### **Appendices**

# **Appendix E** Protected Tree Report

# **Appendices**

This page intentionally left blank.



# PROTECTED TREE REPORT

#### PREPARED FOR

Valley Industrial, LLC c/o IDS Real Estate Group

#### **PROPERTY**

Walnut Business Park
Valley Blvd. & Lemon Ave.
Walnut, CA 91789

#### **CONTACT**

Evan Lloyd
213-362-9343
elloyd@idsrealestate.com

April 14, 2024

#### PREPARED BY

LISA SMITH, THE TREE RESOURCE ®

REGISTERED CONSULTING ARBORIST #464

ISA BOARD CERTIFIED MASTER ARBORIST #WE3782BM

ISA TREE RISK ASSESSOR QUALIFIED - INSTRUCTOR

MEMBER OF AMERICAN SOCIETY OF CONSULTING ARBORISTS

P.O. BOX 49314, LOS ANGELES, CA 90049

T 310-663-2290 E lisa@thetreeresource.com



# **TABLE OF CONTENTS**

SUMMARY	3
ASSIGNMENT	4
LIMITATIONS	4
TREE CHARACTERISTICS AND SITE CONDITIONS	4
APPENDIX A.1 -TREE LOCATION MAP - SURVEY	7
APPENDIX A.2 –TREE REMOVAL MAPS - Grading Sheets 1 - 7	6 - 11
APPENDIX B - PHOTOGRAPHS	12 - 47
APPENDIX C – SUMMARY OF FIELD INSPECTION	48 - 57
APPENDIX D – SUMMARY OF DATA	58
GENERAL RECOMMENDATIONS	64
Working Within the Protected Zone	64
Protective Fencing	65
Planting Within the Protected Zone	66
New Tree Planting	67
Tree Maintenance and Pruning	69
Diseases and Insects, Grade Changes, Inspection	71
ASSUMPTIONS AND LIMITING CONDITIONS	72



#### PROTECTED TREE REPORT

Walnut Business Park - Valley Blvd. & Lemon Ave. Walnut, CA 91789

#### **SUMMARY**

PROJECT OVERVIEW				
Site Address	Valley Blvd. & Lemon Ave. Walnut, CA 91789			
City	Walnut			
Project Description	Redevelopment of the Walnut Business Park			
Date of Site Visit	12/15/23 & 12/17/23			
Number of Protected Trees on Site	9			
Number of Recommended Removals	0			

This Tree Report was prepared at the request of the property owner, Valley Industrial, LLC, who are preparing to redevelop Walnut Business Park. The subject property is 414,778 square feet and is located in Walnut.

#### **NATIVE TREES**

This property is under the jurisdiction of the City of Walnut, which recognizes native species of trees to be identified and protected within the city.

At this time, I observed nine native trees on the property, which include six (6) Coast Live Oak (*Quercus agrifolia*) trees and (3) Western Sycamore (*Platanus racemosa*) trees. All native trees are outside of the construction zone and will be retained. These trees appear to have been intentionally installed during the original development of the business park. They were not naturally occurring.

This project requires NO REMOVALS of trees considered protected native within the City of Walnut.

#### **NON-NATIVE TREES**

At this time, I observed one-hundred ninety-one (191) **Non-Native Trees** on the property. REMOVALS: Sixty-six (66) trees will be impacted by construction and are recommended for removal and replacement to the satisfaction of the City of Walnut - Department of City Planning.

RETAINED TREES: One hundred twenty-five (125) trees will be retained in place.



#### ASSIGNMENT

#### The Assignment included:

- Field Observation and Inventory of Trees on Evaluation of potential construction impacts
- Recommendations for the protection of trees to remain
- Photographs of the subject trees are included in Appendix B
- Matrix of proposed protected tree removals and protected trees to remain

- A Tree Location Plot Map is included in Appendix A
- Protected tree construction impact guidelines

#### LIMITS OF THE ASSIGNMENT

The field inspection was a visual, grade level tree assessment. No special tools or equipment were used. No tree risk assessments were performed. My site examination and the information in this report is limited to the date and time the inspection occurred. The information in this report is limited to the condition of the trees at the time of my inspection.

#### TREE CHARACTERISTICS AND SITE CONDITIONS

Detailed information with respect to size, condition, species and recommendations are included in the Summary of Field Inspections in Appendix C. The trees are numbered on the Tree Location Map in Appendix A.

**APPENDIX A.1** 

TREE

SURVEY MAP, REDUCED

# PROJECT SUMMARY Site Address Valley Blvd. & Lemon Ave. Walnut, CA 91789 Location and/or Specific Plan Walnut Project Description VSF: x SF Number of Protectad Trees on Sita 9 Number of Recommended Removals 0

KEY		
	Protected Native Oak Tree	Protected Sycamore Tree
C	Non-Protected Tree	
<b>10</b>	Protective Fencing	Tree For Removal

Tree #	Species	Status	DBH (")	Condition	Retain o Remove
46	Coast Live Oak Quercus agrifola	Protected	22.5	С	Retain
48	Coast Live Oak Quercus agrifola	Protected	19.5	CD	Retain
50	Coast Live Oak Quercus agrifola	Protected	22.5	D	Retain
51	Coast Live Oak Quercus agrifola	Protected	26.5	D	Retain
52	Coast Live Oak Quercus agrifola	Protected	14.5	F	Retain
53	Coast Live Oak Quercus agrifola	Protected	14.5	F	Retain
56	Western Sycamore Platanus racemosa	Protected	23.5	C	Retain
57	Western Sycamore Platanus racemosa	Protected	.22	C-D	Retain
59	Western Sycamore Platanus racemosa	Protected	22.5	C-D	Retain

#### **ALTA/NSPS LAND TITLE SURVEY**

COES AND ROMEAND, AS PER MAP RECORDED IN BOOK T, PAGES S AND T, OF MISCELLAWEIUS SECURISS AND LOTS THROUGH S! OF TRACE AND, SISSA IN THE CITY OF WALANIT, COUNTY OF LOS ANGELES, STATE OF CALFORNIA, AS THE MAP RECORDED IN BOOK BIR FAGES IS THROUGH S!, NULLISAN, OF MAPS, IN THE OPPICE OF THE COUNTY

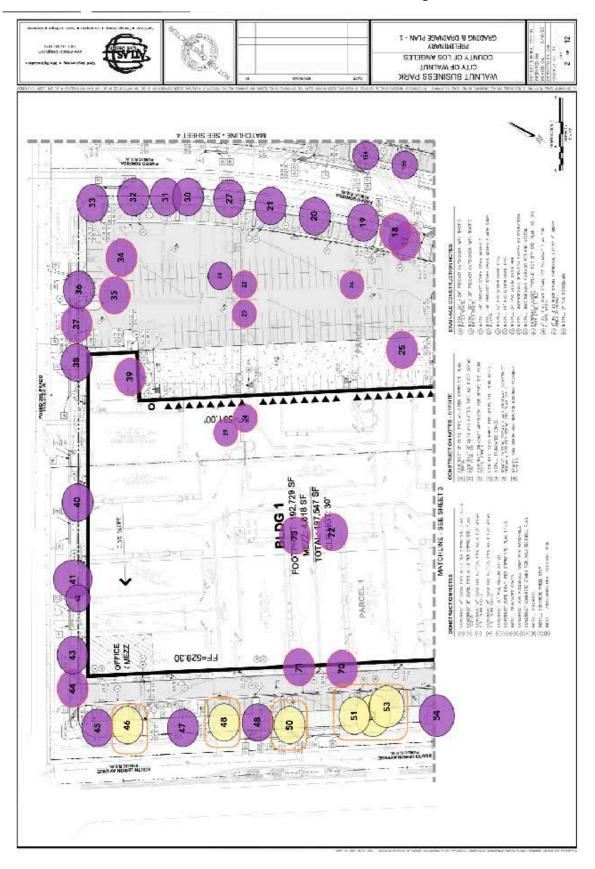
#### **ALTA/NSPS LAND TITLE SURVEY**

AS A PARTITION OF LITTLE FOR THE TRENDING WAR OF A PARTITION OF THE SHAPENING A PARTIT CHARLE NO PROCESS AND REAL AND A SET BY AN PERCONCED IN BOOK 1. THOSE AS AND 1 OF MISCELLARIZED AND EXCELLARIZED 1 THROUGH 20 OF TRACT NO 2300, IN THE COTY OF WAILANT, COUNTY OF LOS WASTLES, STATL OF CALIFORNIA, AS DEEP MAP DESCRIPCING MISCAN DR. PLAGES 20 THROUGH 27 JRIGUISTO, OR MAPE, MISCANDER OF COUNTY.



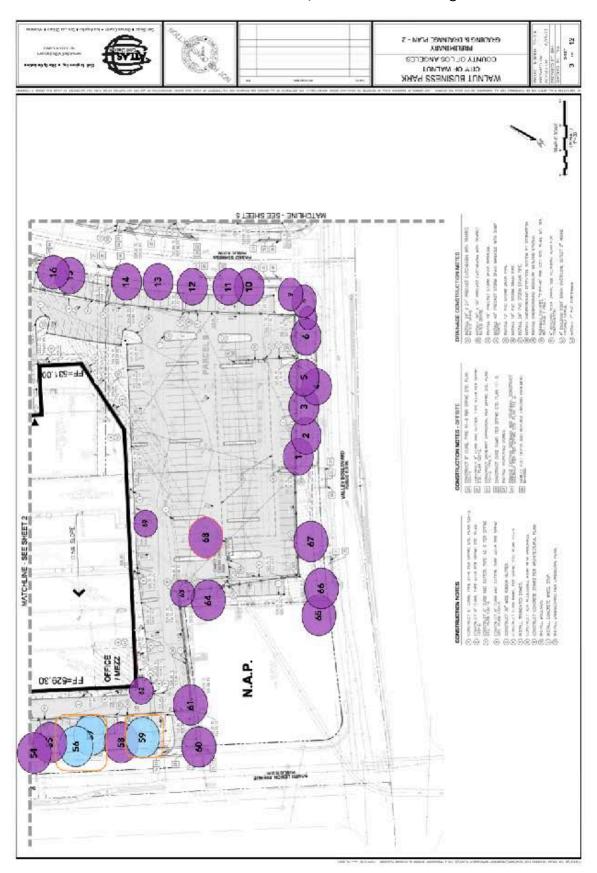


# APPENDIX A.2 - TREE REMOVAL MAP, SHEET. 2 Grading REDUCED

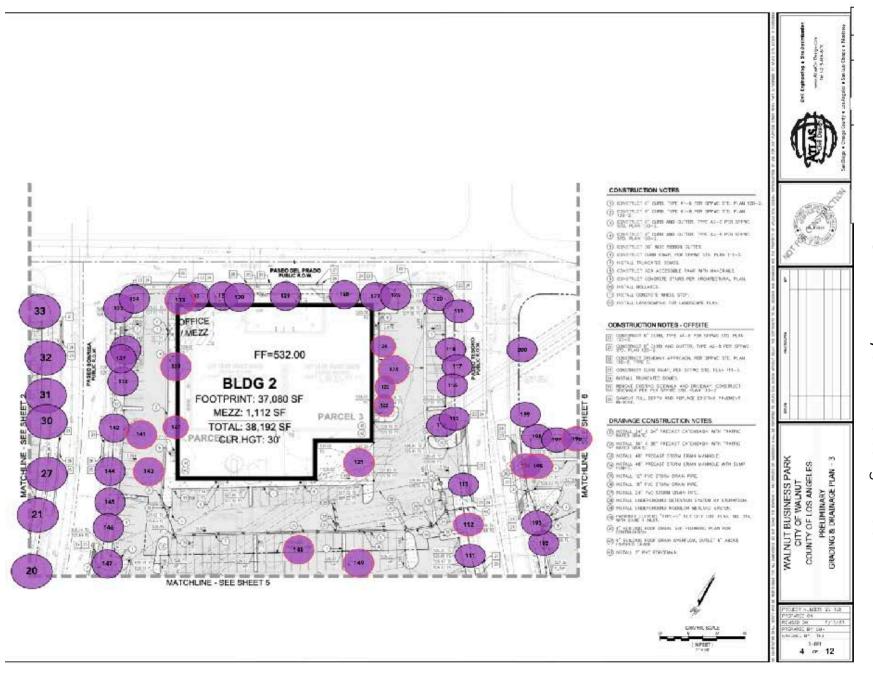




# APPENDIX A.2 - TREE REMOVAL MAP, - SHEET 3 Grading REDUCED

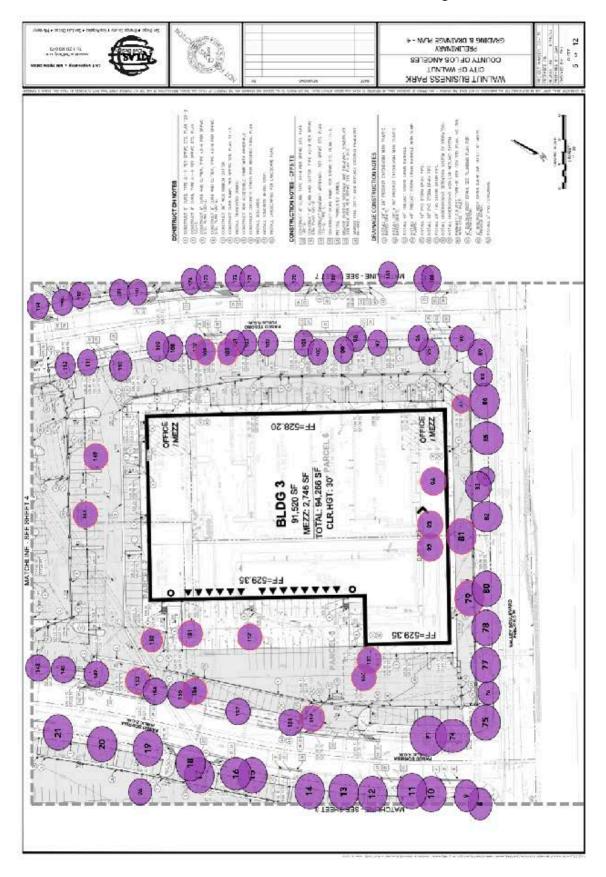


# APPENDIX A.2 TRE Ш REMOVAL MAP, SHEET. 4 Grading REDUCED



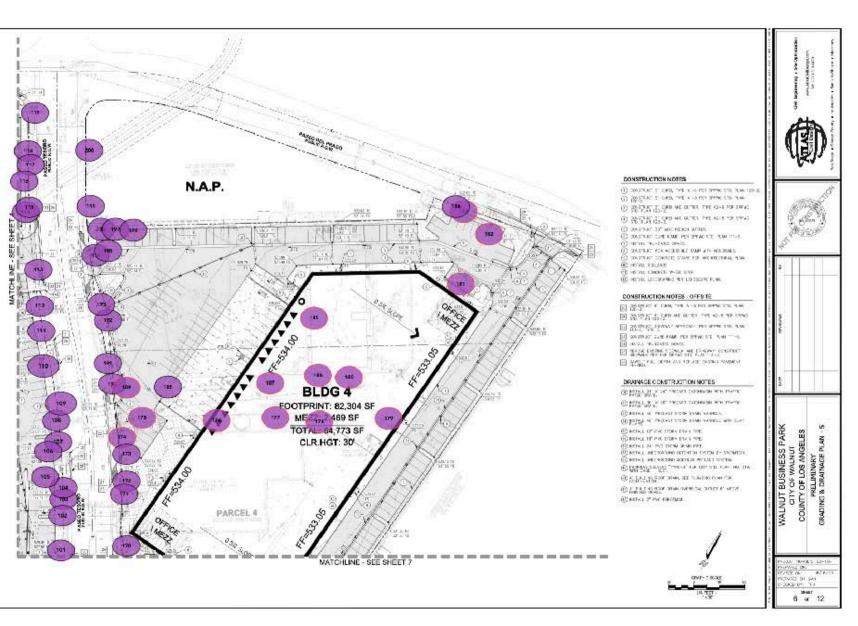


# APPENDIX A.2 - TREE REMOVAL MAP, SHEET. 5 Grading REDUCED



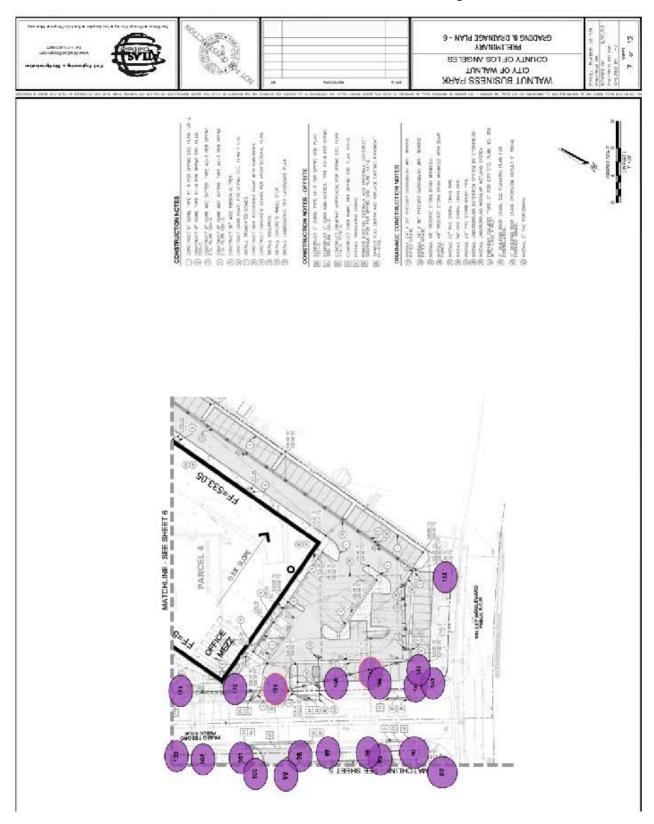


# **APPENDIX A.2** TREE REMOVAL MAP, SHEET. 6 Grading REDUCED

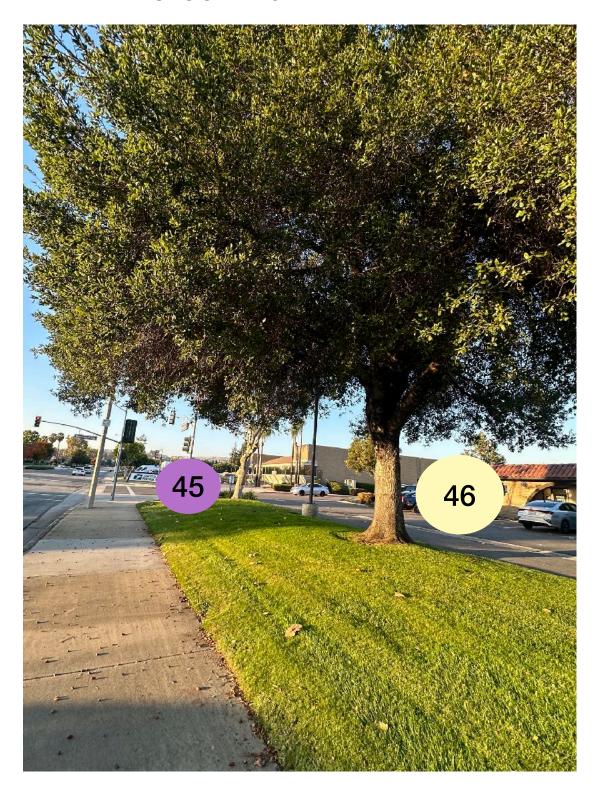




# APPENDIX A.2 - TREE REMOVAL MAP, SHEET. 7 Grading REDUCED

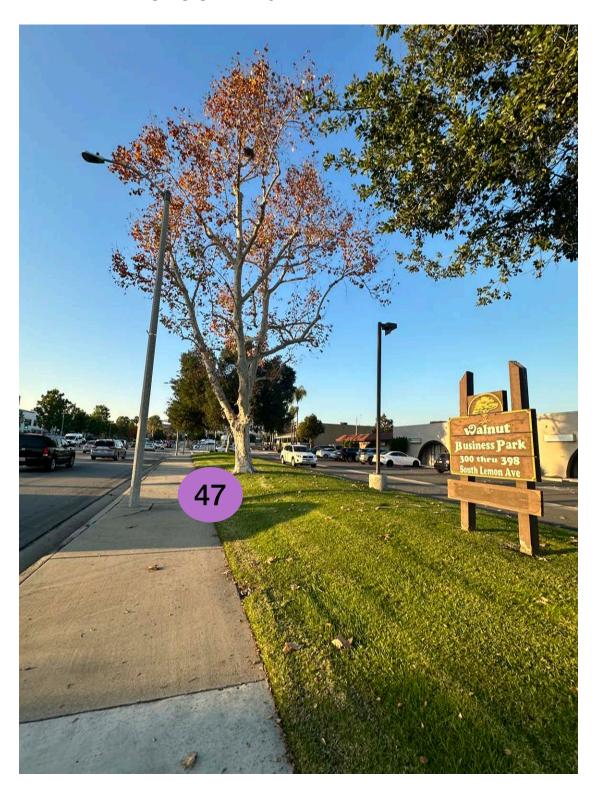






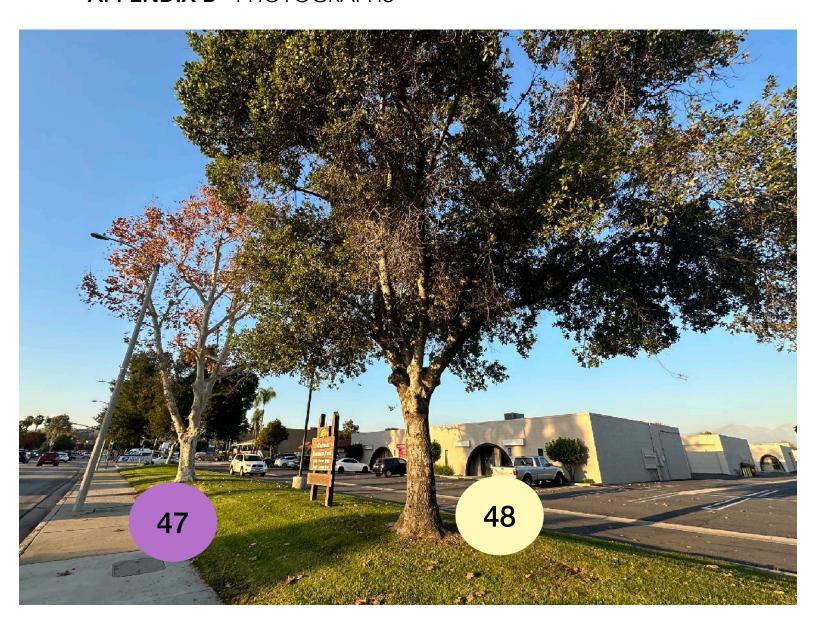
**PHOTO 1 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





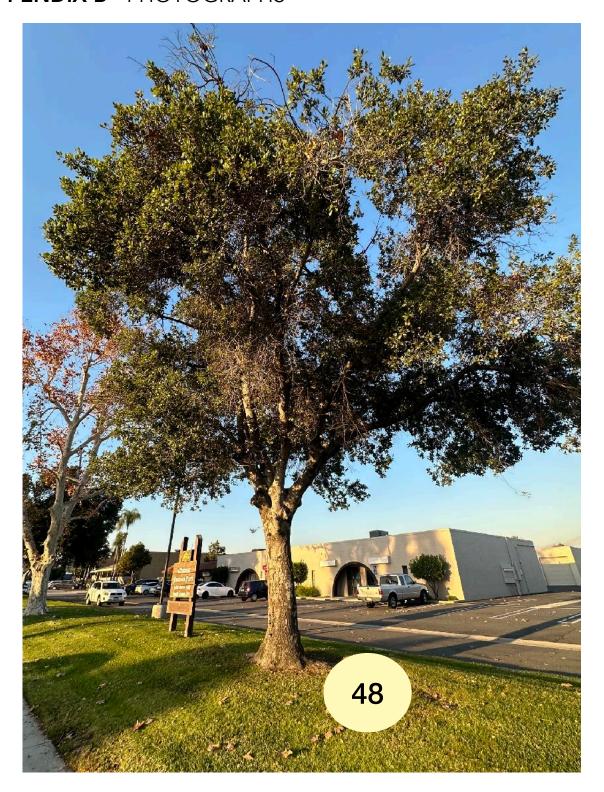
**PHOTO 2 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.



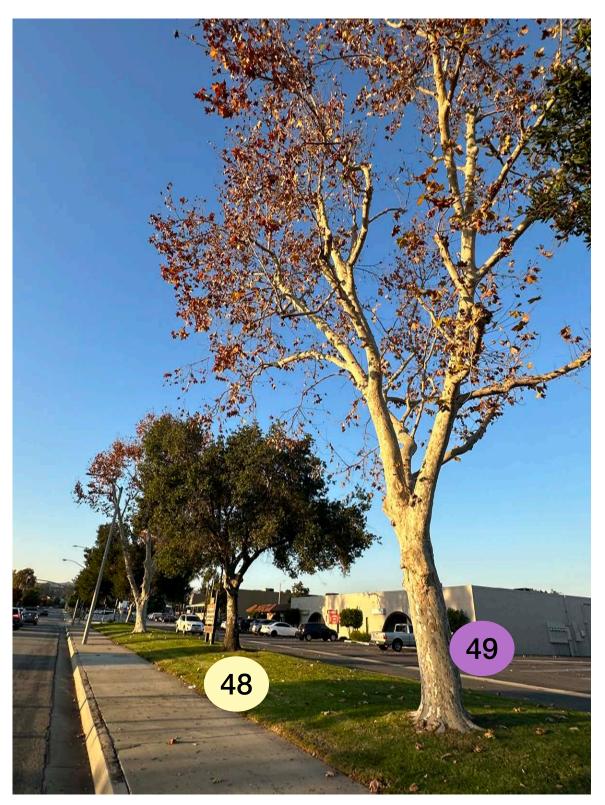


**PHOTO 3 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.



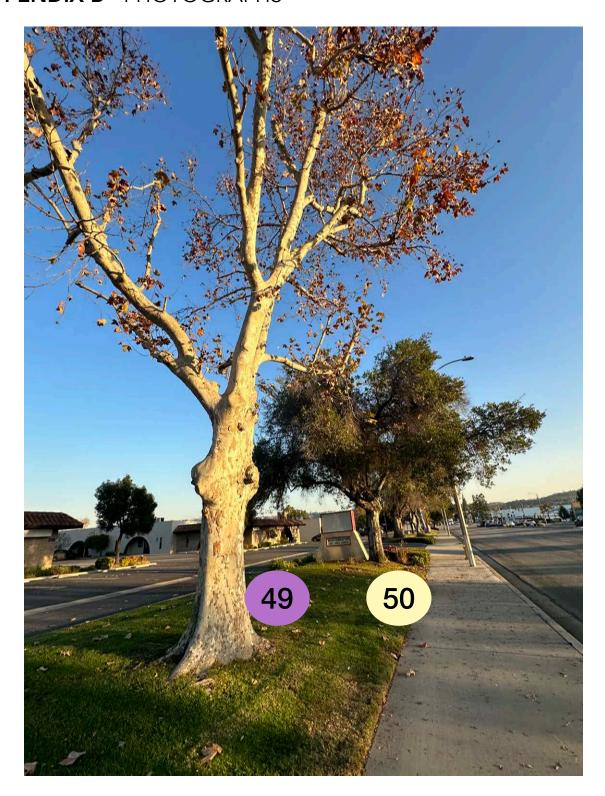


**PHOTO 4 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.



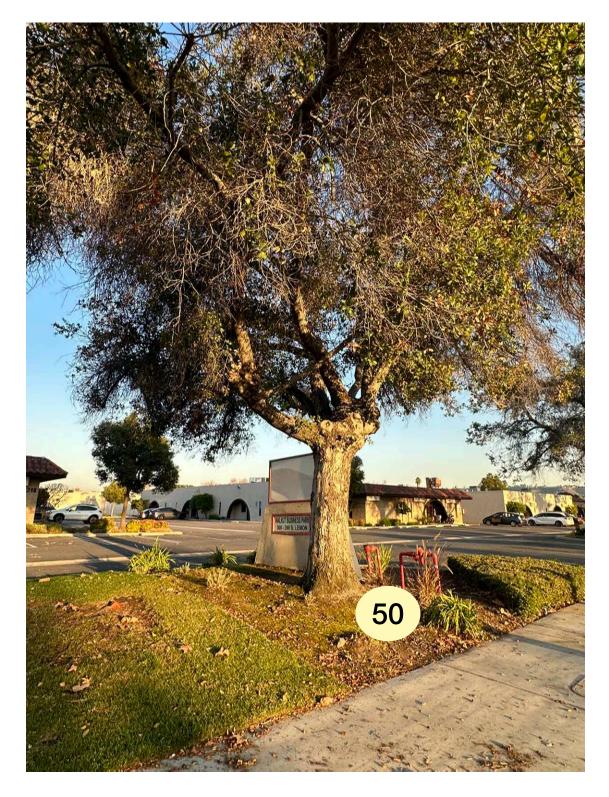
**PHOTO 5 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





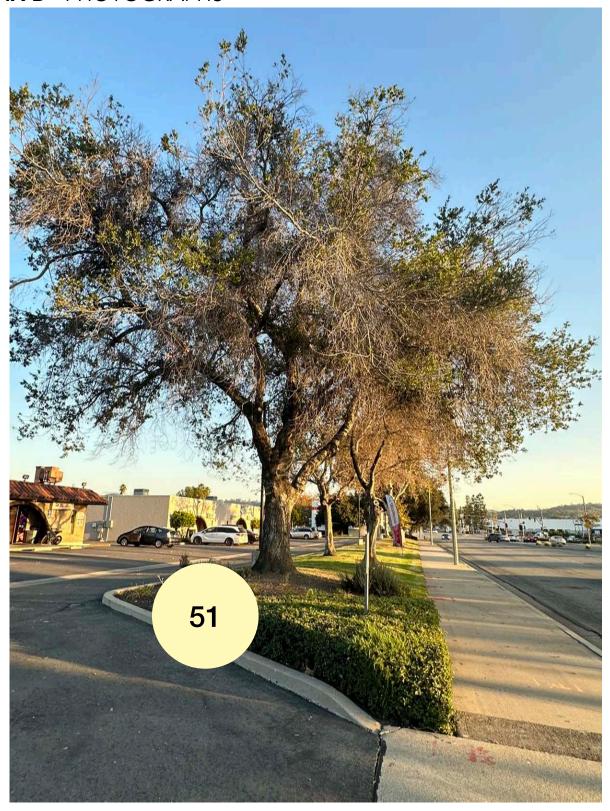
**PHOTO 6 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 7 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 9 -** Shows some of the protected oak trees on site. These trees will be retained and protected in place.







**PHOTO 11 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.





**PHOTO 12 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.





**PHOTO 13 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.





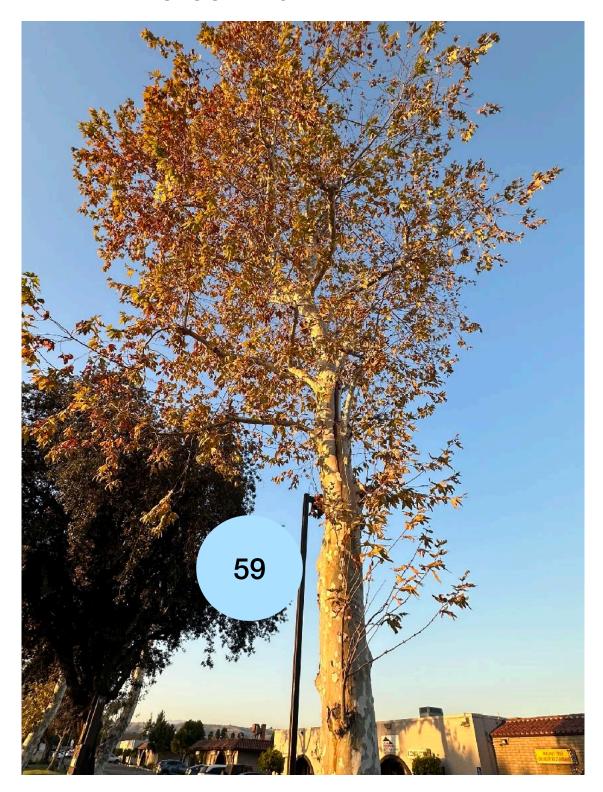
**PHOTO 14 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.





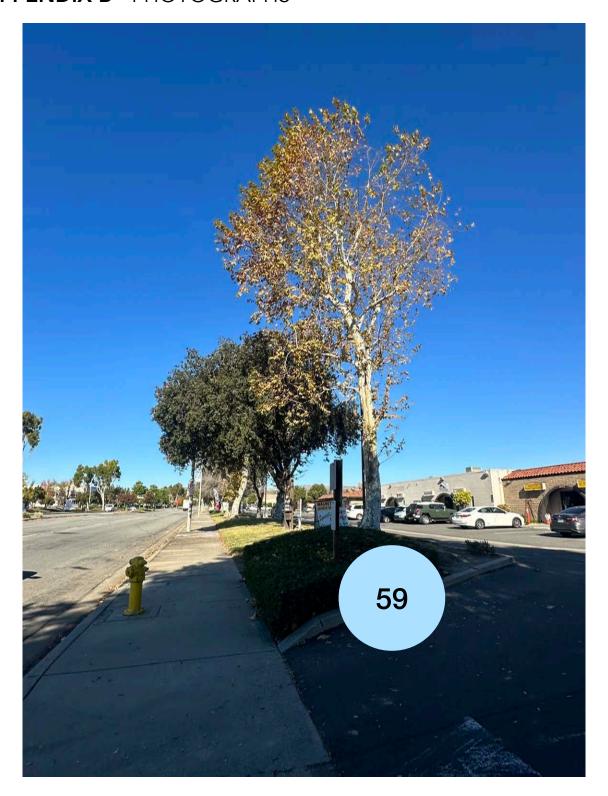
**PHOTO 15** - Shows some of the protected oak trees on site. These trees will be retained and protected in place.





**PHOTO 16 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 17 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 18 -** Shows some of the protected oak and sycamore trees on site. These trees will be retained and protected in place.





**PHOTO 19 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 20 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 21 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 22 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 23 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 24 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.



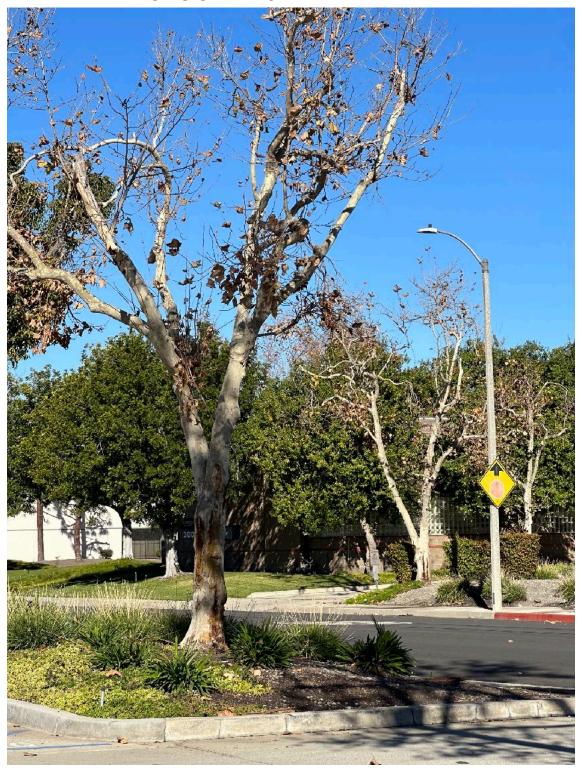
**PHOTO 25 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 26** - Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 27 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 28 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 29 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 30 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 31 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 32 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





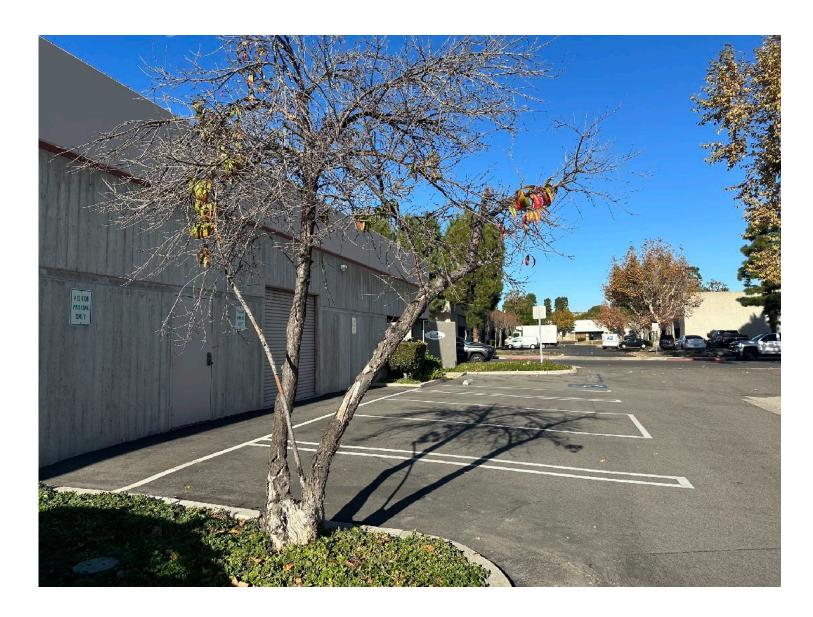
**PHOTO 33** - Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 34 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 35** - Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.





**PHOTO 36 -** Shows trees on site, which include London Plane, Brazilian Pepper, and other non-protected trees. Removals are focused on areas of future development and root impacts that will not be tolerable.



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove
1	Paperbark Melaleuca quinquinervia	Non-Protected	18.5	35	15	Fair	Retain
2	Camphor Cinnamomum camphora	Non-Protected	12.5	30	15	Fair	Retain
3	Camphor Cinnamomum camphora	Non-Protected	17.5	30	15	Fair	Retain
4	Camphor Cinnamomum camphora	Non-Protected	12.5	30	15	Fair-Poor	Retain
5	London Plane Tree Platanus x acerfolia	Non-Protected	25.5	40	25	Fair	Retain
6	London Plane Tree Platanus x acerfolia	Non-Protected	18	35	20	Fair	Retain
7	Camphor Cinnamomum camphora	Non-Protected	17.5	25	20	Fair-Poor	Retain
8	London Plane Tree Platanus x acerfolia	Non-Protected	12	20	20	Fair-Poor	Retain
9	London Plane Tree Platanus x acerfolia	Non-Protected	9	20	12	Fair-Poor	Retain
10	Camphor Cinnamomum camphora	Non-Protected	15.5	25	20	Fair-Poor	Retain
11	Camphor Cinnamomum camphora	Non-Protected	13	30	25	Fair	Retain
12	Camphor Cinnamomum camphora	Non-Protected	13.5	30	20	Fair	Retain
13	London Plane Tree Platanus x acerfolia	Non-Protected	23.5	45	30	Fair	Retain
14	London Plane Tree Platanus x acerfolia	Non-Protected	20	40	30	Fair	Retain
15	London Plane Tree Platanus x acerfolia	Non-Protected	13.5	25	15	Fair-Poor	Retain
16	London Plane Tree Platanus x acerfolia	Non-Protected	13.5	25	20	Fair-Poor	Retain
17	Camphor Cinnamomum camphora	Non-Protected	9	20	15	Fair	Remove
18	Camphor Cinnamomum camphora	Non-Protected	11.5	20	20	Fair	Remove
19	Camphor Cinnamomum camphora	Non-Protected	14.5	20	20	Fair	Retain
20	London Plane Tree Platanus x acerfolia	Non-Protected	17	45	25	Fair	Retain



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

		Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead						
Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove	
21	Camphor Cinnamomum amphora	Non-Protected	6.5	10	6	Poor	Retain	
22	Camphor Cinnamomum amphora	Non-Protected	5, 4	10	8	Fair	Remove	
23	Southern Magnolia Magnolia grandiflora	Non-Protected	6	15	12	Fair	Remove	
24	Acacia Acacia mearnsii	Non-Protected	7	15	20	Fair	Remove	
25	Brazilian Pepper Schinus terebinthifolius	Non-Protected	18	15	20	Fair	Remove	
26	Camphor Cinnamomum amphora	Non-Protected	6.5	12	10	Fair	Remove	
27	London Plane Tree Platanus x acerfolia	Non-Protected	14.5	25	20	Fair	Retain	
28	Southern Magnolia Magnolia grandiflora	Non-Protected	11	20	20	Fair	Retain	
29	Southern Magnolia Magnolia grandiflora	Non-Protected	15.5	30	25	Fair	Remove	
30	Camphor Cinnamomum amphora	Non-Protected	12	25	20	Fair	Retain	
31	Camphor Cinnamomum amphora	Non-Protected	11	25	20	Fair	Retain	
32	Camphor Cinnamomum amphora	Non-Protected	8	20	15	Fair	Retain	
33	London Plane Tree Platanus x acerfolia	Non-Protected	11	20	15	Fair-Poor	Retain	
33	London Plane Tree Platanus x acerfolia	Non-Protected	19	35	30	Fair	Retain	
34	Southern Magnolia Magnolia grandiflora	Non-Protected	7.5	15	10	Fair	Remove	
35	Southern Magnolia Magnolia grandiflora	Non-Protected	7.5	15	10	Poor	Remove	
36	London Plane Tree Platanus x acerfolia	Non-Protected	24	40	25	Fair	Retain	
37	London Plane Tree Platanus x acerfolia	Non-Protected	11	25	15	Poor	Remove	
38	London Plane Tree Platanus x acerfolia	Non-Protected	24			Fair	Retain	
39	fruit tree	Non-Protected	5, 4	10	10	Dead	Remove	
40	Southern Magnolia Magnolia grandiflora	Non-Protected	12.5			Fair	Retain	



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove
41	Southern Magnolia Magnolia grandiflora	Non-Protected	8	18	10	Fair	Retain
42	Citrus Citrus sp	Non-Protected	2, 2, 1	10	10	Fair	Retain
43	Southern Magnolia Magnolia grandiflora	Non-Protected	6.5	20	12	Fair	Retain
44	Camphor Cinnamomum camphora	Non-Protected	9.5	20	15	Fair	Remove
45	London Plane Tree Platanus x acerfolia	Non-Protected	15	25	25	Fair	Retain
46	Coast Live Oak Quercus agrifolia	Protected	22.5	35	45	Fair	Retain
47	London Plane Tree Platanus x acerfolia	Non-Protected	26	35	30	Fair	Retain
48	Coast Live Oak Quercus agrifolia	Protected	19.5	30	25	Fair-Poor	Retain
49	London Plane Tree Platanus x acerfolia	Non-Protected	23.5	35	30	Fair	Retain
50	Coast Live Oak Quercus agrifolia	Protected	22.5	30	35	Poor	Retain
51	Coast Live Oak Quercus agrifolia	Protected	26.5	35	35	Poor	Retain
52	Coast Live Oak Quercus agrifolia	Protected	14.5	25	20	Dead	Retain
53	Coast Live Oak Quercus agrifolia	Protected	14.5	25	20	Dead	Retain
54	London Plane Tree Platanus x acerfolia	Non-Protected	22	40	30	Fair	Retain
55	Holly Oak Quercus ilex	Non-Protected	15	30	25	Poor - rotted	Retain
56	Western Sycamore Platanus racemosa	Protected	23.5	40	25	Fair	Retain
57	Western Sycamore Platanus racemosa	Protected	22	40	20	Fair-Poor	Retain
58	Holly Oak Quercus ilex	Non-Protected	16.5	35	30	Fair	Retain
59	Western Sycamore Platanus racemosa	Protected	21.5	45	25	Fair-Poor	Retain
60	Holly Oak Quercus ilex	Non-Protected	22.5	40	35	Fair	Retain



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

	Rating Code: $A = Excellent$ , $B = Good$ , $C = Fair$ , $D = Poor$ , $E = Nearly Dead$ , $F = Dead$							
Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove	
61	Brazilian Pepper Schinus terebinthifolius	Non-Protected	26	35	40	Fair	Retain	
62	Camphor Cinnamomum camphora	Non-Protected	6.75	15	10	Fair	Retain	
63	Citrus Citrus spp.	Non-Protected	12	15	15	Fair	Retain	
64	Camphor Cinnamomum camphora	Non-Protected	18	30	25	Fair	Retain	
65	Camphor Cinnamomum camphora	Non-Protected	14	25	25	Fair	Retain	
66	Camphor Cinnamomum camphora	Non-Protected	13	25	10	Fair	Retain	
67	Camphor Cinnamomum camphora	Non-Protected	15	25	20	Fair	Retain	
68	Peach Tree Prunus persica	Non-Protected	6, 5	15	15	Fair	Remove	
69	Fig Ficus carica	Non-Protected	7, 4	15	15	Fair	Retain	
70	Camphor Cinnamomum camphora	Non-Protected	8	15	12	Fair	Remove	
71	Camphor Cinnamomum camphora	Non-Protected	8	15	12	Fair	Remove	
72	Camphor Cinnamomum camphora	Non-Protected	6	15	12	Fair	Remove	
73	Camphor Cinnamomum camphora	Non-Protected	5	15	12	Fair	Remove	
74	London Plane Tree Platanus x acerfolia	Non-Protected	22	40	25	Fair-Poor	Retain	
75	Brazilian Pepper Schinus terebinthifolius	Non-Protected	28	35	30	Fair-Poor	Retain	
76	Camphor Cinnamomum camphora	Non-Protected	8	12	6	Poor	Retain	
77	Camphor Cinnamomum camphora	Non-Protected	18	25	20	Fair-Poor	Retain	
78	London Plane Tree Platanus x acerfolia	Non-Protected	22	40	30	Fair	Retain	
79	Camphor Cinnamomum camphora	Non-Protected	20	40	30	Fair	Remove	
80	Brazilian Pepper Schinus terebinthifolius	Non-Protected	20	35	30	Fair-Poor	Retain	
				-				



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of	Retain or Remove
81	Brazilian Pepper	Non-Protected	14	20	20	Condition Fair-Poor	Remove
82	Schinus terebinthifolius  London Plane Tree  Platanus x acerfolia	Non-Protected	20	40	35	Fair	Retain
83	Brazilian Pepper Schinus terebinthifolius	Non-Protected	22	35	25	Fair	Retain
84	Camphor Cinnamomum camphora	Non-Protected	10	18	10	Poor	Retain
85	London Plane Tree Platanus x acerfolia	Non-Protected	22	45	35	Fair	Retain
86	Brazilian Pepper Schinus terebinthifolius	Non-Protected	35 @ 1′	40	35	Fair	Retain
87	Brazilian Pepper Schinus terebinthifolius	Non-Protected	12	15	8	Poor	Remove
88	Camphor Cinnamomum camphora	Non-Protected	15	25	12	Poor	Retain
89	London Plane Tree Platanus x acerfolia	Non-Protected	24	40	35	Fair	Retain
90	Brazilian Pepper Schinus terebinthifolius	Non-Protected	20 @1′	30	30	Fair	Retain
91	Camphor Cinnamomum camphora	Non-Protected	24	45	40	Fair	Retain
92	Camphor Cinnamomum camphora	Non-Protected	12	25	25	Fair	Remove
93	Camphor Cinnamomum camphora	Non-Protected	12	25	25	Fair	Remove
94	Camphor Cinnamomum camphora	Non-Protected	10	20	20	Fair	Remove
95	London Plane Tree Platanus x acerfolia	Non-Protected	12	20	20	Poor	Retain
96	London Plane Tree Platanus x acerfolia	Non-Protected	8	18	12	Poor	Retain
97	Camphor Cinnamomum camphora	Non-Protected	18	30	30	Fair	Retain
98	London Plane Tree Platanus x acerfolia	Non-Protected	10	25	15	Poor	Retain
99	London Plane Tree Platanus x acerfolia	Non-Protected	11	20	15	Poor	Retain
100	London Plane Tree Platanus x acerfolia	Non-Protected	12	20	15	Poor	Retain



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

	Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead							
Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove	
101	London Plane Tree Platanus x acerfolia	Non-Protected	14	20	20	Poor	Retain	
102	Camphor Cinnamomum camphora	Non-Protected	14	40	35	Fair	Retain	
103	Camphor Cinnamomum camphora	Non-Protected	14	35	25	Fair	Retain	
104	London Plane Tree Platanus x acerfolia	Non-Protected	12	30	20	Poor	Retain	
105	London Plane Tree Platanus x acerfolia	Non-Protected	11	30	15	Poor	Remove	
106	London Plane Tree Platanus x acerfolia	Non-Protected	11	20	15	Poor	Remove	
107	London Plane Tree Platanus x acerfolia	Non-Protected	11	20	15	Poor	Retain	
108	Camphor Cinnamomum camphora	Non-Protected	10	18	12	Fair	Retain	
109	Camphor Cinnamomum camphora	Non-Protected	13	25	20	Fair	Retain	
110	London Plane Tree Platanus x acerfolia	Non-Protected	14	35	25	Fair-Poor	Retain	
111	London Plane Tree Platanus x acerfolia	Non-Protected	11	20	15	Poor	Retain	
112	Camphor Cinnamomum camphora	Non-Protected	12	25	25	Fair	Remove	
113	Camphor Cinnamomum camphora	Non-Protected	12	25	25	Fair	Retain	
114	London Plane Tree Platanus x acerfolia	Non-Protected	10	20	15	Fair	Retain	
115	London Plane Tree Platanus x acerfolia	Non-Protected	5	15	12	Fair	Retain	
116	Camphor Cinnamomum camphora	Non-Protected	9	15	12	Poor	Retain	
117	Camphor Cinnamomum camphora	Non-Protected	9	15	12	Poor	Retain	
118	Camphor Cinnamomum camphora	Non-Protected	8	15	12	Poor	Retain	
119	Carrotwood Cupaniopsis anacardiodes	Non-Protected	5	16	15	Fair	Retain	
120	London Plane Tree Platanus x acerfolia	Non-Protected	14	35	20	Fair	Retain	



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove
121	Paperbark Melaleuca quinquinervia	Non-Protected	18	25	15	Fair	Remove
122	Paperbark Melaleuca quinquinervia	Non-Protected	12	16	6	Fair	Remove
123	Paperbark Melaleuca quinquinervia	Non-Protected	14	16	6	Fair	Remove
124	Paperbark Melaleuca quinquinervia	Non-Protected	14	20	6	Fair	Remove
125	Brazilian Pepper Schinus terebinthifolius	Non-Protected	22	35	30	Fair-Poor	Remove
126	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	15	Fair	Retain
127	Camphor Cinnamomum camphora	Non-Protected	14	20	15	Fair-Poor	Retain
128	London Plane Tree Platanus x acerfolia	Non-Protected	13	25	20	Fair-Poor	Retain
129	Camphor Cinnamomum camphora	Non-Protected	9	15	15	Poor	Retain
130	London Plane Tree Platanus x acerfolia	Non-Protected	20	30	20	Fair-Poor	Retain
131	London Plane Tree Platanus x acerfolia	Non-Protected	20	30	30	Fair-Poor	Retain
132	Camphor Cinnamomum camphora	Non-Protected	12	20	15	Fair-Poor	Retain
133	Camphor Cinnamomum camphora	Non-Protected	7	15	10	Fair-Poor	Remove
134	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	15	Fair	Retain
135	London Plane Tree Platanus x acerfolia	Non-Protected	14	30	25	Fair	Retain
136	Camphor Cinnamomum camphora	Non-Protected	8	20	12	Fair	Retain
137	Camphor Cinnamomum camphora	Non-Protected	8	12	10	Fair-Poor	Retain
138	Camphor Cinnamomum camphora	Non-Protected	7	10	6	Fair-Poor	Retain
139	Brazilian Pepper Schinus terebinthifolius	Non-Protected	22	25	20	Fair-Poor	Remove
140	Brazilian Pepper Schinus terebinthifolius	Non-Protected	12	20	12	Fair	Remove



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove
141	London Plane Tree Platanus x acerfolia	Non-Protected	14	30	25	Fair	Remove
142	London Plane Tree Platanus x acerfolia	Non-Protected	12	30	20	Fair	Retain
143	Brazilian Pepper Schinus terebinthifolius	Non-Protected	14	25	20	Fair	Remove
144	London Plane Tree Platanus x acerfolia	Non-Protected	10	18	10	Poor	Retain
145	Camphor Cinnamomum camphora	Non-Protected	12	25	15	Fair-Poor	Retain
146	Camphor Cinnamomum camphora	Non-Protected	15	25	15	Fair-Poor	Retain
147	London Plane Tree Platanus x acerfolia	Non-Protected	18	35	25	Fair	Retain
148	Brazilian Pepper Schinus terebinthifolius	Non-Protected	14	20	20	Fair	Remove
149	Brazilian Pepper Schinus terebinthifolius	Non-Protected	10, 10	25	25	Fair	Remove
150	Brazilian Pepper Schinus terebinthifolius	Non-Protected	10	20	20	Fair-Poor	Remove
151	Camphor Cinnamomum camphora	Non-Protected	10	20	15	Fair	Remove
152	Brazilian Pepper Schinus terebinthifolius	Non-Protected	13	20	15	Fair	Remove
153	Camphor Cinnamomum camphora	Non-Protected	8	20	15	Fair	Remove
154	Camphor Cinnamomum camphora	Non-Protected	10	20	20	Fair	Retain
155	Camphor Cinnamomum camphora	Non-Protected	8	15	15	Fair	Retain
156	Camphor Cinnamomum camphora	Non-Protected	13	20	20	Fair	Remove
157	London Plane Tree Platanus x acerfolia	Non-Protected	22	40	35	Fair	Retain
158	Camphor Cinnamomum camphora	Non-Protected	20	35	25	Fair	Retain
159	Camphor Cinnamomum camphora	Non-Protected	20	35	25	Fair	Remove
160	Indian Laurel Fig Ficus microcarpa 'Nitida'	Non-Protected	8	12	12	Fair-Poor	Remove



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

	Hading Godd: 77 Excellent, B Good, G Tail, B Tool, E Healing Bodd, T Bedd						
Tree #	Species	Status	DBH (")	Height (′)	Spread (')	Summary of Condition	Retain or Remove
161	Indian Laurel Fig Ficus microcarpa 'Nitida'	Non-Protected	8	12	12	Fair-Poor	Remove
162	Camphor Cinnamomum camphora	Non-Protected	24	30	30	Fair	Retain
163	London Plane Tree Platanus x acerfolia	Non-Protected	6	15	10	Poor	Retain
164	London Plane Tree Platanus x acerfolia	Non-Protected	6	15	10	Poor	Retain
165	London Plane Tree Platanus x acerfolia	Non-Protected	6	15	10	Poor	Retain
166	London Plane Tree Platanus x acerfolia	Non-Protected	6	15	10	Poor	Retain
167	London Plane Tree Platanus x acerfolia	Non-Protected	6	15	10	Poor	Remove
168	Camphor Cinnamomum camphora	Non-Protected	12	20	15	Fair-Poor	Retain
169	London Plane Tree Platanus x acerfolia	Non-Protected	12	20	15	Fair-Poor	Remove
170	London Plane Tree Platanus x acerfolia	Non-Protected	12	20	15	Fair-Poor	Retain
171	London Plane Tree Platanus x acerfolia	Non-Protected	18	40	25	Fair	Retain
172	London Plane Tree Platanus x acerfolia	Non-Protected	14	35	20	Fair	Retain
173	Carrotwood Cupaniopsis anacardiodes	Non-Protected	4, 4	15	15	Fair	Retain
174	London Plane Tree Platanus x acerfolia	Non-Protected	10	20	20	Fair	Remove
175	London Plane Tree Platanus x acerfolia	Non-Protected	13	30	15	Fair-Poor	Remove
176	Carrotwood Cupaniopsis anacardiodes	Non-Protected	5, 3	20	15	Fair	Remove
177	White Alder Alnus rhombifolia	Non-Protected	18	30	15	Fair-Poor	Remove
178	Fig Ficus carica	Non-Protected	10, 8, 8, 6,	15	15	Fair-Poor	Remove
179	Lemon-scented gum Corymbia citriodora	Non-Protected	24	45	30	Fair	Remove
180	Brazilian Pepper Schinus terebinthifolius	Non-Protected	6, 5	15	15	Fair	Remove



Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

	Rading Good, 7 Extendit, 9 Good, 6 Tail, 9 Tool, 2 Ready Bead, 1 Bead						
Tree #	Species	Status	DBH (")	Height (′)	Spread (')	Summary of Condition	Retain or Remove
181	Brazilian Pepper Schinus terebinthifolius	Non-Protected	16	20	20	Fair-Poor	Remove
182	Madras Thorn Tree Pithecellobium dulce	Non-Protected	4,4	10	6	Fair-Poor	Remove
183	California Pepper Schinus molle	Non-Protected	22	30	30	Fair	Remove
184	California Pepper Schinus molle	Non-Protected	22	30	30	Poor	Retain
185	Brazilian Pepper Schinus terebinthifolius	Non-Protected	16	20	20	Fair-Poor	Remove
186	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	15	Fair	Remove
187	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	15	Poor	Remove
188	London Plane Tree Platanus x acerfolia	Non-Protected	8, 6	20	12	Fair-Poor	Retain
189	London Plane Tree Platanus x acerfolia	Non-Protected	8	20	10	Fair-Poor	Remove
190	London Plane Tree Platanus x acerfolia	Non-Protected	8, 5	15	10	Poor	Retain
191	London Plane Tree Platanus x acerfolia	Non-Protected	8, 6	20	15	Fair-Poor	Retain
192	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	25	Fair-Poor	Retain
193	London Plane Tree Platanus x acerfolia	Non-Protected	8	15	10	Fair-Poor	Retain
194	London Plane Tree Platanus x acerfolia	Non-Protected	12	25	15	Fair-Poor	Remove
195	London Plane Tree Platanus x acerfolia	Non-Protected	9	15	10	Fair-Poor	Remove
196	Shiny Xylosma Xylosma congesta	Non-Protected	12	20	20	Fair-Poor	Remove
197	Shiny Xylosma Xylosma congesta	Non-Protected	12	20	20	Fair-Poor	Retain
198	Shiny Xylosma Xylosma congesta	Non-Protected	12	20	20	Fair	Retain
199	Carrotwood Cupaniopsis anacardiodes	Non-Protected	14	20	20	Fair	Retain
200	Carrotwood Cupaniopsis anacardiodes	Non-Protected	14	20	20	Fair	Retain



## Table 1. Summary of Data - Total Protected Trees or Shrubs On Site

Coast Live Oak (Quercus agrifolia)	6				
Number of Native Coast Live Oak trees to be removed	0				
Number of Native Coast Live Oak trees to be minimally impacted by the construction	0				
Number of Native Coast Live Oak trees not dead, to be retained, and/or where natural grade is unchanged	6				
Western Sycamore ( <i>Platanus racemosa</i> )	3				
Number of Western Sycamore trees to be removed					
Number of Western Sycamore trees to be minimally impacted by the construction	0				
Number of Western Sycamore trees not dead, to be retained, and/or where natural grade is unchanged	3				
Total Protected Trees or Shrubs (DBH 4" or greater)	9				
Total Protected Trees or Shrubs to be removed	0				
Total Protected Trees or Shrubs to be minimally impacted	0				
Total Protected Trees or Shrubs to be retained, and/or where natural grade is unchanged	9				



## Table 2. Schedule of Proposed Removals

#### RECOMMENDATION

Tree #	Species	Status	Condition	Retain or Remove	Reason for Removal
17	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
18	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
22	Camphor Cinnamomum amphora	Non-Protected	Fair	Remove	Construction Impact
23	Southern Magnolia Magnolia grandiflora	Non-Protected	Fair	Remove	Construction Impact
24	Acacia Acacia mearnsii	Non-Protected	Fair	Remove	Construction Impact
25	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
26	Camphor Cinnamomum amphora	Non-Protected	Fair	Remove	Construction Impact
29	Southern Magnolia Magnolia grandiflora	Non-Protected	Fair	Remove	Construction Impact
34	Southern Magnolia Magnolia grandiflora	Non-Protected	Poor	Remove	Construction Impact
35	Southern Magnolia Magnolia grandiflora	Non-Protected	Fair	Remove	Construction Impact
37	London Plane Tree Platanus x acerfolia	Non-Protected	Poor	Remove	Construction Impact
39	Fruit tree	Non-Protected	Dead	Remove	Construction Impact
44	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
68	Peach Tree Prunus persica	Non-Protected	Fair	Remove	Construction Impact
70	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
71	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
72	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
73	Camphor Cinnamomum camphora	Non-Protected	Fair		



## Table 2. Schedule of Proposed Removals

#### RECOMMENDATION

Tree #	Species	Status	Condition	Retain or Remove	Reason for Removal
79	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
81	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair-Poor	Remove	Construction Impact
87	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Poor	Remove	Construction Impact
87	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Poor	Remove	Construction Impact
92	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
93	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
94	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
105	London Plane Tree Platanus x acerfolia	Non-Protected	Poor	Remove	Construction Impact
106	London Plane Tree Platanus x acerfolia	Non-Protected	Poor	Remove	Construction Impact
112	Camphor Cinnamomum camphora	Non-Protected	Poor	Remove	Construction Impact
121	Paperbark Melaleuca quinquinervia	Non-Protected	Fair	Remove	Construction Impact
122	Paperbark Melaleuca quinquinervia	Non-Protected	Fair	Remove	Construction Impact
123	Paperbark Melaleuca quinquinervia	Non-Protected	Fair	Remove	Construction Impact
124	Paperbark Melaleuca quinquinervia	Non-Protected	Fair	Remove	Construction Impact
125	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
133	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
139	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair-Poor	Remove	Construction Impact
140	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Poor	Remove	Construction Impact



## Table 2. Schedule of Proposed Removals

### RECOMMENDATION

Tree #	Species	Status	Condition	Retain or Remove	Reason for Removal
141	London Plane Tree Platanus x acerfolia	Non-Protected	Fair	Remove	Construction Impact
143	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
148	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
149	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
150	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair-Poor	Remove	Construction Impact
151	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
152	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact
153	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
156	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
159	Camphor Cinnamomum camphora	Non-Protected	Fair	Remove	Construction Impact
160	Indian Laurel Fig Ficus microcarpa 'Nitida'	Non-Protected	Fair-Poor	Remove	Construction Impact
161	Indian Laurel Fig Ficus microcarpa 'Nitida'	Non-Protected	Fair-Poor	Remove	Construction Impact
167	London Plane Tree Platanus x acerfolia	Non-Protected	Poor	Remove	Construction Impact
169	London Plane Tree Platanus x acerfolia	Non-Protected	Fair-Poor	Remove	Construction Impact
174	London Plane Tree Platanus x acerfolia	Non-Protected	Fair	Remove	Construction Impact
175	London Plane Tree Platanus x acerfolia	Non-Protected	Fair-Poor	Remove	Construction Impact
176	Carrotwood Cupaniopsis anacardiodes	Non-Protected	Fair	Remove	Construction Impact
177	White Alder Alnus rhombifolia	Non-Protected	Fair-Poor	Remove	Construction Impact
178	Fig Ficus carica	Non-Protected	Fair-Poor	Remove	Construction Impact
179	Lemon-scented gum Corymbia citriodora	Non-Protected	Fair	Remove	Construction Impact
180	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair	Remove	Construction Impact



## Table 2. Schedule of Proposed Removals

#### RECOMMENDATION

Tree #	Species	Status	Condition	Retain or Remove	Reason for Removal
181	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair-Poor	Remove	Construction Impact
182	Madras Thorn Tree Pithecellobium dulce	Non-Protected	Fair-Poor	Remove	Construction Impact
183	California Pepper Schinus molle	Non-Protected	Fair	Remove	Construction Impact
185	Brazilian Pepper Schinus terebinthifolius	Non-Protected	Fair-Poor	Remove	Construction Impact
186	London Plane Tree Platanus x acerfolia	Non-Protected	Fair	Remove	Construction Impact
187	London Plane Tree Platanus x acerfolia	Non-Protected	Poor	Remove	Construction Impact
189	London Plane Tree Platanus x acerfolia	Non-Protected	Fair-Poor	Remove	Construction Impact
194	London Plane Tree Platanus x acerfolia	Non-Protected	Fair-Poor	Remove	Construction Impact
195	London Plane Tree Platanus x acerfolia	Non-Protected	Fair-Poor	Remove	Construction Impact
196	Shiny Xylosma Xylosma congesta	Non-Protected	Fair-Poor	Remove	Construction Impact



Table 3. Summary of Replacement

	Existing Trees to Be Removed	Trees to be Planted in Replacement
NON-PROTECTED SIGNIFICANT TREES 8" + DBH	66	66
TOTAL	66	66

### **Recommended Species and Size of Replacement Trees**

Non-Protected

Non-Protected trees will be replaced at a one-to-one (1:1) ratio, to the satisfaction of the City of Walnut Department of City Planning.



### **GENERAL RECOMMENDATIONS**

During the course of construction, trees can receive much stress, pollution, soil compaction and lack of water. The following general recommendations should be followed to establish and maintain a healthy environment for all retained trees.

#### WORKING IN THE TREE PROTECTION ZONE

This area generally encompasses an area within the dripline of the tree plus additional feet depending on the species and size of the tree. However, if you should need to encroach within a tree's protected zone, please follow these guidelines.

**Observation** – All work within the protected zone should be observed by a certified arborist experienced with each specific tree's requirements. The arborist should be contacted in a timely manner to ensure their availability.

**Hand Tools** – All work should be performed utilizing hand tools only. To reduce compaction in the root zone, no large equipment, such as backhoes or tractors should be utilized in this protected zone.

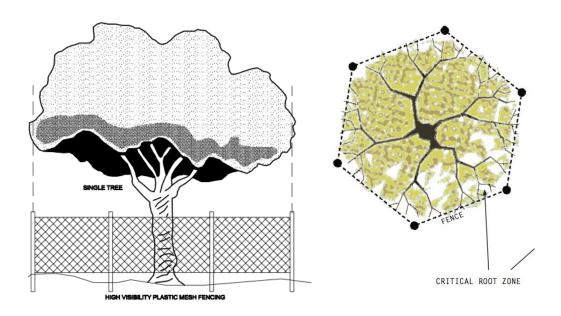
Root Pruning - Should there be a need to perform any light root pruning, it should be done carefully. The roots should be exposed through hand digging. The roots should be cut at a 90-degree angle and cut cleanly. No roots should be torn or jagged; this can lead to rotting and decay in the root zone and reduced stability and health in the tree. I caution excessive root pruning, and encourage you to err on the conservative side. If a tree is in any existing stress or is lacking in health and vigor, the root pruning can contribute to the quick decline of a tree.

**Protective Fencing** – If necessary, the arborist should be contacted to develop a specific fencing plan for your trees. Fencing may be of a flexible configuration and be a minimum of 4 feet in height. A warning sign must be displayed on the street side of the fence, stating the requirements of all workers in the protected zone. Throughout the course of construction, maintain the integrity of the tree protection zone fencing and keep the site clean and maintained at all times.

**Irrigation** – Irrigate trees for the duration of the project. If the tree is newly planted, deep watering should be weekly during its establishment period. If the tree is quite mature, deep water once per month during spring and summer months.



### PROTECTIVE FENCING



Tree protection fencing must be installed at the edge of the Tree Protection Zone (critical root zone) or beyond prior to the start of any clearing, grading or other construction activity. If space limits the fencing, place at the furthest possible distance from the trunk.

- 1) Fencing may be of a **flexible configuration or chain-link** and be a minimum of 4 feet in height supported by vertical posts at a maximum of ten-foot intervals to keep the fence upright and in place.
- 2) A warning sign should be posted on the fencing which states, "Warning: Tree Protection Zone" and stating the requirements of all workers in the protected zone. Example available upon request.
- Throughout the course of construction, maintain the integrity of the tree protection zone fencing and keep the site clean and maintained at all times. No construction staging or disposal of construction materials or byproducts including but not limited to paint, plaster, or chemical solutions is allowed in the Tree Protection Zone.



#### PLANTING WITHIN THE PROTECTED ZONE

Trees remain healthier and vigorous with NO plantings within the protected zone. The natural leaf litter that the tree provides should be allowed to remain on the ground, to provide natural mulch and nutrients. If planting is desired, please follow these recommendations:

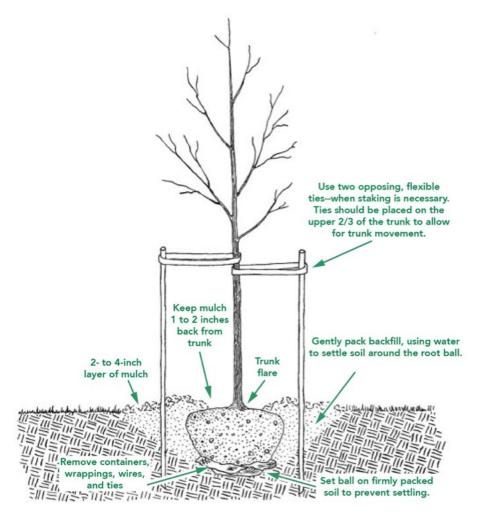
**Plant Selection** – Only drought tolerant plants that are compatible with the specific trees should be selected. Most importantly, select plants that are resistant to Armillaria or Phytophthora. Some trees are particularly susceptible to these diseases in urban areas and when under construction stress. Please refer to local guides for acceptable plant recommendations

Irrigation – Water should not be spraying toward the base of the trunk or tree; this can encourage rotting of the root crown. Excessive moisture on the base of the trunk can encourage Armillaria mellea (Oak Root Fungus) or Phytophthora cinnamomi (Avocado Root rot). Both of these fungus' can reduce the health and vigor of the tree, thus leading to decline and potential failure of the tree (falling over). It is recommended to only provide irrigation to the roots in the warmer months of spring and early summer, thus extending the natural rainy season. This irrigation should be provided via soaker hoses that do not spray upward.

**Mulch** - Apply a light layer of organic mulch over the root zone (approx. 3- 4 inches thick). The mulch will reduce loss of moisture from the soil, protect against construction compaction, and moderate soil temperatures. It also has been demonstrated that the addition of mulch reduces soil compaction over time. Do not place mulch against the trunk, instead placing at least 3 inches from base.



### **NEW TREE PLANTING**



The ideal time to plant trees and shrubs is during the dormant season, in the fall after leaf drop or early spring before budbreak. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. Before you begin planting your tree, be sure you have had all underground utilities located prior to digging.

If the tree you are planting is balled or bare root, it is important to understand that its root system has been reduced by 90 to 95 percent of its original size during transplanting. As a result of the trauma caused by the digging process, trees commonly exhibit what is known as transplant shock. Containerized trees may also experience transplant shock, particularly if they have circling roots that must be cut. Transplant shock is indicated by slow growth and reduced vigor following transplanting. Proper site preparation before and during planting coupled with good follow-up care reduces the amount of time the plant experiences transplant shock and allows the tree to quickly establish in its new location. Carefully follow nine simple steps, and you can significantly reduce the stress placed on the plant at the time of planting.



### **NEW TREE PLANTING, continued**

- 1. Dig a shallow, broad planting hole. Make the hole wide, as much as three times the diameter of the root ball but only as deep as the root ball. It is important to make the hole wide because the roots on the newly establishing tree must push through surrounding soil in order to establish. On most planting sites in new developments, the existing soils have been compacted and are unsuitable for healthy root growth. Breaking up the soil in a large area around the tree provides the newly emerging roots room to expand into loose soil to hasten establishment.
- 2. Identify the trunk flare. The trunk flare is where the roots spread at the base of the tree. This point should be partially visible after the tree has been planted (see diagram). If the trunk flare is not partially visible, you may have to remove some soil from the top of the root ball. Find it so you can determine how deep the hole needs for proper planting.
- **3. Remove tree container for containerized trees.** Carefully cutting down the sides of the container may make this easier. Inspect the root ball for circling roots and cut or remove them. Expose the trunk flare, if necessary.
- 4. Place the tree at the proper height. Before placing the tree in the hole, check to see that the hole has been dug to the proper depth and no more. The majority of the roots on the newly planted tree will develop in the top 12 inches of soil. If the tree is planted too deeply, new roots will have difficulty developing because of a lack of oxygen. It is better to plant the tree a little high, 1-2 inches above the base of the trunk flare, than to plant it at or below the original growing level. This planting level will allow for some settling.
- **5. Straighten the tree in the hole.** Before you begin backfilling, have someone view the tree from several directions to confirm that the tree is straight. Once you begin backfilling, it is difficult to reposition the tree.
- 6. Fill the hole gently but firmly. Fill the hole about one-third full and gently but firmly pack the soil around the base of the root ball. Be careful not to damage the trunk or roots in the process. Fill the remainder of the hole, taking care to firmly pack soil to eliminate air pockets that may cause roots to dry out. To avoid this problem, add the soil a few inches at a time and settle with water. Continue this process until the hole is filled and the tree is firmly planted. It is not recommended to apply fertilizer at time of planting.
- 7. Stake the tree, if necessary. If the tree is grown properly at the nursery, staking for support will not be necessary in most home landscape situations. Studies have shown that trees establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting. However, protective staking may be required on sites where lawn mower damage, vandalism, or windy conditions are concerns. If staking is necessary for support, there are three methods to choose among: staking, guying, and ball stabilizing. One of the most common methods is staking. With this method, two stakes used in conjunction with a wide, flexible tie material on the lower half of the tree will hold the tree upright, provide flexibility, and minimize injury to the trunk (see diagram). Remove support staking and ties after the first year of growth.
- 8. Mulch the base of the tree. Mulch is simply organic matter applied to the area at the base of the tree. It acts as a blanket to hold moisture, it moderates soil temperature extremes, and it reduces competition from grass and weeds. A 2- to 3-inch layer is ideal. More than 3 inches may cause a problem with oxygen and moisture levels. When placing mulch, be sure that the actual trunk of the tree is not covered. Doing so may cause decay of the living bark at the base of the tree. A mulch-free area, 1 to 2 inches wide at the base of the tree, is sufficient to avoid moist bark conditions and prevent decay.



### TREE MAINTENANCE AND PRUNING

Some trees do not generally require pruning. The occasional removal of dead twigs or wood is typical. Occasionally a tree has a defect or structural condition that would benefit from pruning. Any pruning activity should be performed under the guidance of a certified arborist or tree expert.

Because each cut has the potential to change the growth of the tree, no branch should be removed without a reason. Common reasons for pruning are to remove dead branches, to remove crowded or rubbing limbs, and to eliminate hazards. Trees may also be pruned to increase light and air penetration to the inside of the tree's crown or to the landscape below. In most cases, mature trees are pruned as a corrective or preventive measure.

Routine thinning does not necessarily improve the health of a tree. Trees produce a dense crown of leaves to manufacture the sugar used as energy for growth and development. Removal of foliage through pruning can reduce growth and stored energy reserves. Heavy pruning can be a significant health stress for the tree.

Yet if people and trees are to coexist in an urban or suburban environment, then we sometimes have to modify the trees. City environments do not mimic natural forest conditions. Safety is a major concern. Also, we want trees to complement other landscape plantings and lawns. Proper pruning, with an understanding of tree biology, can maintain good tree health and structure while enhancing the aesthetic and economic values of our landscapes.

### Pruning Techniques - From the I.S.A. Guideline

Specific types of pruning may be necessary to maintain a mature tree in a healthy, safe, and attractive condition.

**Cleaning** is the removal of dead, dying, diseased, crowded, weakly attached, and low- vigor branches from the crown of a tree.

**Thinning** is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the tree's natural shape.

Raising removes the lower branches from a tree to provide clearance for buildings, vehicles, pedestrians, and vistas.

**Reduction** reduces the size of a tree, often for clearance for utility lines. Reducing the height or spread of a tree is best accomplished by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). Compared to topping, reduction helps maintain the form and structural integrity of the tree.



### TREE MAINTENANCE AND PRUNING, continued

### **How Much Should Be Pruned?**

Mature trees should require little routine pruning. A widely accepted rule of thumb is never to remove more than one-quarter of a tree's leaf-bearing crown. In a mature tree, pruning even that much could have negative effects. Removing even a single, large- diameter limb can create a wound that the tree may not be able to close. The older and larger a tree becomes, the less energy it has in reserve to close wounds and defend against decay or insect attack. Pruning of mature trees is usually limited to removal of dead or potentially hazardous limbs.

### **Wound Dressings**

Wound dressings were once thought to accelerate wound closure, protect against insects and diseases, and reduce decay. However, research has shown that dressings do not reduce decay or speed closure and rarely prevent insect or disease infestations. Most experts recommend that wound dressings not be used.



### **DISEASES AND INSECTS**

Continual observation and monitoring of your tree can alert you to any abnormal changes. Some indicators are: excessive leaf drop, leaf discoloration, sap oozing from the trunk and bark with unusual cracks. Should you observe any changes, you should contact a Tree specialist or Certified Arborist to review the tree and provide specific recommendations. Trees are susceptible to hundreds of pests, many of which are typical and may not cause enough harm to warrant the use of chemicals. However, diseases and insects may be indication of further stress that should be identified by a professional.

### **GRADE CHANGES**

The growing conditions and soil level of trees are subject to detrimental stress should they be changed during the course of construction. Raising the grade at the base of a tree trunk can have long-term negative consequences. This grade level should be maintained throughout the protected zone. This will also help in maintaining the drainage in which the tree has become accustomed.

### INSPECTION

The property owner should establish an inspection calendar based on the recommendation provided by the tree specialist. This calendar of inspections can be determined based on several factors: the maturity of the tree, location of tree in proximity to high-use areas vs. low-use area, history of the tree, prior failures, external factors (such as construction activity) and the perceived value of the tree to the homeowner.



### **Assumptions and Limiting Conditions**

No warranty is made, expressed or implied, that problems or deficiencies of the trees or the property will not occur in the future, from any cause. The Consultant shall not be responsible for damages or injuries caused by any tree defects, and assumes no responsibility for the correction of defects or tree related problems.

The owner of the trees may choose to accept or disregard the recommendations of the Consultant, or seek additional advice to determine if a tree meets the owner's risk abatement standards.

The Consulting Arborist has no past, present or future interest in the removal or retaining of any tree. Opinions contained herein are the independent and objective judgments of the consultant relating to circumstances and observations made on the subject site.

The recommendations contained in this report are the opinions of the Consulting Arborist at the time of inspection. These opinions are based on the knowledge, experience, and education of the Consultant. The field inspection was a visual, grade level tree assessment.

The Consulting Arborist shall not be required to give testimony, perform site monitoring, provide further documentation, be deposed, or to attend any meeting without subsequent contractual arrangements for this additional employment, including payment of additional fees for such services as described by the Consultant.

The Consultant assumes no responsibility for verification of ownership or locations of property lines, or for results of any actions or recommendations based on inaccurate information.

This Arborist report may not be reproduced without the express permission of the Consulting Arborist and the client to whom the report was issued. Any change or alteration to this report invalidates the entire report.

Should you have any further questions regarding this property, please contact me at (310) 663-2290.

Respectfully submitted,

Kisa Smit C

#### Lisa Smith

Registered Consulting Arborist #464 ISA Board Certified Master Arborist #WE3782BM ISA Tree Risk Assessor Qualified- Instructor American Society of Consulting Arborists, Member

