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**City of Goleta**Current Planning Division



### **Arborist Report**

**Project: Patterson Place Apartments** 

Project # 2037-01-CU20 Location: Goleta, CA Date: February 8, 2021

Prepared For: The Towbes Group 33 E. Carrillo St, Ste 200 Santa Barbara, CA 93101

Prepared By: Jake Minnick, PLA ISA Certified Arborist #WE-11830A RRM Design Group 3765 S Higuera St, Ste 102 San Luis Obispo, CA 93401

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#### Introduction and Overview

RRM Design Group was contracted by The Towbes Group to complete a tree survey, assessment and arborist report for the entire site located at 120 S Patterson Ave. The site consists of 11 aparticle of Luid age 1, the use, and surface parking. The site is bounded by commercial office space to the north and south, 3 Patterson Ave to the west and Maria Ignacio Creek to the east. Our scope of services includes tagging, measuring diameter at breast height (DBH), and assessing the condition of all trees on site. Disposition and health recommendations are based on current site conditions. Site development may change the preservation suitability.

### Methodological Division

Our tree survey work is a deliberate and systematic methodology for cataloging trees on site:

- 1. Identify each tree species.
- 2. Tag each tree with a metal tag and note its location on a site map.
- 3. Measure each trunk circumference at 54" above grade per ISA standards.
- 4. Evaluate the health and preservation suitability of each tree.

#### **Summary of Findings**

On February 1, 2021, RRM Design Group conducted a tree inventory of 165 trees located on the grounds of the Patterson Place Apartments. Generally, the health of the trees inspected is moderate and most are exhibiting signs of stress from overpruning and topping in the form of epicormic growth. Most of the trees observed appear to be part of the original planting from the development of the apartment complex in the 1970's and are mature specimens.

Most of the trees observed are evergreen pears, lemon-scented gums, and African fern pines. The pears and African fern pines, along with many of the other species observed have been topped. Although topping is a common practice performed by many tree maintenance companies. it is well known and documented as a poor arboricultural practice. Topping trees reduces their lifespan and increases required maintenance. Topping should not be confused with pollarding, which conversely, is initiated when the tree is young and requires annual pruning the remove each year's flush of new growth. Topping generally occurs when a tree is planted in an area that it is not suitable for, and as it matures it outgrows the space, which leaves the owner to decide whether it is time to remove the tree or reduce its size. Depending on the species, a crown reduction can be performed without topping, but that is not an option for most small ornamental trees. After topping, the tree will reestablish new growth at the end(s) of the topping cut(s). The attachment of this new growth is generally understood to be inherently weak, and therefore cannot bear the substantial weight of several years of growth. This new need to reduce weight at the topping location(s) establishes the need for increased pruning requirements. Increased pruning consistently limits opportunities to photosynthesize, which stresses the tree and increases chances that pests and disease will infect the tree via open wounds and a weakened defense system. Most of the topped trees are in moderate health and should not necessarily be removed for that reason. The property owner should understand that the lifespans of the topped onsite trees are reduced, and that they will require increased maintenance to prevent future limb failures during storm events.

Refer to the following supplemental documents for additional information:

- Exhibit A Tree Location Map for tree locations relative to the existing site conditions.
- Table 1 Tree Quantity Summary for quantities of trees by size and species.
- Table 2 Tree Evaluation Summary for sizes, notes and recommendations for each tree.
- o Exhibit B Tree Photographs for photographs of typical conditions observed in the field.

#### **Specific Species Recommendations**

**Species:** *Afrocarpus falcatus* (African yew pine)

Que pit 20 El Va E Dobservations: This is a very resilient tree species and although not generally recommended, it can recover from the stress associated with overpruning and topping since it's susceptible to very few pests and is resistant to most disease. Most of the specimens observed have been topped and reduced for years to provide adequate space between nearby trees and structures. This species is simply to large to grow close to structures and should be given adequate space to grow into its mature size with minimal conflicts. Some of the specimens were located within 24" of the building indicating that they may have been intended to be hedges but were let grow into their mature tree form.

Recommendations: Many of these trees can remain but will require frequent maintenance to maintain clearance to nearby structures and other trees. Trees located within 36" of a structure should be considered for removal or replacement in a more suitable location onsite.

**Species:** Corymbia citriodora (lemon-scented gum)

Quantity: 25

Observations: Formerly included in the Eucalyptus genus, this gum has recently transitioned to the genus Corymbia. This genus supports this species growth habit and naturally less invasive character. Although most of these specimens were observed in moderate health, it should be noted that they are not an ideal tree selection for a dense apartment complex. These are very large, stately trees that are typically long lived and need room to mature. Another requirement for space comes from their inherent self-pruning growth habits. It is common for this species to drop large limbs as it matures and continues to quickly grow in height.

Several specimens showed evidence of root pruning in the critical root zone very close to the root collar. This is commonly performed by concrete contractors when asked to fix damaged hardscape surfaces. It is unlikely that they understand that this can destabilize the tree and will cause long term damage.

Recommendations: To mitigate damage from large falling limbs, the lower limbs of these specimens should be pruned regularly to reduce weight or removed completely as the tree matures. Roots should not be pruned to repour adjacent hardscape surfaces because the problem will occur again a few years down the road. Consider the establishment of a replacement plan to replace these specimens with a more suitable species. Given the size and quantity of this species, a phased approach to the replacement plan is recommended, replacing approximately 5 trees per year for the next 5 years.

**Species:** Corymbia ficifolia (red flowering gum)

Quantity: 1

Observations: This is a beautiful mature red flowering gum specimen. Preservation will require some attention to preserve the weak attachment at the lowest crotch. It looks like the tree was cabled many years ago when it was much younger.

Recommendations: One or two additional cables installed higher in the crown would help balance wind forces throughout the crown.

**Species:** *Eriobotrya deflexa* (bronze loquat)

Quantity: 12

Observations: These multi-leader specimens have mostly been topped and reduced to provided adequate space between trees and other structures. This is a resilient tree species and should tolerate the consistent overpruning for many years. This type of pruning will develop an unsightly tree over time.

**Recommendations:** Consider removal of the specimens located within 48" of structures and continue to monitor the remaining specimens. Consider the establishment of a replacement plan to replace these specimens with a more suitable species.

Species Examina califa (Scan African coral tree)

Quantity: 9

Observations: 2005 2002 derally not a common choice of tree for dense properties and is at home as a specimen planting in an open setting, like a park. This is a very large tree with heavy and moderate weak planting. All of the specimens observed were topped and reduced to maintain a smaller size. The tries have responded poorly to many years of overpruning and have developed strange forms with some questionable attachments.

**Recommendations:** Specimens with moderate structure in larger areas should remain, but those in confined spaces or with structural defects should be considered for removal.

**Species:** *Erythrina coralloides* (naked coral tree)

**Quantity**: 8

**Observations:** Many specimens were observed with visible decay in the main stem and other leaders. Like the South African coral trees, this species has a moderate-weak branching structure, that leaves it susceptible to failure if other structural defects are present.

**Recommendations:** Tree 163 has extensive structural defects and should be removed immediately. Other specimens with visible decay should be considered for removal to mitigate risk associated with tree or limb failures.

**Species:** Ficus elastica (rubber tree)

**Quantity:** 6

**Observations:** This species is typically sold as a house plant and is not commonly planted in the landscape. All six specimens were severely topped and reduced to maintain clearance from adjacent structures and limit the overall height of the tree. The trees have not responded well to frequent overpruning and have began to decay at the site of the larger topping cuts. These specimens showed evidence of strong surface roots damaging nearby hardscape and were all planted within 5' of an adjacent structure.

**Recommendations:** These trees are severely damaged from many years of overpruning and their surface roots will continue to damage nearby hardscape and building foundations as they mature. Consider the establishment of a replacement program to replace these specimens with a more suitable species.

**Species:** *Fraxinus uhdei* (evergreen ash)

Quantity: 2

**Observations:** Both trees are located near to the public sidewalk at the intersection of Overpass Rd and S Patterson Ave. Tree 78 is encroaching on the overhead utilities located in the area. Both trees have many large attachments near the root collar. Although typical with this species, these attachments can weaken over time.

**Recommendations:** Both trees should be monitored for stability. Tree 78 may be considered for removal by the local utility.

**Species**: Persea americana (avocado)

Quantity: 3

**Observations:** There are three mature avocado trees located onsite. Although there is no evidence of root rot from the soil surface, it is a common problem for these trees in California and may explain the trees lack of vigor. Trees 28 and 29 appear to be at least 50 years old, which is

well past their expected commercial production lifespan of 35-40 years. Tree 58 is in moderate condition and may be younger than the others.

Recommendations: Consider the replacement of trees 28 and 29 with a more suitable species. Cor true and more suitable species.

Species: Pyrus calleryana (callery pear)

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Observations: The callery pears are in moderate health and show signs of vigorous growth and little incidence of free light. These appear to be younger replacement trees and are performing well Current Planning Division

**Recommendations:** Avoid topping or reducing the callery pears.

**Species:** *Pyrus kawakamii* (evergreen pear)

Quantity: 42

**Observations:** Although most of the evergreen pears are in moderate health, they have all been topped and reduced to limit the mature size of the trees. Many are planted too close to structures and have been pruned to provide clearance, and several others have adequate space to grow in the parking lot, so it is unclear why all the specimens were topped. All evergreen pears showed symptoms of fireblight with impacts ranging from slight to severe. All trees show signs of stress as a symptom of overpruning in the form of epicormic growth and lack of vigor.

**Recommendations:** Consider removal of the specimens located within 48" of structures and continue to monitor the remaining specimens. Consider the establishment of a replacement plan to replace these specimens with a more suitable species. The remaining specimens should be pruned on a regular schedule to maintain their size and shape and mitigate premature failure of new attachments during storm events. Each winter, blighted shoots should be removed with sterile tools and a dormant treatment for fire blight should be applied. Reduce the use of high nitrogen fertilizer near the evergreen pears to limit new growth in the spring that is easily infected. As trees are removed, consider replacement with *Pyrus calleryana* 'Capitol,' a columnar pear that is known to be resistant to fire blight and has a crown with a more suitable shape for this dense site.

#### **Municipal Code Governing Trees**

See Chapter 4, Policies C9 and C14 of the City of Goleta General Plan.

#### **Recommendations for Trees During Construction**

**Site preparation:** All existing trees shall be fenced off 10' beyond the extent of the drip line of the tree. Alternatively, where this is not feasible, fence to the drip line of the tree. Where fencing is not possible, the trunk shall be wrapped with a straw waddle and orange snow fencing. Tree protection fencing should be a minimum of six feet high, made of pig wire with steel stakes or any material superior in quality, such as cyclone fencing. A tree protection zone sign shall be affixed to the fencing at appropriate intervals as determined by the arborist on site. If the fence is within the drip line of the trees, the crown shall be raised to offset the chance of limb breakage from construction equipment encroaching within the drip line. All contractors, subcontractors and other personnel shall be warned that encroachment within the fenced area is forbidden without the consent of the Project Arborist. This includes, but is not limited to, storage of lumber and other materials, disposal of paints, solvents or other noxious materials, parked cars, grading equipment or other heavy equipment. Penalties, based on the cost of remedial repairs and the evaluation guide published by the international society of arboriculture, shall be assessed for damages to the trees.

Grading/excavating: All grading plans that specify grading within the drip line of any tree, or within the distance from the trunk as outlined in the site preparation section above when said distance is outside the drip line, shall first be reviewed by a certified arborist. Provisions for aer truncate, purification unneling beneath roots, root pruning or other necessary actions to protect the tree shall be outlined by an arborist. If trenching is necessary within the area as described above, said trenching shall be undertaken by hand labor and dug directly beneath the trunk of the ree shall be cut inches or larger shall be tunneled under and other roots shall be cut smoothly to the trunk side of the trench. The trunk side should be draped immediately with two layers of interesting the trench of 3 feet from the surface. The burlap shall be soaked nightly and left in place until the trench is back filled to the original level. An arborist shall examine the trench prior to back filling to ascertain the number and size of roots cut, to suggest the necessary remedial repairs.

Remedial repairs: An arborist shall have the responsibility of observing all ongoing activities that may affect the trees and prescribing necessary remedial work to ensure the health and stability of the trees. This includes, but is not limited to, all arborist activities brought out in the previous sections. In addition, pruning, as outlined in the "pruning standards" of the western chapter of the International Society of Arboriculture, shall be prescribed as necessary. Fertilizing, aeration, irrigation, pest control and other activities shall be prescribed according to the tree needs, local site requirements, and state agricultural pest control laws. All specifications shall be in writing. For pest control operations, consult the local county agricultural commissioner's office for individuals licensed as pest control advisors or pest control operators.

**Final inspection:** Upon completion of the project, the arborist shall review all work undertaken that may impact the existing trees. Special attention shall be given to cuts and fills, compacting, drainage, pruning and future remedial work. An arborist should submit a final report in writing outlining the ongoing remedial care following the final inspection.

#### **Maintenance Recommendations for Trees to Remain**

Regular maintenance, designed to promote plant health and vigor, ensures longevity of existing trees. Regular inspections and the necessary follow-up care of mulching, fertilizing, and pruning, can detect problems and correct them before they become damaging or fatal.

Tree Inspection: Regular inspections of mature trees at least once a year can prevent or reduce the severity of future disease, insect, and environmental problems. During tree inspection, four characteristics of tree vigor should be examined: new leaves or buds, leaf size, twig growth, and absence of crown dieback (gradual death of the upper part of the tree). A reduction in the extension of shoots (new growing parts), such as buds or new leaves, is a reliable cue that the tree's health has recently changed. Growth of the shoots over the past three years may be compared to determine whether there is a reduction in the tree's typical growth pattern. Further signs of poor tree health are trunk decay, crown dieback, or both. These symptoms often indicate problems that began several years before. Loose bark or deformed growths, such as trunk conks (mushrooms), are common signs of stem decay. Any abnormalities found during these inspections, including insect activity, and spotted, deformed, discolored, or dead leaves and twigs, should be noted and observed closely.

**Mulching:** Mulch, or decomposed organic material, placed over the root zone of a tree reduces environmental stress by providing a root environment that is cooler and contains more moisture than the surrounding soil. Mulch can also prevent mechanical damage by keeping machines such as lawn mowers and string trimmers away from the tree's base. Furthermore, mulch reduces competition from surrounding weeds and turf. To be most effective, mulch should be placed 2 to

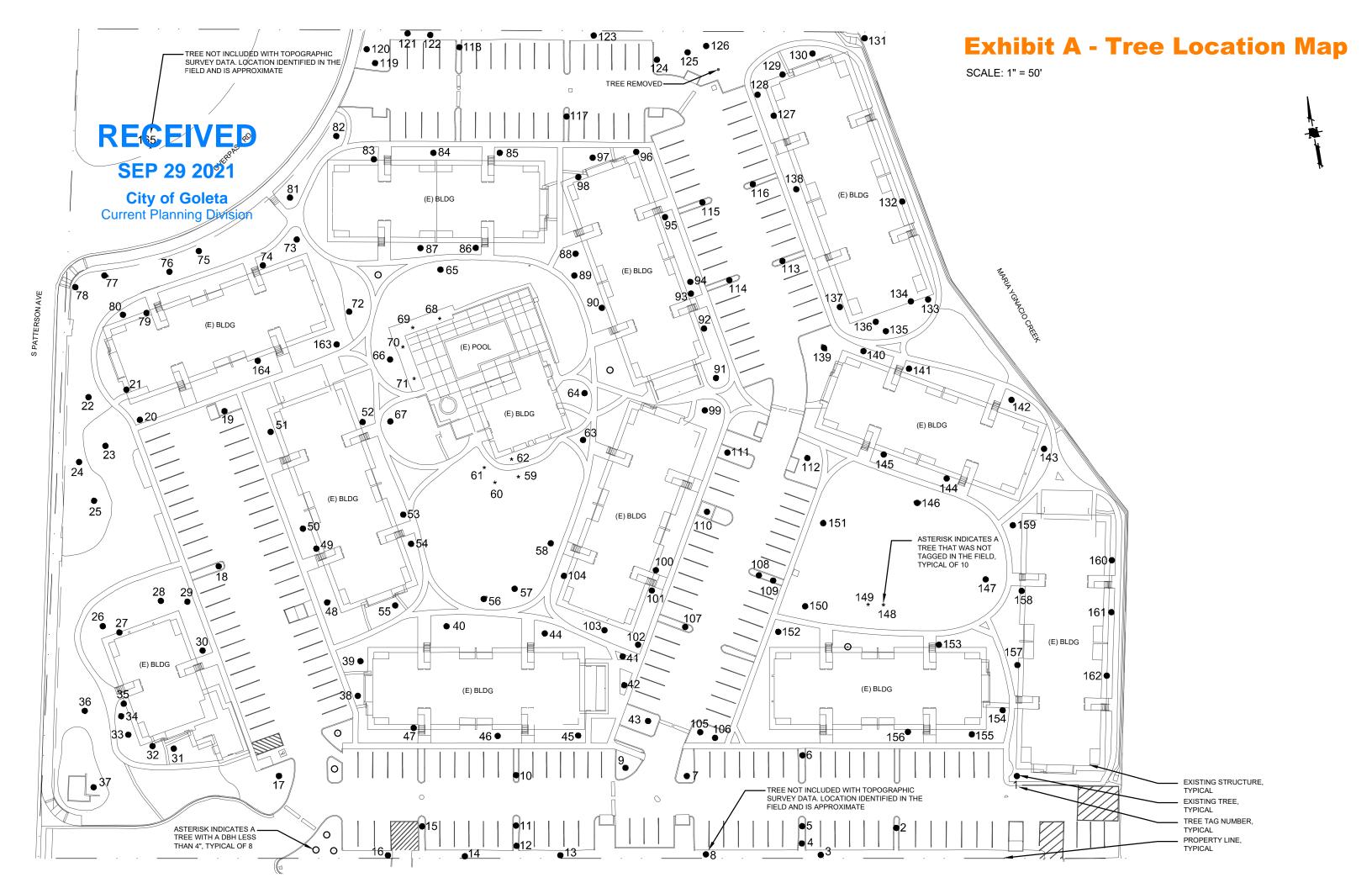
4 inches deep and cover the entire root system, which may be as far as 2 or 3 times the diameter of the branch spread of the tree. If the area and activities happening around the tree do not permit the entire area to be mulched, it is recommended that as much of the area under the drip line of the ree single like of the ree. This much ree area, 1 to 2 inches wide at the base, is sufficient to avoid moist bark conditions and prevent trunk decay. An organic mulch layer 2 to 4 inches deep of loosely packed liveded bearing permit moss, or composted wood chips is adequate. Plastic should not be used as it interferes with the exchange of gases between soil and air, which inhibits root growth. Track much layers, 5 to 6 inches deep or greater, may also inhibit gas exchange.

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Fertilization: Trees require certain nutrients (essential elements) to function and grow. Urban landscape trees may be growing in soils that do not contain sufficient available nutrients for satisfactory growth and development. In certain situations, it may be necessary to fertilize to improve plant vigor. Fertilizing a tree can improve growth; however, if fertilizer is not applied wisely, it may not benefit the tree at all and may even adversely affect the tree. Mature trees making satisfactory growth may not require fertilization. When considering supplemental fertilizer, it is important to consider nutrients deficiencies and how and when to amend the deficiencies. Soil conditions, especially pH and organic matter content, vary greatly, making the proper selection and use of fertilizer a somewhat complex process. To that end, it is recommended that the soil be tested for nutrient content. A soil testing laboratory and can give advice on application rates, timing, and the best blend of fertilizer for each tree and other landscape plants on site. Mature trees have expansive root systems that extend from 2 to 3 times the size of the leaf canopy. A major portion of actively growing roots is located outside the tree's drip line. Understanding the actual size and extent of a tree's root system before applying fertilizer is paramount to determine quantity, type and rate at which to best apply fertilizer. Always follow manufacturer recommendations for use and application.

**Pruning:** Pruning is often desirable or necessary to remove dead, diseased, or insect-infested branches and to improve tree structure, enhance vigor, or maintain safety. Because each cut has the potential to change the growth of (or cause damage to) a tree, no branch should be removed without reason. Removing foliage from a tree has two distinct effects on growth: (1) it reduces photosynthesis and, (2) it may reduce overall growth. Pruning should always be performed sparingly. Caution must be taken not to over-prune as a tree may not be able to gather and process enough sunlight to survive. Pruning mature trees may require special equipment, training, and experience. Arborists are equipped to provide a variety of services to assist in performing the job safely and reducing risk of personal injury and property damage (See also Addendum A - ANSI A300 Part 1 Pruning Standards).

**Removal:** There are circumstances when removal is necessary. An arborist can help decide whether a tree should be removed. Professionally trained arborists have the skills and equipment to remove trees safely and efficiently. Removal is recommended when a tree: (1) is dead, dying, or considered irreparably hazardous; (2) is causing an obstruction or is crowding and causing harm to other trees and the situation is impossible to correct through pruning; (3) is to be replaced by a more suitable specimen, and (4) should be removed to allow for construction. Pruning or removing trees, especially large trees, can be dangerous work. It should be performed only by those trained and equipped to work safely in trees.



## **Table 1 - Tree Quantity Summary**

Tree Quantity by Species						
Species C C C C C	Quantity	% of Site				
Afrocurpus falsalus	20	12%				
Corymbia citriodora	25	15%				
Corymbia licilolia 2021	1	1%				
Cupaniopsis anagardioides	1	1%				
Eriobotrya deflexaming Divisio	on 12	7%				
Erythrina caffra	10	6%				
Erythrina coralloides	7	4%				
Ficus elastica	6	4%				
Fraxinus uhdei	2	1%				
Magnolia grandiflora	8	5%				
Persea americana	3	2%				
Pinus pinea	1	1%				
Prunus cerasifera	3	2%				
Pyrus calleryana	7	4%				
Pyrus kawakamii	42	25%				
Pittosporum undulatum	2	1%				
Schefflera actinophylla	2	1%				
Schinus molle	1	1%				
Schinus terebinthifolia	2	1%				
Syagrus romanzoffiana	4	2%				
Trachycarpus fortunei	6	4%				
Total	165	100%				

Tree Quantity by Size						
DBH	Quantity	% of Site				
<12"	41	25%				
12-23.9"	89	54%				
>24"	35	21%				
Total	165	100%				

## **Table 2 - Tree Evaluation Summary**

#### Prepared By: Jake Minnick, ISA Certified Arborist #WE-11830A DBH Measurement Height: 54"

Date of Evaluation: 2/1/2021

Suitab	ility for Preservation	on is based on the following							
Good	Trees with god thealth	and structural etalpility that have the potential for longevity at the site.							
Mod.	Trees in some that tections leave that the line of the structural defects that cannot be abated with treatment. Trees will require more intense management and will have a shorter lifespan than those in the 'Good' category.								
Poor	Trees in poor leating	with gignificant atructural defects that cannot be mitigated. Tree is expected to decline, regardless of treatment.							
Health	Rating								
Good	A healthy, vigorous tree	Creasonable free of pests and disease, with good form typical of the species							
Mod.	A tree with maderate Pi	gon and moderate signs of stress							
Poor	A tree in decline								
Abbre	viations and Defini	tions							
BL	Blight	Evidence of fire blight, a disease that causes vascular wilt in many varieties of pome trees.							
CD	Codominant leaders	Forked leaders nearly the same size in diameter, arising from a common junction an lacking a normal branch union.							
CDB	Crown Dieback	Condition where branches in the tree crown die from the tips toward the center.							
CR	CR	Tree is bounded closely by one or more of the following: structure, tree, large shrub.							
D	Decline	Tree shows obvious signs of decline, which may be indicative of the presence of multiple biotic and abiotic disorders.							
DBH	Diameter at Breast Height	Measurement of tree diameter in inches. Measurement height varies by agency and is noted above.							
EG	Epicormic Growth	Watersprouting on trunk and main leaders. Typically indicative of tree stress.							
EH	Exposed Heartwood	Exposure of the tree's heartwood is typically seen as an open wound that leaves a tree more susceptible to pathogens, disease or infection.							
Н	Hazardous	A tree that currently presents a hazard.							
IB	Included Bark	Structural defect where bark is included between the branch attachment. Contributes to a higher probability of failure during a storm event.							
LC	Low crotch	Multiple central leaders originating below the DBH measurement site.							
LN	Lean	Tree leaning, see notes for severity.							
ML	Multiple Leaders	More than one upright primary stem.							
S	Suckers	Shoot arising from the roots.							
SD	Structural Defects  Naturally or secondary conditions including cavities, poor branch attachments, cracks, or decayed wood in any part of the tree that may contribute to structural failure.								
SE	Severe	Indicates the severity of the following term.							
SL	Slight	Indicates the mildness of the following term.							
TP	Topped	Poor pruning practice of main leaders. Often practiced under utility lines to limit tree height.							
ST	Stress	Environmental factor inhibiting regular tree growth. Includes drought, salty soils, nitrogen and other nutrient deficiencies in the soil.							
WU	Weak Union	Weak union or fork in tree branching structure.							

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	oort - Patterson P Health	Preservation Suitability	Field Notes & Recommendations
1	Magnolia grandiflora 'Little Gem'	little gem magnolia	11.0	5.5, 5.5	Good	Good	CD, IB, ML
2	Pyrus calleryana 'Bradford'	callery pear	6.0		Moderate	Moderate	SL ST
3	Corymbia citriculora	Ten on Vice ntec gum	28.5		Moderate	Moderate	SL ST, SL CDB, LN
4	corymola omioacia	2lsho <mark>n-3leh</mark> ted gum	19.5		Moderate	Moderate	SL ST, SL CDB, LN
5	Pyrus kawakamii Current Pla	of Goleta evergreen pear anning Divisio	11.0		Moderate	Moderate	SL BL
6	Schinus terebinthifolia	Brazilian pepper	41.5		Moderate	Poor	SL ST, SR, S, EG
7	Corymbia citriodora	lemon-scented gum	21.5		Moderate	Moderate	SR, SL ST, SL CDB, LN
8	Corymbia citriodora	lemon-scented gum	30.0		Moderate	Moderate	SL ST, SL CDB, LN
9	Erythrina caffra	South African coral tree	15.0		Moderate	Poor	SR, LN, TP
10	Pyrus calleryana 'Bradford'	callery pear	13.0		Moderate	Moderate	CD, IB, SL BL
11	Corymbia citriodora	lemon-scented gum	27.0		Moderate	Moderate	SL ST, SL CDB, LN
12	Corymbia citriodora	lemon-scented gum	19.5		Moderate	Poor	LN, CDB, CR, ST
13	Corymbia citriodora	lemon-scented gum	21.0		Moderate	Moderate	SL ST, SL CDB, LN
14	Pyrus kawakamii	evergreen pear	13.0		Moderate	Moderate	CD, IB, LN
15	Pyrus calleryana 'Bradford'	callery pear	5.0		Moderate	Moderate	SL LN
16	Pyrus kawakamii	evergreen pear	11.5		Moderate	Moderate	Trunk covered in ivy that should be removed before it gets to the crown
17	Erythrina caffra	South African coral tree	49.5	20, 29.5	Moderate	Moderate	SR, EG, SL ST, IB, ML
18	Pyrus kawakamii	evergreen pear	14.5		Moderate	Moderate	SL ST, SL EG, SL BL
19	Cupaniopsis anacardioides	carrot wood	10.0		Moderate	Poor	LN, EG, SR

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
20	Pittosporum undulatum	victorian box	17.0	10, 7	Poor	Poor	CDB, SR, ST, EG, ML
21	Afrocarpus falcatus	African fern pine	13.0		Moderate	Poor	CR, LN, SR
22	Magnoli i gra idiflera 'Little Gem'	ttl\/ge n magnolia	18.5	5, 5, 3, 5.5	Good	Good	SL EG, ML
23	Erythrina collides	29.2021ree	8.5		Poor	Poor	EH, D, SD
24	Erythrina coralloides Current Pla	of Goleta naked coral tree anning Divisio	29.0		Moderate	Moderate	SL ST
25	Prunus cerasifera	purple-leaf plum	10.5		Poor	Poor	SD, D
26	Corymbia citriodora	lemon-scented gum	22.5		Moderate	Moderate	SL LN, SL CDB
27	Afrocarpus falcatus	African fern pine	19.0		Moderate	Moderate	CR, LN, TP
28	Persea americana	avocado	18.0		Moderate	Poor	LN, ST, CDB, TP
29	Persea americana	avocado	24.5		Moderate	Poor	LN, ST, CDB, TP
30	Pyrus kawakamii	evergreen pear	15.0		Moderate	Moderate	SL CR, LN, SL BL, SE SR
31	Pyrus kawakamii	evergreen pear	17.0		Poor	Poor	ST, CDB, BL, EG, TP
32	Pyrus kawakamii	evergreen pear	11.5		Moderate	Moderate	CR, LN, ST, EG, BL, TP
33	Afrocarpus falcatus	African fern pine	19.0		Moderate	Moderate	SL CR
34	Afrocarpus falcatus	African fern pine	6.5		Moderate	Poor	CR, LN, ST, EG
35	Afrocarpus falcatus	African fern pine	10.0		Moderate	Moderate	CR, LN, SL ST, EG
36	Pyrus kawakamii	evergreen pear	14.5		Moderate	Moderate	LN, ST, EG, TP, BL
37	Corymbia ficifolia	red flowering gum	39.0		Good	Moderate	LN, CD, large quantites of sap exudations, previously cabled
38	Pyrus kawakamii	evergreen pear	12.5		Moderate	Poor	SE CR, BL, TP, ST, EG

Tree	Botanical Name	Common Name	Diameter at Breast Height	Multi Leader Individual DBH	Health	Preservation	Field Notes & Recommendations
Tag			(in.)	(in.)		Suitability	
39	Pyrus kawakamii	evergreen pear	15.5		Moderate	Moderate	CR, BL, TP, ST, EG
40	Magnolia grandiflora 'Little Gem'	little gem magnolia	5.0		Good	Good	SL LN
41	Pyrus kawakamii	evergreen pear	15.0		Moderate	Moderate	BL, TP, EG, ST
42		<b>29 2021 2</b>	8.0		Poor	Poor	BL, TP, CDB, EG, ST
43	Pyrus kawakamii Current Pla	of Goleta evergreen pear anning Divisio	11.0		Moderate	Moderate	EP, SL BL, SL ST
44	Magnolia grandiflora 'Little Gem'	little gem magnolia	11.0	5.5, 5.5	Good	Good	ML
45	Eriobotrya deflexa	bronze loquat	30.5	5, 5.5, 5, 6, 4, 5	Moderate	Moderate	ST, ML, EG, D, SD
46	Eriobotrya deflexa	bronze loquat	30.5	5.5, 5, 5, 9, 6	Moderate	Moderate	ML, SL ST, EG, SL CR
47	Schefflera actinophylla	Queensland umbrella tree	21.0	9, 12	Moderate	Poor	SE CR, ST, EG, LN, CD, IB, ML
48	Ficus elastica	rubber tree	42.0	20, 22	Moderate	Poor	SE SR, EH, ML, CD, TP
49	Ficus elastica	rubber tree	23.0	9, 14	Moderate	Poor	TP, LN, SE SR, EH, ML, CR
50	Ficus elastica	rubber tree	41.5	11, 13, 17.5	Moderate	Poor	TP, LN, SE SR, ML, EH
51	Afrocarpus falcatus	African fern pine	14.5		Moderate	Moderate	SL ST, SL EG, CR, TP
52	Eriobotrya deflexa	bronze loquat	11.5	4, 7.5	Moderate	Moderate	ML, CR, SL LN, SL ST, EG
53	Pyrus calleryana 'Bradford'	callery pear	10.0		Moderate	Moderate	TP, SL CR
54	<i>Pyrus calleryana</i> 'Bradford'	callery pear	9.5		Moderate	Moderate	TP, SL CR
55	Pyrus kawakamii	evergreen pear	12.5		Moderate	Moderate	CR, TP, BL, ST, EG
56	Erythrina caffra	South African coral tree	35.5	17, 18.5	Poor	Poor	LC, CD, WU, CDB, D, SD, ML

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
57	Erythrina caffra	South African coral tree	23.0		Poor	Moderate	LN, TP, CDB, ST
58	Persea americana	avocado	14.5		Moderate	Moderate	SL CDB, LN, CR, SL chlorosis
59	l rachycarpus tortunei	windmill paim	12' BTH		Moderate	Moderate	-
60		29 2021 Windmill palm	10' BTH		Moderate	Moderate	-
61	Trachycarpus fortuneil	of Goleta anwindgilbpellgio	n 8' BTH		Moderate	Moderate	-
62	Trachycarpus fortunei	windmill palm	10' BTH		Moderate	Moderate	-
63	Magnolia grandiflora 'Little Gem'	little gem magnolia	8.0	2, 6	Good	Good	ML
64	Erythrina caffra	South African coral tree	24.5		Poor	Poor	TP, ST, CDB, SE SR, EH, D
65	Erythrina coralloides	naked coral tree	35.0	7, 7, 6.5, 7.5, 7	Moderate	Moderate	ML, LC, IB, LN, EH, TP
66	Erythrina coralloides	naked coral tree	23.0	4, 6.5, 2.5, 7, 3	Poor	Poor	ML, EH, D, TP
67	Pyrus kawakamii	evergreen pear	13.0		Moderate	Moderate	LN, TP, ST, EG, SL CR, BL
68	Syagrus romanzoffiana	queen palm	10' BTH		Moderate	Moderate	-
69	Syagrus romanzoffiana	queen palm	10' BTH		Moderate	Moderate	-
70	Syagrus romanzoffiana	queen palm	10' BTH		Moderate	Moderate	-
71	Syagrus romanzoffiana	queen palm	12' BTH		Moderate	Moderate	-
72	Magnolia grandiflora 'Little Gem'	little gem magnolia	5.5	3, 2.5	Good	Good	CD, ML
73	Magnolia grandiflora 'Little Gem'	little gem magnolia	7.5		Good	Good	SL EG
74	Afrocarpus falcatus	African fern pine	10.0		Moderate	Moderate	CR, TP, EG

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
75	Corymbia citriodora	lemon-scented gum	25.0		Moderate	Moderate	SR, CR, SL CDB, LN
76	Corymbia citriodora	lemon-scented	24.0		Moderate	Moderate	SL CDB, SL CR
77	Fraxinus unaei	evergreen asn	59.5	18, 19.5, 22	Moderate	Poor	SE SR, ML, climbed with spikes
78		evergreen ash	29.0	8.5, 9.5, 8, 3	Moderate	Poor	SL SR, ML, TP, near utilities
79	Afrocarpus faleatus	of Goleta Africag fendano	n 8.5		Moderate	Moderate	TP, LN, CR, ST ,EG
80	Pittosporum undulatum	victorian box	14.0	4, 7.5, 2.5	Poor	Poor	TP, EG, ML, CR
81	Magnolia grandiflora 'Little Gem'	little gem magnolia	8.5	1, 2, 2.5, 2, 1	Good	Good	ML
82	Erythrina caffra	South African coral tree	41.5	19, 22.5	Moderate	Moderate	SR, TP, ML
83	Ficus elastica	rubber tree	13.5	7.5, 6	Moderate	Poor	SR, SE CR, TP, LN, EH, ML
84	Pyrus kawakamii	evergreen pear	13.5		Moderate	Moderate	BL, TP, CR
85	Ficus elastica	rubber tree	24.5	8, 8.5, 8	Moderate	Poor	SE SR, TP, CR, LN, ML
86	Eriobotrya deflexa	bronze loquat	27.0	5, 2.5, 5, 5.5, 3, 2, 4	Moderate	Poor	SR, ML, SL ST, SL EG, SL CR, TP
87	Eriobotrya deflexa	bronze loquat	32.0	7, 7.5, 9, 5, 3.5	Moderate	Poor	SR, ML, SL ST, SL EG, SL CR, TP
88	Pyrus kawakamii	evergreen pear	8.0		Moderate	Poor	CR, TP, BL, LN
89	Pyrus kawakamii	evergreen pear	15.5		Moderate	Moderate	LN, CR, BL, TP
90	Schefflera actinophylla	Queensland umbrella tree	16.5	8, 8.5	Moderate	Moderate	ML, CR, SR, LN
91	Prunus cerasifera	purple-leaf plum	27.0	4.5, 6, 3, 3, 8, 2.5	Poor	Poor	SR, SE ST, EG, ML
92	Eriobotrya deflexa	bronze loquat	17.0	6, 3.5, 2.5, 5	Moderate	Moderate	SE SR, SE CR, ML

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
93	Afrocarpus falcatus	African fern pine	9.5		Moderate	Moderate	SR, TP, ST, SE CR
94	Pyrus kawakamii	evergreen pear	14.0		Moderate	Poor	TP, LN, CR, ST, EG
95	Afrocarpus faicatus	Atrican tern pine	17.5		Moderate	Moderate	CR, TP, SR, LN
96	Pyrus kawakamii	29 2021 evergreen pear	15.0		Moderate	Poor	SE LN, TP, EG, ST, SL BL
97	Pyrus kawakamii Pla	of Goleta angles of the state o	n 18.0		Moderate	Moderate	LN, CR, ST, EG, TP
98	Afrocarpus falcatus	African fern pine	8.0		Moderate	Poor	SE CR, TP, LN, ST, EG
99	Prunus cerasifera	purple-leaf plum	14.0		Moderate	Poor	SE SR, ST, EG
100	Afrocarpus falcatus	African fern pine	13.5		Moderate	Poor	TP, SE CR, ST, EG
101	Afrocarpus falcatus	African fern pine	13.5		Moderate	Moderate	CR, TP, ST, EG, SL LN
102	Pyrus kawakamii	evergreen pear	8.5		Moderate	Moderate	CR, LN, BL, ST, TP
103	Pyrus kawakamii	evergreen pear	11.5		Moderate	Moderate	BL, TP, ST, CR, EG
104	Afrocarpus falcatus	African fern pine	14.0		Moderate	Poor	SR, TP, SE CR, LN, ST, EG
105	Corymbia citriodora	lemon-scented gum	21.0		Moderate	Poor	SR, CDB, CR, roots pruned
106	Corymbia citriodora	lemon-scented gum	22.5		Moderate	Poor	SR, CR, roots pruned
107	Pyrus kawakamii	evergreen pear	12.0		Moderate	Moderate	TP, BL, ST, EG, SR
108	Pyrus kawakamii	evergreen pear	12.5		Moderate	Moderate	TP, ST, EG, BL
109	Pyrus kawakamii	evergreen pear	17.0		Moderate	Poor	CR, TP, ST, EG, CDB, BL
110	Pyrus kawakamii	evergreen pear	6.0		Moderate	Moderate	LN, TP, BL, ST, EG

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
111	Pyrus kawakamii	evergreen pear	14.0		Moderate	Moderate	LN, BL, TP, ST, EG
112	Erythrina coralloides	naked coral tree	21.5		Moderate	Poor	EH, LN, TP
113	Pyrus каwакатіі	evergreen pear	13.5		Moderate	Moderate	TP, BL, EG, ST, SL LN
114	Pyrus kawakamii	evergreen pear	14.5		Moderate	Moderate	TP, BL, EG, ST, SL LN
115		of Goleta anrfalleryDreasio	n 7.5		Moderate	Moderate	TP, ST, EG
116	Pyrus kawakamii	evergreen pear	14.0		Moderate	Moderate	ST, TP, BL, EG, SR
117	Pyrus calleryana 'Bradford'	callery pear	7.5		Moderate	Moderate	TP
118	Pyrus kawakamii	evergreen pear	11.0		Moderate	Moderate	EG, ST
119	Corymbia citriodora	lemon-scented gum	25.0		Moderate	Moderate	SL CR, SL CDB
120	Corymbia citriodora	lemon-scented gum	25.5		Moderate	Moderate	SL CR, SL CDB
121	Corymbia citriodora	lemon-scented gum	31.0		Moderate	Moderate	SL CR, SL CDB
122	Corymbia citriodora	lemon-scented gum	22.5		Moderate	Moderate	CR
123	Corymbia citriodora	lemon-scented gum	18.5		Poor	Poor	ST, CDB, EG, SR
124	Erythrina coralloides	naked coral tree	15.5	3, 5, 4.5, 3	Moderate	Poor	ML, ST, CDB, CR
125	Pinus pinea	Italian stone pine	23.5		Moderate	Moderate	LN
126	Erythrina caffra	South African coral tree	17.0		Moderate	Moderate	CR, TP ST, EG
127	Pyrus kawakamii	evergreen pear	12.5		Moderate	Poor	LN, CR, TP, ST, EG
128	Pyrus kawakamii	evergreen pear	10.0		Moderate	Moderate	TP, ST, EG

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
129	Afrocarpus falcatus	African fern pine	11.0		Moderate	Poor	SR, SE CR, LN, TP, ST, EG
130	Corymbia citriodora	lemon-scented	23.0		Moderate	Moderate	SE CR, LN
131	Schinus molle	California pepper	39.5	16, 23.5	Moderate	Poor	ML, SE SR, SE CR, SE LN
132	Corymbia citriodora	Zlernoz-Vente d gum	23.0		Moderate	Moderate	SE CR, LN, SR, SL CDB
133	Eriobotrya deflexa p	of Goleta antifinge to plusto	n 13.0	7, 6	Moderate	Moderate	SR, SE CR, ST, EG, ML
134	Eriobotrya deflexa	bronze loquat	8.0		Moderate	Moderate	SR, SE CR, ST, EG
135	Corymbia citriodora	lemon-scented gum	32.5		Moderate	Moderate	SL CDB, SL CR
136	Corymbia citriodora	lemon-scented gum	29.0		Moderate	Moderate	SL ST, SL CDB, CR
137	Eriobotrya deflexa	bronze loquat	20.5	8, 7, 5.5	Moderate	Poor	ML, CR, TP, ST, EG
138	Eriobotrya deflexa	bronze loquat	13.0		Moderate	Moderate	LN, CR, SL ST, EG
139	Erythrina caffra	South African coral tree	57.5	12, 20.5, 25	Moderate	Moderate	EH, TP, ST, EG, ML
140	Eriobotrya deflexa	bronze loquat	18.0	5, 6.5, 6.5	Moderate	Moderate	SR, CR, LN, ML
141	Eriobotrya deflexa	bronze loquat	14.5	5.5, 9	Moderate	Moderate	SR, CR, LN, ML
142	Corymbia citriodora	lemon-scented gum	24.5		Moderate	Moderate	LN, SL SR
143	Pyrus kawakamii	evergreen pear	13.0		Poor	Poor	LN, CR, TP, ST, EG, BL
144	Afrocarpus falcatus	African fern pine	10.5		Moderate	Moderate	TP, ST, EG, CR
145	Afrocarpus falcatus	African fern pine	15.0		Moderate	Moderate	TP, ST, EG, SE CR
146	Erythrina caffra	South African coral tree	42.5	26, 16.5	Moderate	Moderate	TP, ST, EG, ML, SR

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
147	Corymbia citriodora	lemon-scented gum	24.0		Moderate	Moderate	CD, IB, SL CDB
148	Trachycarpus fortunei	windmill palm	14' BTH		Moderate	Moderate	-
149	Trachycarpus tortunei	windmill paim	8' BTH		Moderate	Moderate	-
150	Pyrus kawakamii	29 2021 evergreen pear	8.5		Moderate	Moderate	BL, SR, ST, EG, TP
151	Erythrina cattral Pla	South African anntogal Regisio	n 55.5	17, 19.5, 19	Moderate	Moderate	ML, SE LN, SR, EG, ST, TP
152	Pyrus kawakamii	evergreen pear	12.5		Moderate	Moderate	TP, ST, S, EG
153	Afrocarpus falcatus	African fern pine	14.5		Moderate	Moderate	CR, ST, EG, TP, LN, SR
154	Pyrus kawakamii	evergreen pear	13.0		Moderate	Moderate	SR, TP, ST, EG
155	Schinus terebinthifolia	Brazilian pepper	46.5	7, 5, 6.5, 6, 8, 7, 7	Moderate	Poor	ML, SR, EG, ST
156	Pyrus kawakamii	evergreen pear	14.5		Moderate	Poor	SE LN, SE CR, TP, ST, EG
157	Afrocarpus falcatus	African fern pine	11.0		Moderate	Moderate	SE CR, SR, TP, ST, EG, LN
158	Afrocarpus falcatus	African fern pine	12.5		Moderate	Poor	SE CR, TP, ST, EG, LN
159	Pyrus kawakamii	evergreen pear	17.0		Moderate	Moderate	CD, IB, ST, EG, BL
160	Corymbia citriodora	lemon-scented gum	23.5		Moderate	Poor	LN, SL CDB, SE CR, SR
161	Pyrus kawakamii	evergreen pear	14.0		Moderate	Poor	SR, LN, TP, ST, BL, EG, SE CR
162	Pyrus kawakamii	evergreen pear	10.0		Moderate	Poor	TP, SE LN, SE CR, SR, EG
163	Erythrina coralloides	naked coral tree	10.5		Poor	Poor	D, H, EH, SD
164	Ficus elastica	rubber tree	30.0	11, 19	Moderate	Poor	ST, EH, ML, TP, SR

Tree Tag	Botanical Name	Common Name	Diameter at Breast Height (in.)	Multi Leader Individual DBH (in.)	Health	Preservation Suitability	Field Notes & Recommendations
165	Corymbia citriodora	lemon-scented gum	24.0		Moderate	Moderate	SL CDB, SL SR

# **RECEIVED**

**SEP 29 2021** 

**City of Goleta**Current Planning Division

## Exhibit B - Tree Photographs



South African coral tree in the parking lot showing signs of root pruning and decay around the root collar.



Typical example of AC pavement upheaval and curb damage from underground surface roots.

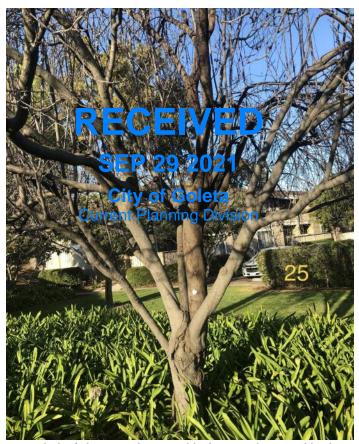


Typical example of the declining Victorian box trees observed.

The crown is thinning and dying back from the tips of the branches towards the center of the crown.



Exposed heartwood and visible decay is common among the naked coral trees observed onsite.



Purple-leaf plum #25 shows visible decay in the tagged leader and moderate dieback in the crown. This specimen is declining and should be removed.



This is a typical example of the many evergreen pears that are planted too close to structures. These specimens should be considered for replacement further from the structures they are currently crowding.



These are 2 of the 3 avocado trees onsite. They show signs of stress, which is likely attributed to extensive pruning and lack of water. Removal is not necessary at this time, but they should be monitored for signs of decline.



are This image shows the cabling that was performed on this tree be many years ago to add strength to this weak attachment. The tree has outgrown this cabling location and should be cabled higher February 8, 2021 in the crown to provide additional support. 22





These large ash trees are likely mature volunteers from years ago. This is a typical form of the evergreen ash and their attachments tend to hold up well over time. They are located close to the public sidewalk and utility lines, which limits their preservation suitability.



This is a typical image of the larger South African coral trees onsite. It's evident that a long history of overpruning has kept these trees small and created the strange form and character seen onsite.



This image shows the variability of blight observed in the pears onsite. The mature tree 89 (right) is severely blighted, while tree 88 (left) shows a minor blight issue.



Several South African coral trees were observed with evidence of severe root pruning, or remaining deadwood from the consistent removal of suckers.



Several of the pears are severely topped and pruned to keep the crown away from the building eves. These trees are mature and will require extensive maintenance to maintain this form into the



This image represents a the typical planting conditions of the African fern pines observed onsite. Many are severely crowded by adjacent structures and should be replaced further from the structures (or elsewhere onsite) with a suitably sized species.



This is a typical image of the stressed purple-leaf plums observed onsite. Note the extensive pruning that has created a vase shaped crown and the resulting stress in the form of severe epicormic 24

growth. February 8, 2021



This image shows evidence of root pruning on these stressed lemon scented gums. It's likely the roots damaged the paving, and the paving contractor removed the surface roots to repour the pavement in place.



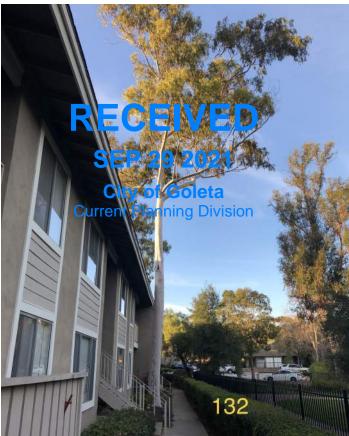
This is another example of the pears that are severely crowded by structures and have been extensively pruned to maintain adequate distance. This is a good candidate for replacement.



Many of the lemon scented gums are in moderate condition with minor signs of crown dieback. Tree 123 is the exception to this. This tree shows signs of decline and should be monitored.



This California pepper tree appears to be a volunteer. It is damaging the wrought iron fence and may damage the large drain inlet in the future. It should be considered for removal.





Tree 163 was the only hazardous specimen observed onsite. There is visible decay around the root collar, which has created stability issues. This tree should be removed.



This is a typical image of the multi-leader bronze loquat trees observed onsite. Most have matured only to be topped and reduced to maintain clearance from the structure.

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- 1. Ste scop of any report or other correspondence is limited to the trees and conditions specifically mentioned in those reports and correspondence. RRM Design Group assumes no liability of the failure of trees or parts of trees, either inspected or otherwise. RRM Curbeston Coupassidines no responsibility to report on the condition of any tree or landscape feature not specifically requested by the named client.
- 2. No tree described in this report was climbed, unless otherwise stated. RRM Design Group does not take responsibility for any defects, which could have only been discovered by climbing. A full root collar inspection, consisting of excavating the soil around the tree to uncover the root collar and major buttress roots was not performed unless otherwise stated. RRM Design Group does not take responsibility for any root defects, which could only have been discovered by such an inspection.
- 3. RRM Design Group shall not be required to provide further documentation, give testimony, be deposed, or attend court by reason of this appraisal or report unless subsequent contractual arrangements are made, including payment of additional fees for such services as described by RRM Design Group or in the schedule of fees or contract.
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