Coast redwood	25, 22	Grading, w/in wlkwy	3 thru 9	\$7,100

Table 1 continued: Tree Removal Criteria that are met from May 27, 2021 report.

TREE #	NAME	DIAM. (in.)	REASON(S) FOR REMOVAL	CITY CRITERIA	APPRAISED VALUE
119	Coast redwood	21, 17	New wlkwy, grading	3 thru 9	\$5,400
120	Coast redwood	33	New wlkwy, grading, storm drain and water lines	3 thru 9	\$8,400
121	Coast redwood	27	Grading, w/in wlkwy	3 thru 9	\$4,970
122	Coast redwood	45	Grading, weak structure	3 thru 9	\$9,400
136	Cork oak	56	Grading, w/in wlkwy, bioswale	3 thru 9	\$18,900
137	Columbia London plane	16	w/in future street/parking area	3 thru 9	\$1,990
138	Columbia London plane	12	w/in future street/parking area	3 thru 9	\$780
139	Canary Island date palm	24	Fire dept. road width clmce	3 thru 9	\$2,340
141	Valley oak	15	Grading for secondary EVA	3 thru 9	\$3,600
142	Coast live oak	19	Grading for secondary EVA	3 thru 9	\$2,700
144	Purple-leaf cherry plum	10	Nearly dead, grading for wlkwy	1, 3 thru 9	\$0
148	Valley oak	31	Grading for secondary EVA	3 thru 9	\$17,200
149	Mexican fan palm	20	w/in secondary EVA	3 thru 9	\$320

TREE INFORMATION:

Project Arborist: David L. Babby, Arbor Resources

Date of Report: February 22, 2019, revised March 18, 2020 and May 27, 2021

Table 2: Tree information from May 27, 2021 arborist report.

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
1	California fan palm	-	X	18	-	\$240
2	Coast redwood	-	X	81	-	\$21,800
3	California fan palm	-	X	21	-	\$270
4	California fan palm	-	X	20	-	\$290
5	California fan palm	-	X	20	-	\$290
6	California fan palm	-	X	18	-	\$290
7	California fan palm	-	X	17	-	\$290

Table 2 continued: Tree information from May 27, 2021 arborist report.

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
8	Canary Island date palm	-	X	28	-	\$3,100
9	Canary Island date palm	-	X	27	-	\$2,880
10	Coast redwood	X	-	89	\$43,900	-
11	Coast redwood	-	X	51	-	\$14,700
12	Valley oak	-	X	27	-	\$14,000
13	Columbia London plane	-	X	11	-	\$990
14	Columbia London plane	-	X	14	-	\$1,430
15	Bloodgood London plane	-	X	23	-	\$2,550
17	Columbia London plane	-	X	11	-	\$760
18	Columbia London plane	-	X	11	-	\$0
19	Columbia London plane	-	X	10	-	\$710
21	Tulip tree	-	X	10	-	\$320
23	Tulip tree	-	X	10	-	\$290
24	Tulip tree	-	X	11	-	\$570
26	Tulip tree	-	X	11	-	\$340
31	Tulip tree	-	X	14	-	\$600
32	Tulip tree	-	X	12	-	\$540
34	Tulip tree	-	X	12	-	\$450
38	Tulip tree	X	-	10	\$210	-
39	Tulip tree	X	-	14	\$660	-
41	Coast live oak	X	-	27	\$7,400	-
42	Coast live oak	X	-	15, 12, 11	\$2,800	-
43	Coast live oak	X	-	10	\$580	-
46	Columbia London plane	-	X	13	-	\$880
48	Columbia London plane	-	X	8	-	\$750
53	Mexican fan palm	-	X	16	-	\$200
67	Coast redwood	X*	-	12	\$1,720	-

Table 2 continued: Tree information from May 27, 2021 arborist report.

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
72	Coast redwood	-	X	16	-	\$2,790
73	Coast redwood	X*	-	12	\$2,090	-
75	Coast redwood	-	X	19	-	\$3,780
79	Coast live oak	-	X	24	-	\$3,970
80	Coast live oak	-	X	6	-	\$310
81	Coast live oak	-	X	7	-	\$730
89	Coast live oak	-	X	18	-	\$3,030
90	Coast redwood	-	X	48	-	\$12,900
91	Coast redwood	-	X	45	-	\$10,100
92	Coast live oak	-	X	12, 11	-	\$2,010
93	Coast live oak	-	X	6	-	\$0
94	Coast live oak	-	X	12	-	\$1,060
95	Coast live oak	-	X	16	-	\$2,210
96	Coast live oak	-	X	9	-	\$630
97	Coast live oak	-	X	7	-	\$0
98	Coast live oak	-	X	9	-	\$0
99	Coast live oak	-	X	13	-	\$1,090
100	Coast live oak	-	X	20, 13	-	\$4,060
101	Coast redwood	X	-	37	\$10,200	-
102	Coast redwood	X	-	15	\$1,880	-
103	Coast redwood	X	-	49	\$8,100	-
104	Coast redwood	X	-	30	\$5,900	-
105	Coast redwood	X	-	21	\$2,740	-
106	Coast redwood	X	-	22, 21, 20	\$6,800	-
107	Blackwood acacia	X	-	20	\$0	-
108	Coast redwood	X	-	27	\$4,020	-
109	Coast redwood	-	X	25	-	\$2,850

Table 2 continued: Tree information from May 27, 2021 arborist report.

TREE #	NAME	DISPOSITION		DIAM. (in.)	APPRAISED VALUE	
		RETAIN	RMV		RETAIN	RMV
110	Coast redwood	-	X	26	-	\$4,620
111	Coast live oak	-	X	24	-	\$4,250
112	Coast live oak	-	X	38	-	\$8,700
115	Tuscarora crape myrtle	-	X	5, 4(4), 3(3), 2	-	\$780
116	Tuscarora crape myrtle	-	X	3(3), 2, 1	-	\$200
117	Tuscarora crape myrtle	-	X	6, 5, 4, 3, 2	-	\$640
118	Coast redwood	-	X	25, 22	-	\$7,100
119	Coast redwood	-	X	21, 17	-	\$5,400
120	Coast redwood	-	X	33	-	\$8,400
121	Coast redwood	-	X	27	-	\$4,970
122	Coast redwood	-	X	45	-	\$9,400
126	Coast redwood	X	-	26	\$2,700	-
129	Valley oak	X	-	36	\$21,200	-
133	Valley oak	X*	-	13	\$5,600	-
136	Coast live oak	-	X	56	-	\$18,900
137	Columbia London plane	-	X	16	-	\$1,990
138	Columbia London plane	-	X	12	-	\$780
139	Canary Island date palm	-	X	24	-	\$2,340
141	Valley oak	-	X	15	-	\$3,600
142	Coast live oak	-	X	19	-	\$2,700
143	Valley oak	X	-	19	\$4,800	-
144	Purple-leaf cherry plum	-	X	10	-	\$0
148	Valley oak	-	X	31	-	\$17,200
149	Mexican fan palm	-	X	20	-	\$320

LEGEND

* = Retained and relocated

RMV = Remove

TOTALS: \$133,300 \$223,340

TREE REMOVAL CRITERIA

Criteria that permit the removal of a protected tree are listed below. This information is from Article 15-50.080 of the City Code and is applied to any tree requested for removal as part of the project. If findings are made that meet the criteria listed below, the tree(s) may be approved for removal and replacement during construction.

- (1)** The condition of the tree with respect to disease, imminent danger of falling, proximity to existing or proposed structures and interference with utility services, and whether the tree is a Dead tree or a Fallen tree.
- (2)** The necessity to remove the tree because of physical damage or threatened damage to improvements or impervious surfaces on the property.
- (3)** The topography of the land and the effect of the tree removal upon erosion, soil retention and the diversion or increased flow of surface waters, particularly on steep slopes.
- (4)** The number, species, size and location of existing trees in the area and the effect the removal would have upon shade, privacy impact, scenic beauty, property values, erosion control, and the general welfare of residents in the area.
- (5)** The age and number of healthy trees the property is able to support according to good forestry practices.
- (6)** Whether or not there are any feasible alternatives that would allow for retaining or not encroaching on the protected tree.
- (7)** Whether the approval of the request would be contrary to or in conflict with the general purpose and intent of this Article.
- (8)** Any other information relevant to the public health, safety, or general welfare and the purposes of this ordinance as set forth in [Section 15-50.010](#)
- (9)** The necessity to remove the tree for economic or other enjoyment of the property when there is no other feasible alternative to the removal.
- (10)** The necessity to remove the tree for installation and efficient operation of solar panels, subject to the requirements that the tree(s) to be removed, shall not be removed until solar panels have been installed and replacement trees planted in conformance with the City Arborist's recommendation.
- (11)** The necessity to remove a tree following the creation of defensible space within 100 feet of a structure located within the Wildland Urban Interface, in accordance with defensible space standards established by CAL FIRE or as determined by Santa Clara County Fire Department, and that risk of increased wildfire cannot reasonably be addressed through maintenance or without tree removal.

CONDITIONS OF APPROVAL

1. Owner, Architect, Contractor: It is the responsibility of the owner, architect and contractor to be familiar with the information in this report and implement the required conditions.
2. Permit:
 - a. Receipt of a Planning or Building permit does not relieve applicant of his responsibilities for protecting trees per City Code Article 15-50 on all construction work.
 - b. No protected tree authorized for removal or encroachment pursuant to this project may be removed or encroached upon until the issuance of the applicable permit from the building division for the approved project.
3. Final Plan Sets:
 - a. Shall include the tree information, protection recommendations, and the maps showing tree protection from the arborist report by **David L. Babby** dated **May 27, 2021** copied onto a plan sheet.
 - b. Shall include the Project Data in Brief and the Conditions of Approval sections of the City Arborist report dated May 16, 2022.
4. Tree Protection Security Deposit:
 - a. Is required per City Ordinance 15-50.080.
 - b. Shall be **\$128,500** for tree(s) **10, 38-43, 67, 73, 101-108, 126, 129, 133 and 143**.
 - c. Shall be obtained by the owner and filed with the Community Development Department before obtaining Building Division permits.
 - d. May be in the form of cash, check, or a bond.
 - e. Shall remain in place for the duration of construction of the project.
 - f. May be released once the project has been completed, inspected and approved by the City Arborist.
5. Tree Protection Fencing:
 - a. Shall be installed as shown on the attached map.
 - b. Shall be shown on the Site Plan.
 - c. Shall be established prior to the arrival of construction equipment or materials on site.
 - d. Shall be comprised of six-foot high chain link fencing mounted on 2-inch diameter galvanized posts, driven into the ground and spaced no more than 10 feet apart.
 - e. Shall be posted with signs saying "TREE PROTECTION FENCE - DO NOT MOVE OR REMOVE WITHOUT APPROVAL FROM CITY ARBORIST, CHRISTINA FUSCO (408) 868-1276".
 - f. Wherever protection is needed outside of fences, unprocessed wood chips, or approved equivalent, shall be placed to the edge of the tree's canopy and to a depth of 6 inches.
 - g. Call City Arborist, at (408) 868-1276 for an inspection of tree protection fencing once it has been installed. This is required prior to obtaining building division permits.
 - h. Tree protection fencing shall remain undisturbed throughout the construction until final inspection.

6. Construction: All construction activities shall be conducted outside tree protection fencing unless permitted as conditioned below. These activities include, but are not necessarily limited to, the following: demolition, grading, trenching for utility installation, equipment cleaning, stockpiling and dumping materials (including soil fill), and equipment/vehicle operation and parking.
7. Work inside fenced areas:
 - a. Requires field meeting with City Arborist before performing work.
 - b. Requires City Arborist approval prior to performing work.
 - c. Requires Project Arborist on site to monitor work.
8. Project Arborist:
 - a. Shall be David L. Babby, unless otherwise approved by the City Arborist.
 - b. Shall visit the site every two weeks during grading, trenching or digging activities and every six weeks thereafter.
 - c. Shall provide a letter/email to the City after each inspection. The letters/emails shall document the work performed around trees, include photos of the work in progress, and provide information on the condition of the trees during construction.
 - d. Shall supervise any permitted pruning or root pruning of trees on site. Roots of protected trees measuring two inches in diameter or more shall not be cut without prior approval of the Project Arborist. Roots measuring less than two inches in diameter may be cut using a sharp pruning tool.
9. Tree removal:
 - a. Trees **1 – 9, 11 – 15, 17 – 19, 21, 23, 24, 26, 31, 32, 24, 46, 48, 53, 72, 75, 79 – 81, 89 – 100, 109 – 112, 115 – 122, 136 – 139, 140-142 and 143-149** meet the criteria for removal and may be removed once building division permits have been obtained.
 - b. Replacement values for new trees are listed below.

15 gallon = \$350	24 inch box = \$500	36 inch box = \$1,500
48 inch box = \$5,000	60 inch box = 7,000	72 inch box = \$15,000
 - c. No trees are requested or approved for removal to construct the project.
 - d. Should any tree be damaged beyond repair, new trees shall be required to replace the tree. If there is insufficient room to plant the necessary number of new trees, some of the value for trees may be paid into the City's Tree Fund.
10. New trees:
 - a. New trees equal to **\$233,340** shall be planted as part of the project before final inspection and occupancy of the new home. New trees may be of any species.
 - b. Trees shall be replaced on or off site according to good forestry practices, and shall provide equivalent value in terms of aesthetic and environmental quality, size, height, location, appearance and other significant beneficial characteristics of the removed trees.
 - c. Replacement values for new trees are listed below.

15 gallon = \$350	24 inch box = \$500	36 inch box = \$1,500
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48 inch box = \$5,000 60 inch box = 7,000 72 inch box = \$15,000

- d. The rest of the replacement trees may be planted anywhere on the property as long as they do not encroach on retained trees.

11. Damage to protected trees that will be retained:

- a. Should any protected tree be damaged beyond repair, new trees shall be required to replace the tree. If there is insufficient room to plant the necessary number of new trees, some of the value for trees may be paid into the City's Tree Fund. Replacement values for new trees are listed below.

15 gallon = \$350 24 inch box = \$500 36 inch box = \$1,500

48 inch box = \$5,000 60 inch box = 7,000 72 inch box = \$15,000

- b. Water loving plants and lawns are not permitted under oak tree canopies. Only drought tolerant plants that are compatible with oaks are permitted under the outer half of the canopy of oak trees on site.

12. Final inspection:

- a. At the end of the project, when the contractor wants to remove tree protection fencing and have the tree protection security deposit released by the City, call City Arborist for a final inspection.
- b. Before scheduling a final inspection from the City Arborist, have the project arborist do an inspection, prepare a letter with their findings and provide that letter to the City for the project file.

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LEGEND

- TREE TO BE REMOVED
- TREE TO REMAIN
- PROTECTED TREE
- TREE PROTECTION FENCING

NOT FOR CONSTRUCTION

38 NORTHWEST DAVIS, SUITE 300
PORTLAND, OR 97209
T 503.245.7100

1505 5TH AVE, SUITE 300
SEATTLE, WA 98101
T 206.576.1600

1014 HOWARD STREET
SAN FRANCISCO, CA 94103
T 415.252.7063
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SARATOGA RETIREMENT COMMUNITY
14500 FRUITVALE
SARATOGA, CALIFORNIA
PACIFIC RETIREMENT SERVICES

REVISION	DATE	REASON FOR ISSUE

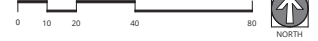
TREE REMOVAL PLAN

SCHEMATIC DESIGN

DATE: 03.30.2020 PROJECT NUMBER: 963117.8

SHEET NUMBER: CS-1.2

1 TREE REMOVAL PLAN - BUILDING A & FITNESS CENTER
1" = 20'-0"



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NOT FOR CONSTRUCTION



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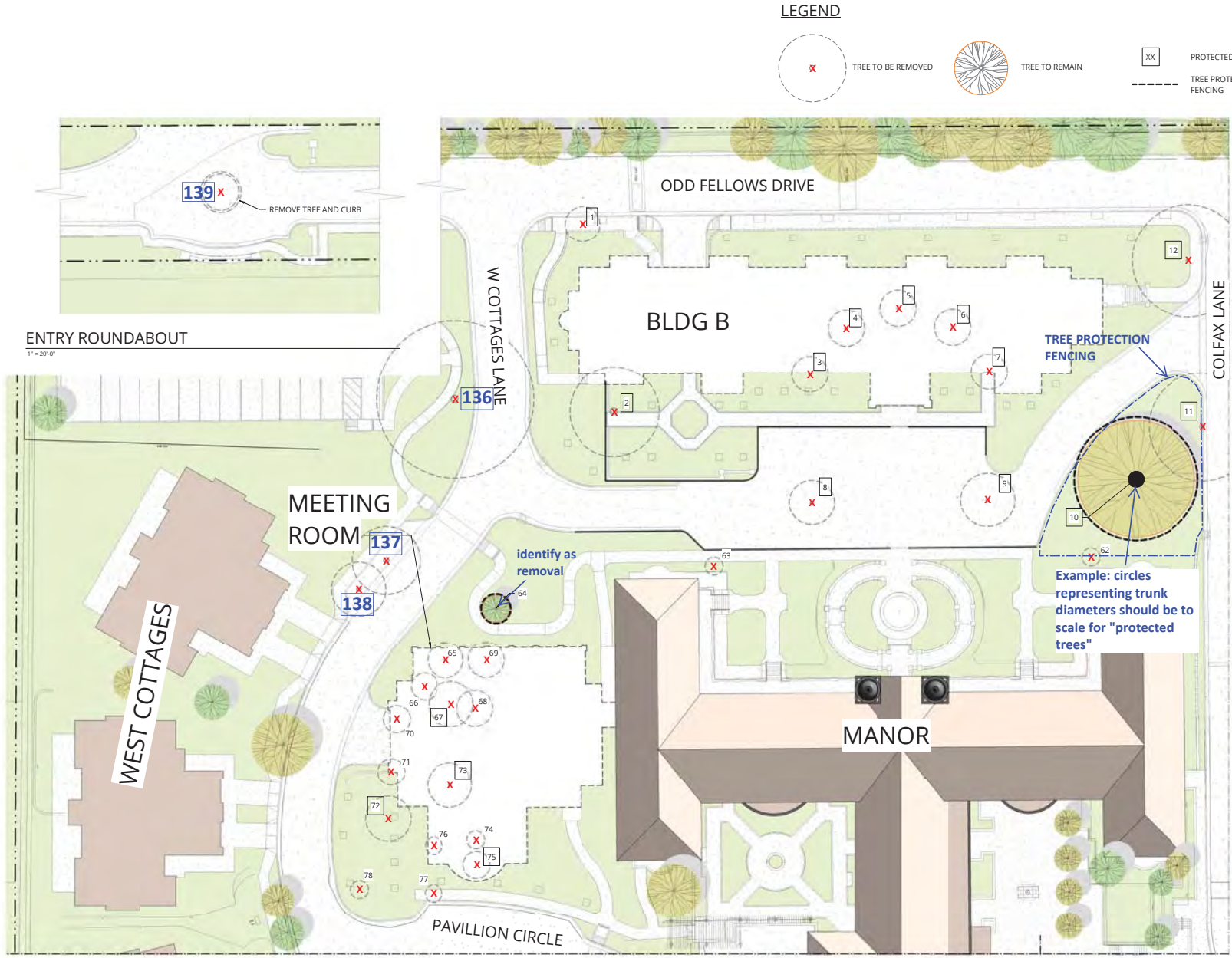
REVISION	DATE	REASON FOR ISSUE

TREE REMOVAL PLAN

SCHEMATIC DESIGN

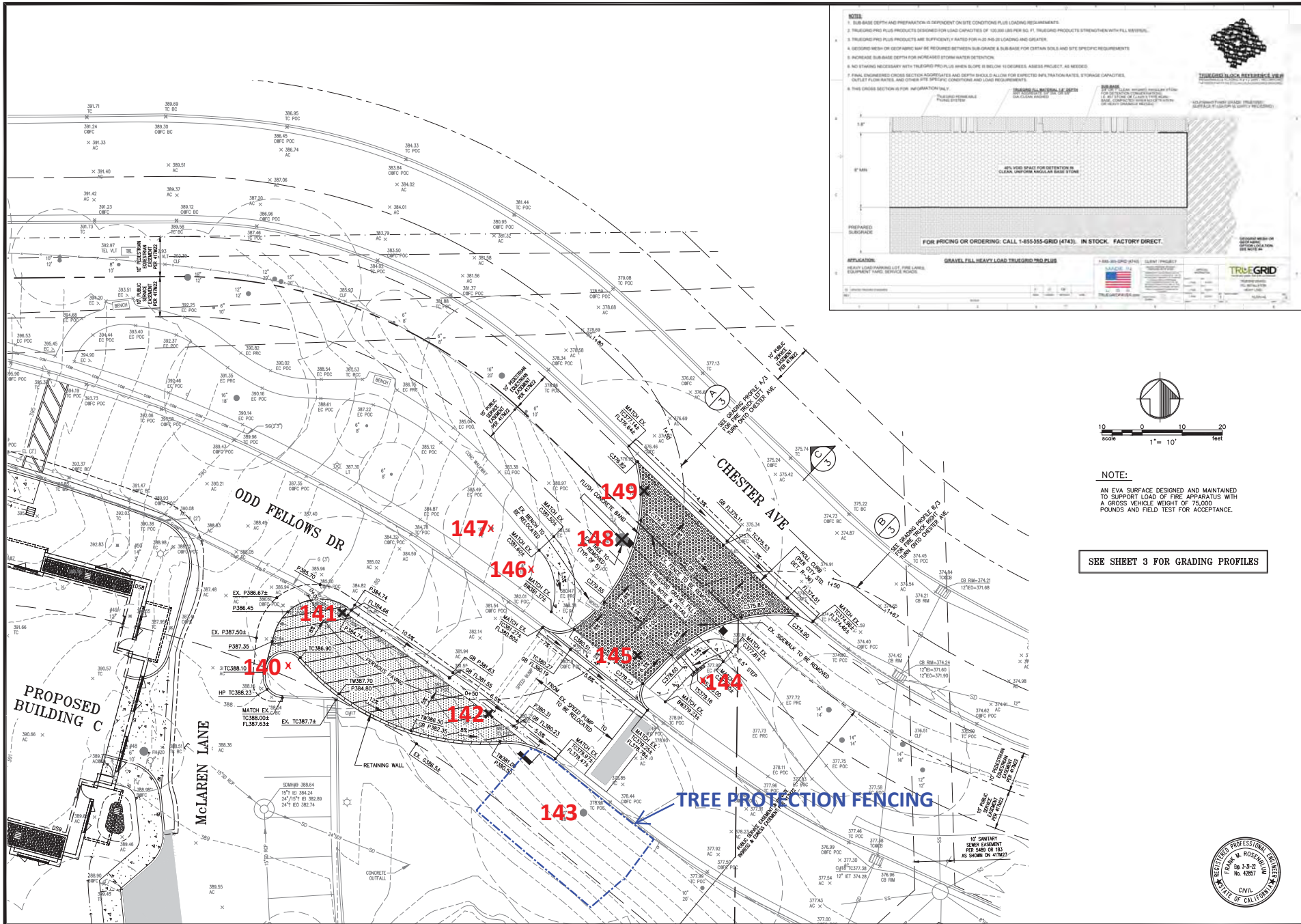
DATE: 03.30.2020 PROJECT NUMBER: 963117.8

SHEET NUMBER: **CS-1.3**



1 TREE REMOVAL PLAN - BUILDING B & MEETING ROOM
1" = 20'-0"





NO.	DATE	REVISIONS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

<p>UNDERWOOD & ROSENBLUM, INC. civil engineers and surveyors 14500 FRUITVALE SARATOGA, CALIFORNIA 95070</p>
<p>SARATOGA RETIREMENT COMMUNITY EMERGENCY VEHICLE ACCESS EXHIBIT "C" GRADING LAYOUT</p>
<p>Date: 04-28-21 Scale: 1"=10' Design: BH Checked: Job: J18028 Sheet 2 of 2</p>

