Tree Report

Ventura County Watershed Protection District

J-Street Drain

South Surfside Drive

Port Hueneme, California

Prepared For:

Jordan, Gilbert and Bain Landscape Architects, Inc

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Summary

I was retained to appraise 114 trees along the western edge of the J Street drain in Port Hueneme, California. The trees are on property owned by the Surfside III condominiums. Some of the trees are growing in the right-of-way, other trees are so close that the County wanted me to determine whether to remove or protect those trees. Further, I was to appraise the monetary value of all trees that needed removed and were outside the right-of-way. Finally, the county wanted to know of any protective measures that should be taken to prevent damage to the trees that were not removed.

I determined the size and location of the trunk diameter, Critical Root Zone and Tree Protected Zone for each of the 114 trees. I used that information to predict what effect excavation would have on each tree. I assigned each tree a Status or disposition using this analysis.

Based on that information I was able to predict which trees that would likely suffer so much damage that they would show rapid decline. I recommend these trees be removed after proper approval by the parties involved. In total I recommend removing sixty-six of the 114 trees in the study.

I identified seven palms and twenty trees that would be adversely impacted by the excavation but would probably survive with little damage. Of the twenty trees, thirteen are relatively tall eucalyptus trees which merit protection and seven myoporum trees that may or may not be worth trying to protect. See the discussion in the body of the report.

Excavation of the drain would not significantly impact the remaining twenty-one trees.

Information about each of the 114 trees can be found in Appendix A, Tree Maps and Appendix B, Appraisal Listing all Trees Numerically.

I make fourteen recommendations for accomplishing the tasks explored in this study. Those can be found in the Recommendations section of this report on page 19.

Introduction

Background

Mike Gilbert of Jordan, Gilbert & Bain Landscape Architects, contacted me in January 2010 about preparing a Tree Report for the Ventura County Watershed Protection District. He arranged a meeting between the two of us and District engineer Kirk Norman on January 29th to discuss the scope of the report. We met at the site.

The J-Street drain is in Port Hueneme, California. The trees are on property owned by the Surfside III condominiums. The county has a right-of-way that runs along the west side of the drain for about 1125 feet. The right-of-way is approximately 5' wide.

The county intends to widen the drain to the extent of their right-of-way. They plan to build the new drain channel walls using slip form construction, which will eliminate the need for over excavation to build the channel walls. The expansion of the drain is part of a larger attempt to mitigate flooding in the area.

A number of trees will be affected by the project. The trees growing in the right-of-way will be removed during the course of construction. Other trees will suffer so much root loss and root damage that they will need to be removed. Other trees will experience some root and/or canopy loss.

The row of trees screens view to the east of the condominium where a sewage treatment complex is located. That complex consists of large round holding tanks, parking, roads and other infrastructure.

At the January meeting, Kirk Norman gave me a topographic map of the site based on a survey conducted in September 2009. It showed the drain, the trees and enough other detail to locate the trees on the ground. I subsequently received a CAD file of the Topographic Map from Mike Gilbert and it forms the basis for the Tree Maps in this report.

At Kirk's direction, I spoke by phone with Scott Walker to request access to the property to conduct my investigation, which he granted.

Assignment

My assignment was to:

1. Identify all trees that should be removed as a consequence of widening the drain channel including those in the right-of-way
2. Assess the dollar value of trees outside the right-of-way that should be removed
3. Describe protective measures for trees that will remain but may be affected by the construction

Limits of Assignment

This report is not intended as, and does not represent, legal advice. Observations were made from the ground; no aerial survey was conducted. No root excavations were done.

Purpose and Use of Report

The purpose of this report is to advise Ventura County Watershed Protection District which trees growing on the condominium property and outside the right-of-way, should be removed as a result of widening the drain. Further, it provides the Watershed Protection District with a dollar value for the trees to be removed based on ISA standards and methods. It identifies protective measures for trees that may be affected by construction. Upon submission, this report will become the property of Ventura County Watershed Protection District and therefore, its use will be at their direction.

Observations

Investigation Methods

I conducted the study in three parts:

1. Looking at the topographic survey of the trees, I numbered trees within ten feet of the right-of-way. I then created a numbered checklist to take with me to the site to survey each tree.
2. I conducted my field survey of the trees on February 10th and 11th. Using that identifying tree number, I filled out a checklist appraising the trees using information in the Guide for Plant Appraisal, 9th Edition.[i] I took a photograph of the tree. At the direction of Kirk Norman I did not tag the trees.
3. I then entered my data into AutoCAD so I could determine the extent of root damage for each tree. Using the size data gathered in the field, I created a unique symbol for each tree, which showed me its critical root zone in relation to the right-of-way line. That analysis

allowed me to determine if a tree should be removed. I then entered the field data and the newly assigned Status of each tree into an Excel spreadsheet which calculated the Appraised value of each tree. That data is shown in Appendix B.

General Site Observations

The trees form a dense screen along the west side of the drain. There is a concrete block retaining wall running parallel to the right-of-way and there are concrete drains, curbs, parking lots, sidewalks and carports that impact the root zone and canopy of individual trees. These structures are shown on the tree maps, which can be seen in Appendix A.

I used a tape to check tree locations relative to the right-of-way line but it was not always possible to determine exactly where the line was because of the dense vegetation. I found the survey to be generally accurate except for the multitrunk myoporum, which are hard to locate with precision because of their sprawling form. Where my field observations conflicted with the location on the survey, I used my field measurements to locate the center of the tree on my tree maps.

Residents told me that trees beside the parking lots had recently been flooded.

Tree Observations

The detailed checklist showing the information for each tree is shown in Appendix B Appraisal Listing all Trees Numerically. A photograph of the tree is shown in Appendix C Tree Photographs, which are also in numerical order.

I observed 114 trees comprised of eight types or species:

1.	California sycamore *(Platanus racemosa)*	1	tree
2.	London plan tree *(Platanus acerifolia)*	1	tree
3.	Monterey Pine *(Pinus radiata)*	1	tree
4.	myoporum (*Myoporum laetum*)	57	trees
5.	red gum *(Eucalyptus camaldulensis)*	21	trees
6.	red ironbark *(Eucalyptus sideroxylon*)	13	trees
7.	silver dollar gum *(Eucalyptus polyanthemos*)	3	trees
8.	windmill palm *(Trachycarpus fortunei)*	14	palms

Heritage Trees

The California sycamore is a protected species in Ventura County. The one in this study will not have any excavation done within its Tree Protected Zone. In other words, it is not affected. Likewise, the London plane tree is not affected.

Related Pests Observations

Among most of the myoporum I observed some gall-like symptoms and distortion of new leaves, stunted terminal growth and leaf curling or folding. This observation is consistent with Myoporum thrips. Described by UC Davis this way "Thrips, order *Thysanoptera*, are tiny, slender insects with fringed wings. They feed by puncturing their host and sucking out the cell contents." [ii]

Root Observations

I checked the roots visually to see if the root crown was visible or if there were surface roots. I looked for problems such as soil compaction, structures like sidewalks and walls that interfere with root growth, lack of a visible root crown, proximity to competing trees and other visible damage.

The roots of many trees are growing in a narrow planter between the drains' concrete sides on the east and on the west either buildings, paving, structures or turf.

Dead Trees and Shrubs Observations

In addition to 112 living trees, I observed two dead trees and a few woody shrubs, which are shown and labeled on the tree maps.

Analysis

I had to determine the location of the critical root zone (CRZ) for each tree. The CRZ is the closest distance to the tree that you can excavate without needing to remove the tree. Any closer and the health and stability of the tree will be immediately affected.[iii] This is a minimum distance so trees with critical root zones that touch the right-of-way line should be considered for removal.

With information gathered in the field and the survey provided by the county, I was able to create tree maps in AutoCAD that used a unique symbol for each tree. The symbol shows information about that tree in relation to the right-of-way line. Each tree symbol is scaled to match the diameter of the tree it represents. [iv]

Figure 1 below shows several trees from Map 2 in Appendix A. If a tree's critical root zone touched the right-of-way, I assigned it a symbol like trees 2, 4 and 5 below. If the tree's critical root zone was not touching the right-of-way, like tree 1, I highlighted its CRZ with a gray circle surrounding its diameter. [v] I then estimated its Tree Protection Zone (TPZ), which is the area below its canopy. [vi]

If the tree's estimated Tree Protection Zone did not touch the right-of-way I used a symbol like tree 3 in the figure below.

Palm trees have a different critical root zone from the other trees in this study, for windmill palms like these it is generally three feet by three feet. See Figure 2 for an explanation of tree and palm symbols.

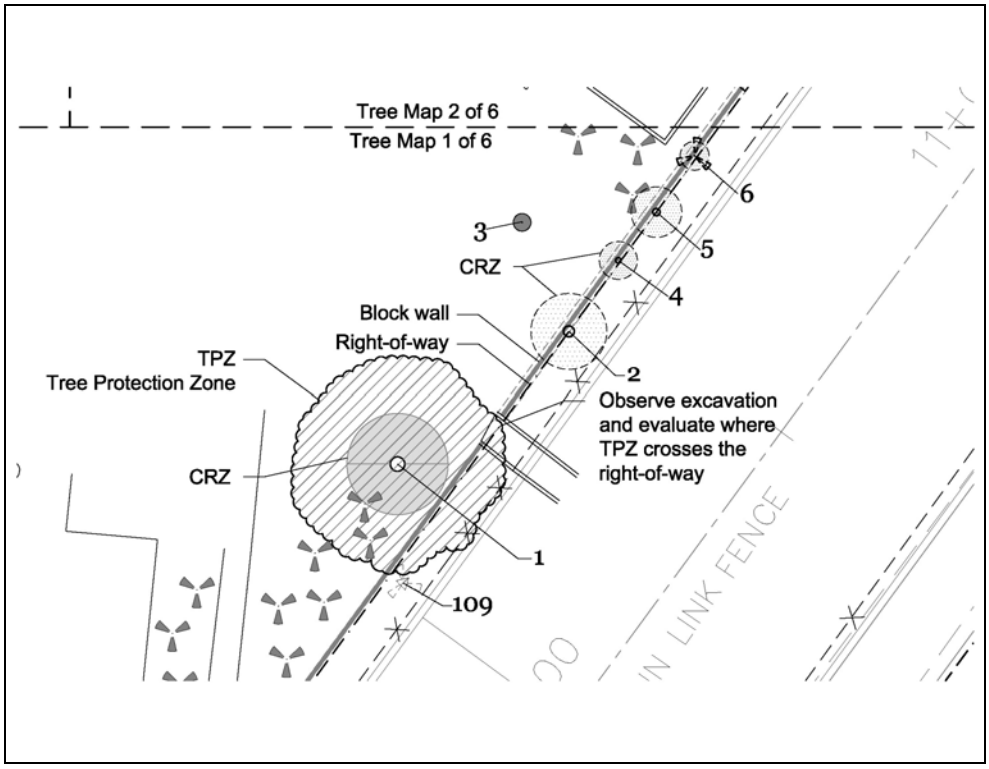


Figure 1 Unique Symbol for Each Tree

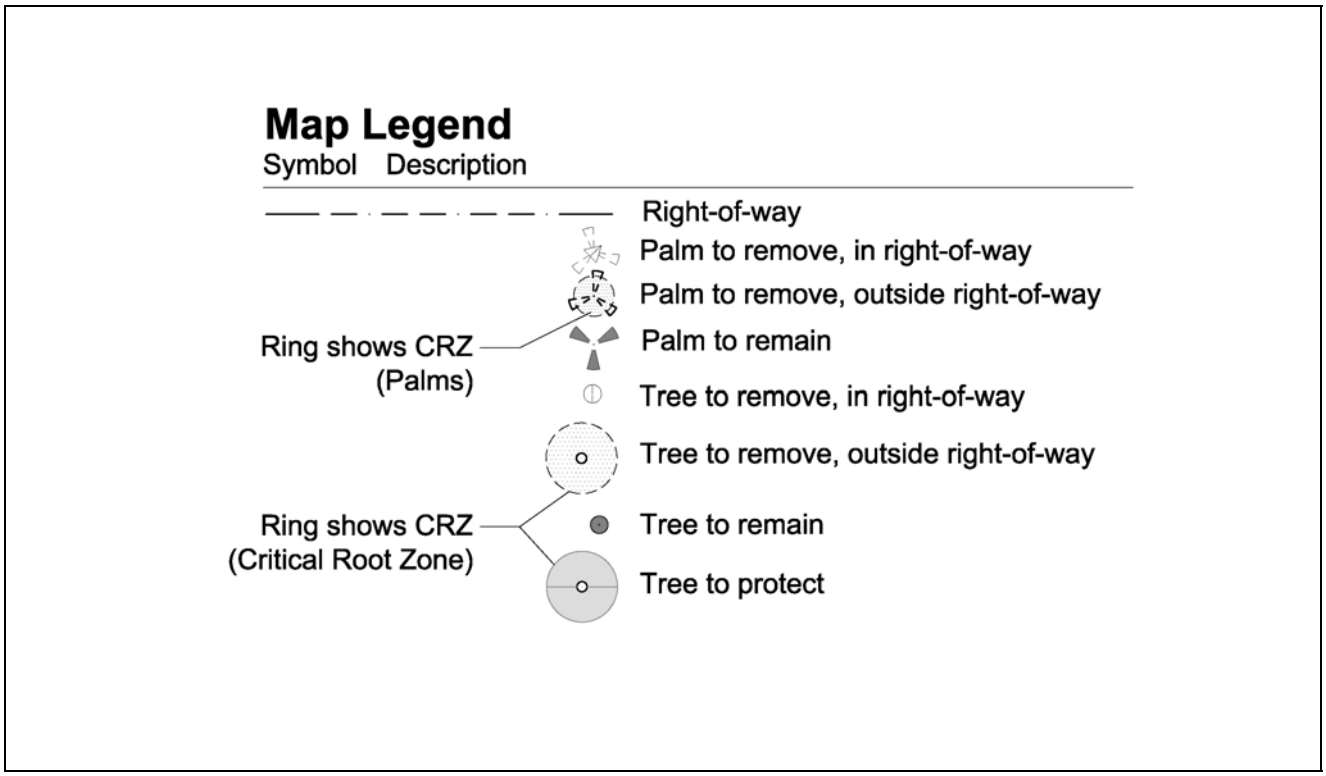


Figure 2 Unique Symbol for Each Tree and Palm

Using the CAD analysis I assigned each tree a status or disposition. There are five types of tree status in this report:

1. RW Status needs removed and is in the right-of-way
2. X Status needs removed but is outside the right-of-way
3. P1 Status observe excavation, prune roots and evaluate
4. P Status need palm fronds protected and is outside the right-of-way
5. NA Status no significant impact on this tree

A more through discussion tree status is included below in the Discussion section. A list of trees by status can be found in Appendix D.

Establishing Tree Value

Trunk Formula Method is used to appraise the monetary value of trees too large to be replaced with nursery stock. The formula establishes the value of a tree starting with the size of the tree and then adjusting that Basic Tree Cost based on its **Species**, physical **Condition** and the landscape **Location**. Below is an explanation of how these values are established.

Size: cross section of the trunk in square inches, calculated using the circumference at 4.5 feet. Trunk area size is used to calculate the **Basic Tree Cost**, which is the value of an ideal tree of that size. For example Tree 1, Red Ironbark eucalyptus, has a 513 square inches of trunk equaling a Basic Tree Cost of $24,374 but that value is reduced based on three factors: species, condition and location.

Species: determined by examining leaf, trunk, flower, seed and form. Not all species have the same value according to the Western Chapter of the International Society of Arboriculture. The Southern California sub region has established five species categories and assigned each tree species a relative value described as a percentage: 90%, 70%, 50%, 30%, 10%. The Basic Tree Cost is then multiplied times the Species Factor, which reduces it value. Using our example of Tree 1 a Red Ironbark it has a species factor of 50% meaning its value would be cut in half to $12,187.

Condition: based on total points for roots, trunk, scaffold branches twigs and foliage, maximum of five (5) points for each category. Each trees' total points are divided by 25 (the maximum possible) to calculate its Condition percentage. That Condition percentage further reduces the value of the tree. A native tree in native soil and great shape would rate 25 points. In the example of the eucalyptus above, it was a good tree with a damage trunk worth 19 Condition Points or 76%. Multiplying the value of our eucalyptus by 76% leaves us with a tree worth $9,262.

Location: expressed as an average of **Site**, **Contribution**, and the **Placement** of the tree in the landscape.

Site percentage is based on the relative market value of the property. ISA recognizes five site ratings:[vii]

1. Very high 90% to 100%
2. High 80% to 89%
3. Average 70% to 79%
4. Low 60% to 69%
5. Very low 10% to 59%

Contribution of the tree to the landscape is also a percentage based on the functional and aesthetic contributions of the plant such as privacy, screening, wildlife attraction and others.

Placement is an estimate of how well a tree performs its functional and aesthetic contribution.

These factors were determined during my site visit, recorded in my field notes and then transferred to an Excel spreadsheet. That information about each tree is included in Appendix B Tree Survey Spreadsheet.

Discussion

I divided all the trees in this study into five categories based on the disposition of the tree as a result of widening the drain. I called this the tree "Status". The five include:

1. RW Status needs removed and is in the right-of-way
2. X Status needs removed but is outside the right-of-way
3. P1 Status observe excavation, prune roots and evaluate
4. P Status need palm fronds protected and is outside the right-of-way
5. NA Status no significant impact on this tree

See Appendix D for a complete list and appraisal for each tree.

1. Status RW

10 trees in the right-of-way

Total appraised value $2,144

2. Status X

56 trees outside the right-of-way that should be removed because of damage to their roots

Total appraised value $112,212

3. Status P1

20 trees that will require excavation within their Tree Protection Zone

Total appraised value $66,854

These trees will need to be protected or removed because some damage to roots and canopy is likely to occur during construction. If too much damage occurs a P1 tree may need to be removed, becoming a Status X tree. Protecting the P1 trees will have some cost.

To minimize potential damage these P1 trees could be observed and monitored by the contractor during excavation using an experienced observer.[viii] This observation process requires the contractor to observe digging and stop the equipment operator when large roots are uncovered (1" or larger). The contractor then prunes the root using approved methods.

There are three ISA approved methods to prune roots:

1. soil excavation using supersonic air tools, pressurized water or hand tools (*like a shovel*), followed by selective root cutting.

2. cutting through the soil along a predetermined line. . . using a tool specifically designed to cut roots.
3. mechanically excavating (such as with a trenching machine or backhoe) the soil , and pruning what is left of the exposed roots.[ix]

The last method is the least preferred because it causes a lot of root damage. If many large roots are observed during excavation, the stability of the tree might be affected and a decision could be made about whether to remove it.

Root pruning prevents the mechanical excavator from tearing the root away from the tree causing greater damage and decay. The reason damage must be assessed during excavation is because we do not know where the roots are growing. You only find the roots by digging them up. So where do you root prune?

Root pruning should take place whenever excavation occurs within the Tree Protected Zone of P1 trees. This information is shown on the tree maps and could be staked or otherwise indicated on site. It is approximately 250 linear feet distributed throughout the site. That means the contractor would need to root prune all the roots uncovered in that 250 feet since you could not easily tell which tree the roots came from.

After going to the expense of pruning the roots, neither I, nor anyone can assure you that the P1 trees will remain stable and healthy in the future. Obtaining daily observation reports including photographs is one way to document root conditions during excavations into a trees protection zone. If for any reason the tree declines in the future, the daily reports would document the extent of root damage at the time of construction and could support our decision to protect the tree rather than remove it.

The discussion of stability is most important for the 13 Status P1 eucalyptus trees that average 52 feet high, some over 65 feet. The appraised value of those thirteen trees is $62,126.

The remaining seven P1 trees are myoporum with an appraised value of $4,728. The canopies of the myoporum are vulnerable to damage during excavation. This is because their canopies cross the right-of-way line. Most of the canopies are lopsided in the direction of the right-of-way line because they are growing in the direction of the sun. Damage or loss of canopy may damage these trees. In addition the low sprawling myoporum may be damaged when other trees are removed. This is illustrated in Figure 3 a portion of map 3 from Appendix A.

Damage to the myoporum is complicated by the presence of Myoporum thrips throughout Ventura County. The thrips damage new leaves and twigs causing unattractive gall structures to form. Leaves are twisted, folded and distorted, canopies become thin and these things cause a gradual decline in the plant. I observed some symptoms consistent with myoporum thrips in trees on this site. A plant laboratory could confirm that diagnosis or identify another reason for the thinning and distorted leaves and twigs.

If thrips are present, the myoporum will decline and it will be hard to separate decline caused by damage to the canopy during excavation and decline caused by thrips either spread during construction or attracted to a tree weakened by root and canopy loss.

The seven myoporum with Status P1 have a combined value of $4,728 with a single tree 92, worth $2460. It may be more cost effective to remove the myoporum than to protect them and then treat them to prevent thrips. A pest control company could be consulted to recommend prevention and treatment based on a plant laboratory report. That information would allow you to estimate the future cost for treating the myoporum.

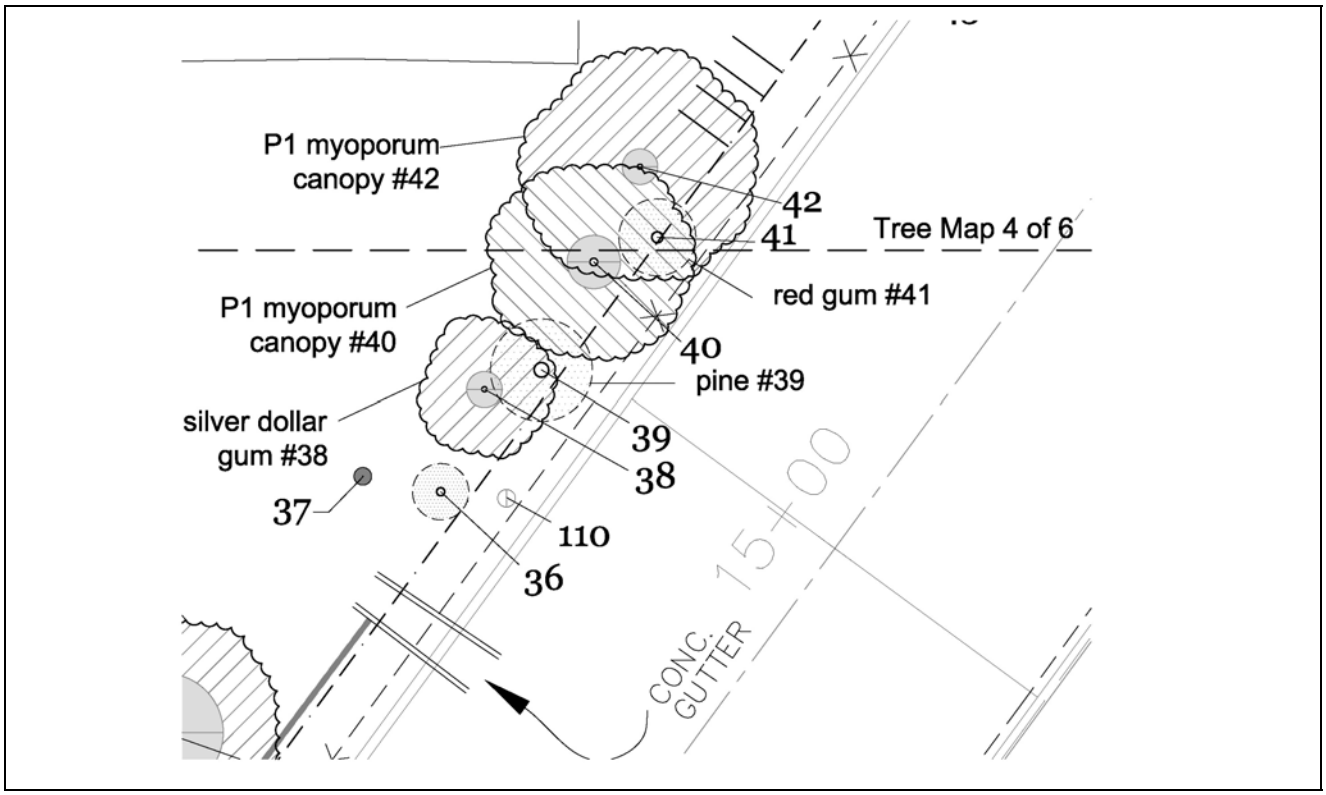


Figure 3 Status P1 myoporum

4. Status P

7 palms need fronds and trunks protected and are outside the right-of-way

Total appraised value $4,229

The trunks or fronds of these palms are close to the right-of-way or are leaning across the right-of-way. They lean toward the sun. If the palms are damaged during construction they may need to be removed. The protection needed is to temporarily restrain the fronds or trunks to avoid damaging them during construction. These palms could be assessed for damage after construction. The contractor could be advised of the value of the palms and the disposition of the seven palms could be included in the daily observation reports if that course of action is adopted.

5. Status NA

21 trees originally studied but found to have no significant adverse impact

Total appraised value $18, 526

Only after doing my field survey and analyzing the data could I determine that excavation should have no significant impact on these trees. Given their proximity to the construction and to trees that are removed, some of these trees may be damaged. If that occurs this report provides information about their condition on the date of the field survey.

Species

Not all tree species have the same value. Their value is determined by a committee of experts and published as a supplement to the Guide for Plant Appraisal. The supplement was last published in 2004 before Myoporum Thrips invaded southern California. At that time myoporum had no known pests so it got the high rating from the committee, 70%. As an arborist I am allowed to discount that Species Factor by ten percent, which I did in my appraisal spreadsheet.

The Western Chapter of ISA may publish a new guidance that will give the *myoporum laetum* trees and *myoporum pacificum* groundcover, a very low Species rating. Nurseries are no longer selling these plants.

With the current Species rating of 60% all the myoporum with Status X or P1 have an appraised value of $52,256. If in the future, the committee gives myoporum the lowest rating or 10% then those same forty trees would appraise to be worth $8,709.

I will attend an ISA symposium to discuss the latest thinking on species classification April 13th and 14th 2010. If your schedule allows, it may be worth waiting a few weeks to learn whether the committee will drop the rating on myoporum.

Location

I rated this site Average or 70%. Its proximity to amenities like the ocean increases its value but an industrial area to the east decreases value. I learned from talking to residents that some of the condominiums are rental units with absentee landlords. The units and grounds were not of the highest quality. The site has experienced flooding.

Shrubs

There are some woody shrubs planted with the trees and six of them are shown on the tree maps. These are Acacia shrub) *Acacia longifolia*. Baron Brother's nursery sells 15 gallon Acacia for $25. Landscape estimators will often double the cost to calculate the installed cost. Using that formula, the six Acacia would be worth $300.

I did not show all shrubs on the tree map, just the six Acacia.

Conclusions

Sixty-six (66) trees or palms should be removed as a result of widening the drain channel. These include:

- Status RW, Ten (10) trees in the right-of-way
- Status X, Fifty-six (56) trees that are outside the right-of-way

The appraised value of the fifty-six Status X trees is $112,212. Myoporum make up $45,528 of that total. If the ISA issues guidance reducing the Species Factor for myoporum to the lowest level the myoporum would appraise at $7,921 saving the county almost $38,000. We should pursue an answer from the Western Chapter of the International Society of Arborists and reappraise the myoporum if the Species Factor is changed and time allows.

If the Home Owners Association approves, leaf samples should be collected by an arborist and taken to a laboratory for analysis to see if Myoporum Thrips is present on this site. If the pest is present then it would be best to remove all the myoporum on the site as has been done in many southern California communities. Knowing this would benefit the HOA to the extent that they might be made aware of a costly problem.

Another option would be to collect samples from County property since the canopies extend over the property line.

Twenty-seven (27) trees will need to be protected and observed during construction due to excavation within their Tree Protection Zone (under the canopy). These include:

- Status P, Seven (7) palms that need temporary restraint during construction and a review to identify damage if it occurs.
- Status P1, Twenty (20) trees will experience excavation into their Protected Zone

The seven palms may be easily protected by the contractor or they may suffer damage. This should be assessed daily during construction. If the palms are damaged, they should be assessed by an arborist and removed or treated as the situation warranted.

The P1 trees should be root pruned using one of the first two techniques described in the Discussion section above. By obtaining daily reports with photographs, the county can document the care used while excavating within the trees' protect zone.

The P1 trees should be monitored following excavation to detect any unexpected decline in their condition. This is especially important for the thirteen tall eucalyptus trees where tree stability is paramount. An appraisal should be made of all the P1 Status trees once a year for the first three years after construction and again at the five-year mark. Trees that show decline may need to be removed. That decision should be made on a case-by-case basis.

If the lab does not detect Myoporum thrips then the seven myoporum trees should be treated just like the P1 eucalyptus but if the pest is present then the County may want request permission from the Home Owners Association to remove the seven (7) myoporum trees with a P1 Status since they are likely to decline. If the HOA approved they could be changed to Status X and be removed if not, they should be treated like all other P1 trees.

Finally, the study looked at twenty-one (21) trees with a Status NA. These trees should not be significantly affected by widening the channel unless they are damaged while removing other trees. The current appraised value of the trees is shown in Appendix D.

Recommendations

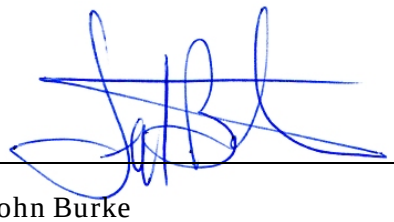
1. Identify the ten (10) trees in the right-of-way. Status RW
2. Identify the fifty-six (56) trees outside the right-of-way that should be removed, Status X
3. Check with the International Society of Arboriculture to see if the myoporum trees can be assigned a lower Species percentage than the current handbook allows based on current problems with Myoporum Thrips.
4. Revise this appraisal if the myoporum trees can be assigned a lower species percentage and any delay experienced will still allow the project to remain on schedule.
5. Collect samples from the myoporum trees and have a lab test for Myoporum Thrips.
6. If Myoporum Thrips is detected by the lab, request approval to remove the seven (7) P1 Status myoporum trees
7. Identify and Track the twenty-seven (27) trees and palms to be protected. Determine whether the seven protected myoporum trees should be removed or protected.
8. If possible and with approval, tag the trees to be protected so they can be protected and monitored over time.
9. Identify on the ground the areas where root pruning will be needed to protect the trees.
10. Communicate the location and identification of the protected trees and their Tree Protected Zones to the appropriate parties such as the contractor, excavator and arborist.
11. Insure the contractor is aware of approved ISA root pruning techniques described in this report.
12. Create a plan to observe, record and report on all protected trees where excavation occurs within the Tree Protected Zone of those trees.
13. Create a plan to monitor the health or in ISA terms, condition, of the protected trees. Appraise the condition of the trees every year for three years and again at five years.
14. Based on the annual appraisal decide whether any tree should be removed.

Certification

PREMISES: J-Street Drain right-of-way, South Surfside Drive, Port Hueneme, California

I, John Burke, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present of prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. That my analysis, opinions, and conclusions were developed, and this appraisal has been prepared, in conformity with the Guide for Plant Appraisal (9th edition, 2000) authored by the Council of Tree & Landscape Appraisers and the *Species Classification and Group Assignment Supplement* published in 2004 by the Western Chapter of the International Society of Arboriculture.
6. That the methods found in this appraisal are based on a request to determine the value of the trees considering reasonable factors of plant appraisal.
7. That my appraisal is based on the information known to me at this time.



Date: 3-21 10

John Burke
Landscape Architect 5251
ISA Certified Arborist WE-8327A

Endnotes

[i] *Guide for Plant Appraisal*, 9th edition, Council of Tree and Landscape Appraisers, International Society of Arboriculture, Champaign, Illinois, 2000. P. 25,

[ii] UC IPM Online website, How to Manage Pests, Pests in Gardens and Landscapes, 3/2010, http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7429.html

"A recent introduction of *Klambothrips myopori* has caused serious leaf and shoot galling damage to *Myoporum laetum* (ngaio tree) and *Myoporum* 'Pacificum' (a groundcover) along the coast of California. This thrips was both a new introduction and an undescribed species, so that initially not even the experts knew what to call it or how it might be managed. This species is now well established and from its original detection site in San Diego has spread north along the coast to at least as far as Santa Barbara. It is expected to continue to spread to wherever *Myoporum* species have been planted."

[iii] Kelly Fite and E. Thomas Smiley, "*Managing Trees During Construction*, Arborist News, Feb. 2009 p. 13

[iv] Note the symbol for the tree does not show an actual survey of the trees root crown, which would be larger that the symbol shows the trunk diameter at 4.5' above ground level.

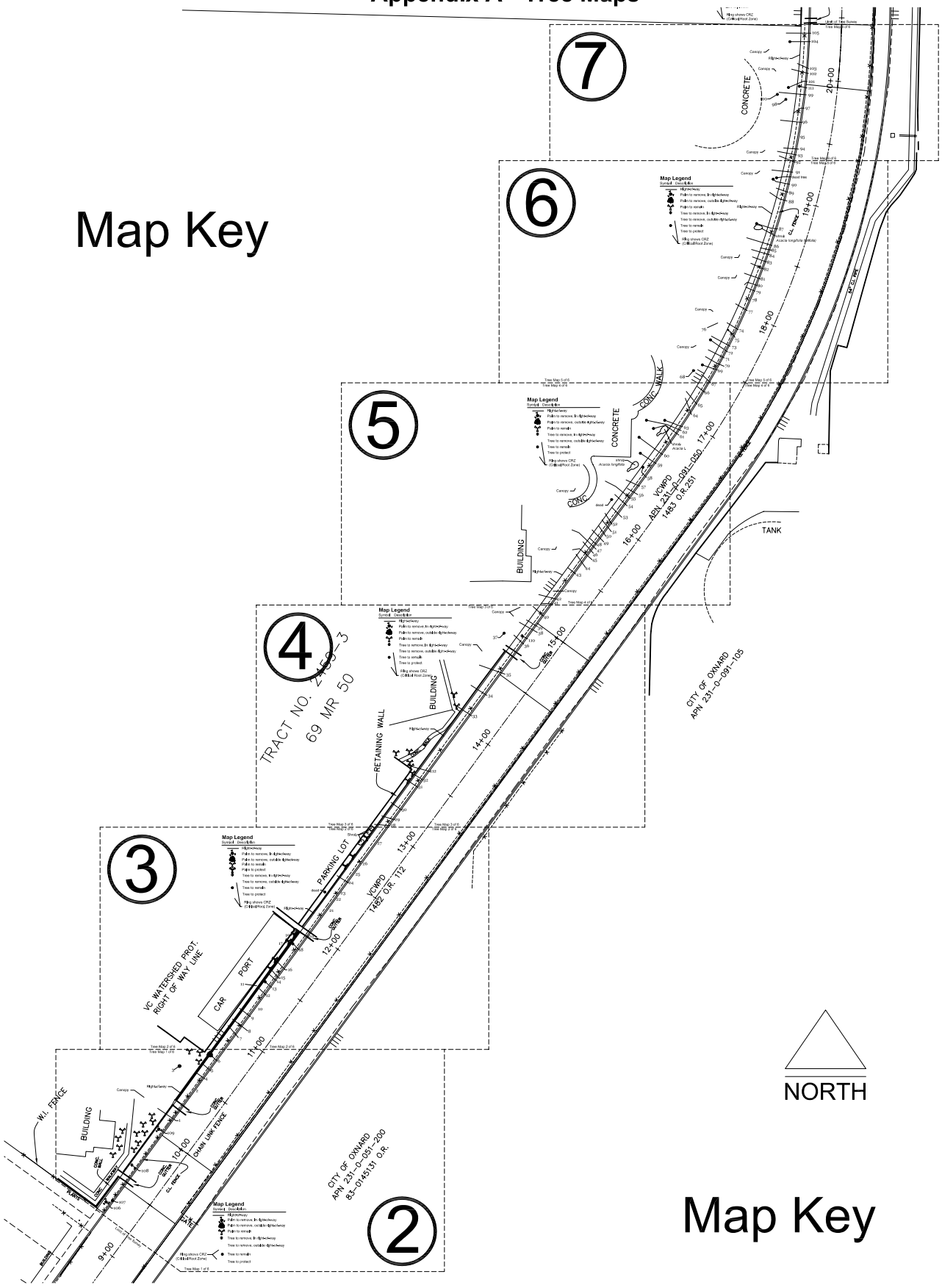
[v] Note: For multitrunk trees like this one I used their total trunk area to calculate a single diameter to use for the symbol.

[vi] Note: This was not a field survey of the tree's canopy but an estimate of its greatest canopy spread. The canopy line shown on the maps are estimates; they are not based on survey information.

[vii] *Guide for Plant Appraisal*, 9th edition, p. 52.

[viii] This observation process is used by the City of Santa Clarita California when excavation is permitted within the Tree Protection Zone of protected oak trees. I am not qualified to say whether this method would work with the excavation method to be used in this case.

[ix] Fite and Smiley, p. 12.


Map Key
7
6
5
4
3
2
CONCRETE
BUILDING
TANK
RETAINING WALL
PARKING LOT
CHAIN LINK FENCE
W.I. FENCE
CONC. WALK
TRACT NO. 2460-3
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1483 O.R.251
CITY OF OXNARD
APN 231-0-091-105
VCWPD
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VC WATERSHED PROT.
RIGHT OF WAY LINE
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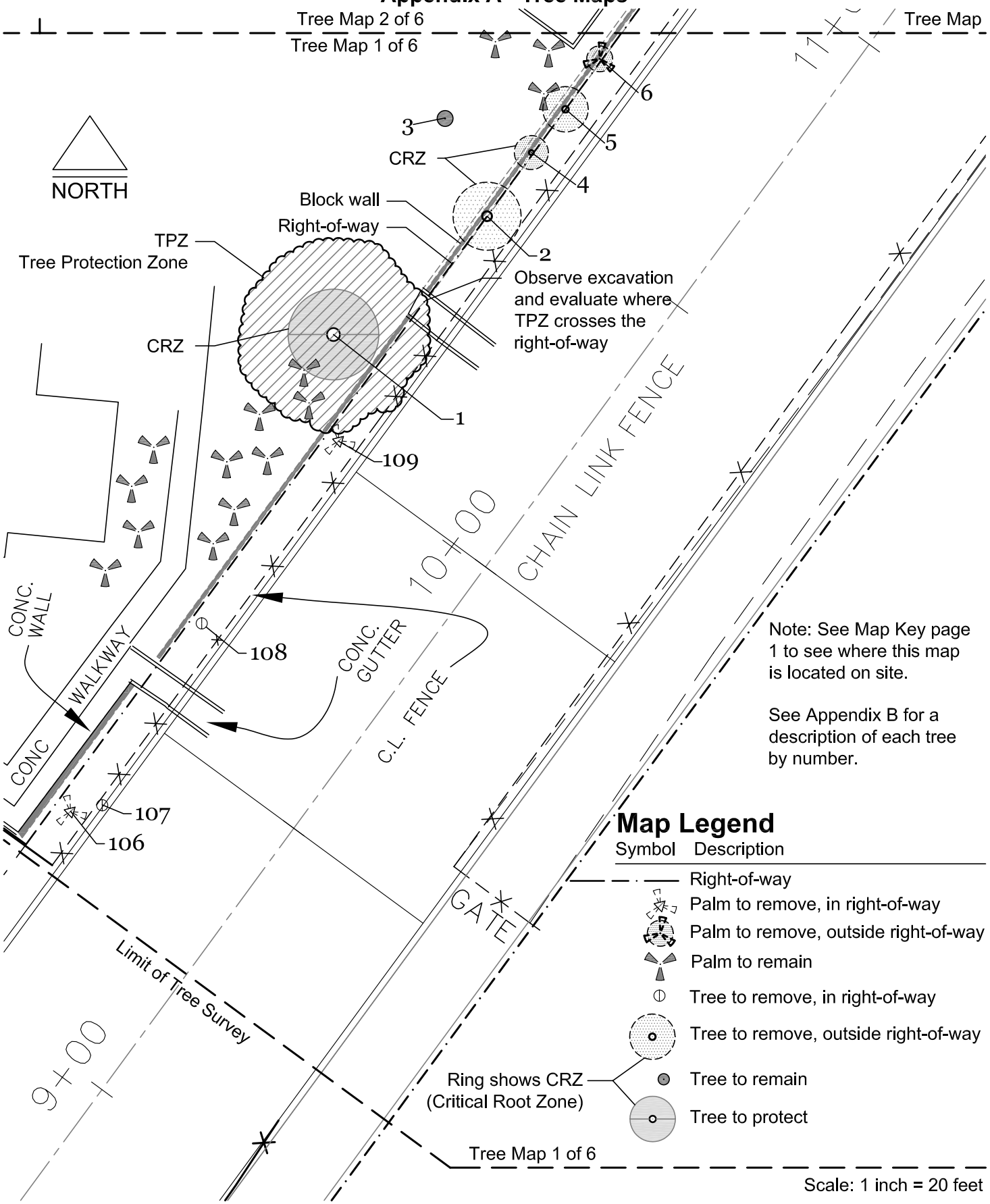
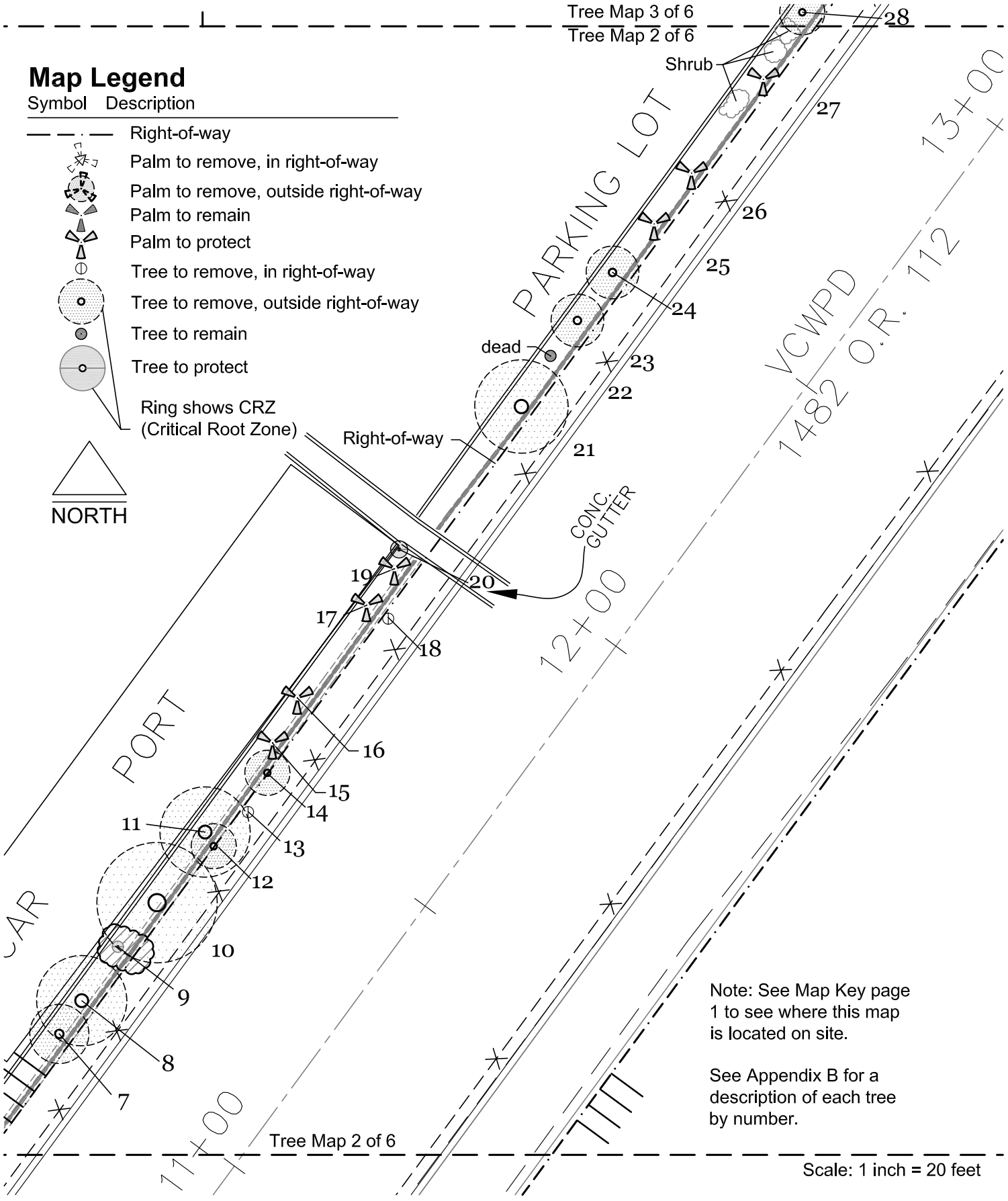
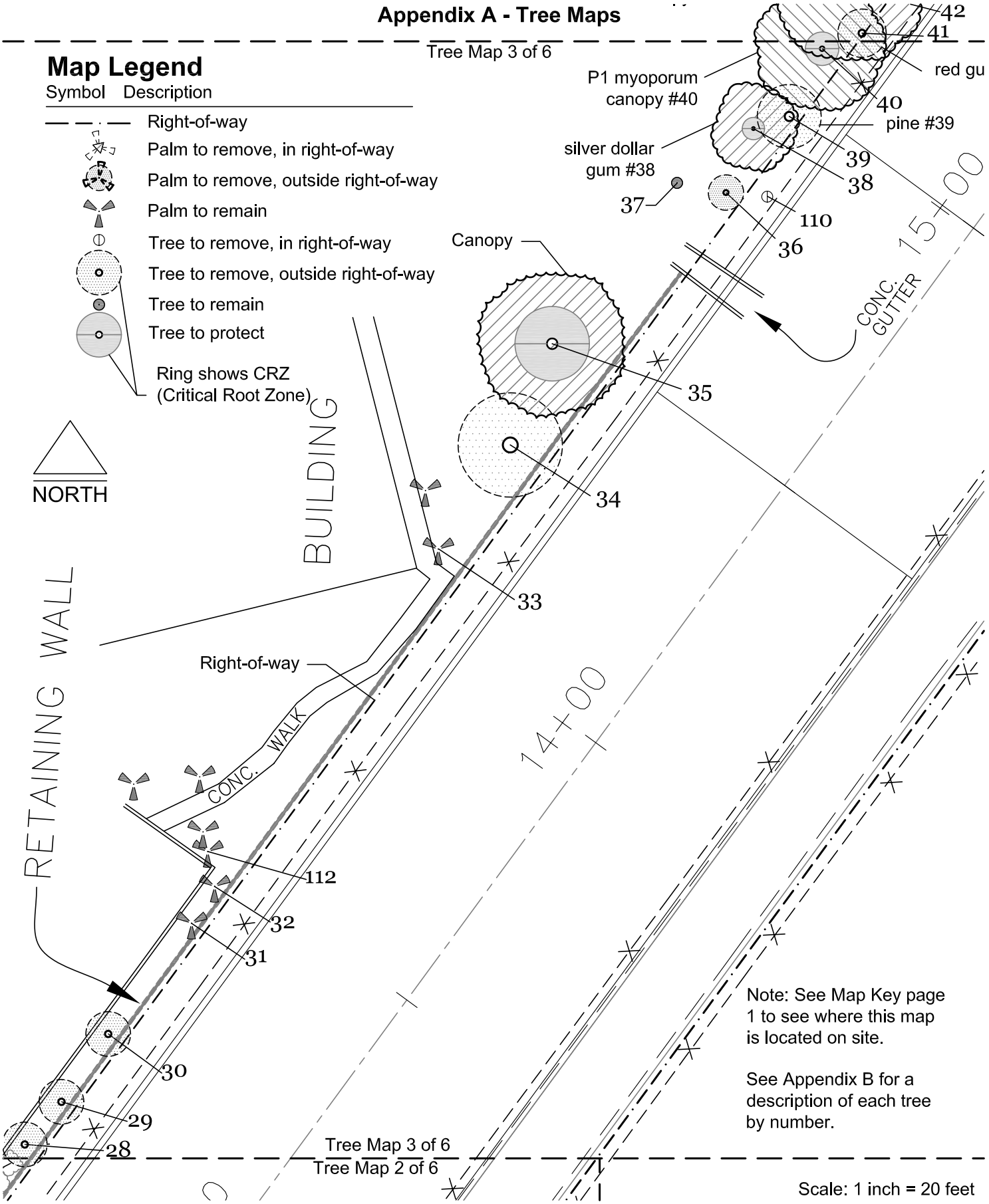
9+00
NORTH
Map Key


Tree Map 2 of 6
Tree Map 1 of 6
Tree Map
NORTH
3
CRZ
6
5
4
Block wall
Right-of-way
TPZ
Tree Protection Zone
2
Observe excavation and evaluate where TPZ crosses the right-of-way
CRZ
1
109
CHAIN LINK FENCE
10+00
CONC. WALL
WALKWAY
108
CONC. GUTTER
C.L. FENCE
CONC
107
106
GATE
Limit of Tree Survey
9+00
Note: See Map Key page 1 to see where this map is located on site.
See Appendix B for a description of each tree by number.
Map Legend
Symbol Description
Right-of-way
Palm to remove, in right-of-way
Palm to remove, outside right-of-way
Palm to remain
Tree to remove, in right-of-way
Tree to remove, outside right-of-way
Ring shows CRZ (Critical Root Zone)
Tree to remain
Tree to protect
Tree Map 1 of 6
Scale: 1 inch = 20 feet


Tree Map 3 of 6
Tree Map 2 of 6
Map Legend
Symbol Description
Right-of-way
Palm to remove, in right-of-way
Palm to remove, outside right-of-way
Palm to remain
Palm to protect
Tree to remove, in right-of-way
Tree to remove, outside right-of-way
Tree to remain
Tree to protect
Ring shows CRZ
(Critical Root Zone)
NORTH
Shrub
dead
Right-of-way
CONC. GUTTER
PARKING LOT
PORT
CAR
VCWPD
1482 O.R. 112
13+00
12+00
11+00
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
Note: See Map Key page 1 to see where this map is located on site.
See Appendix B for a description of each tree by number.
Tree Map 2 of 6
Scale: 1 inch = 20 feet

Tree Map 3 of 6

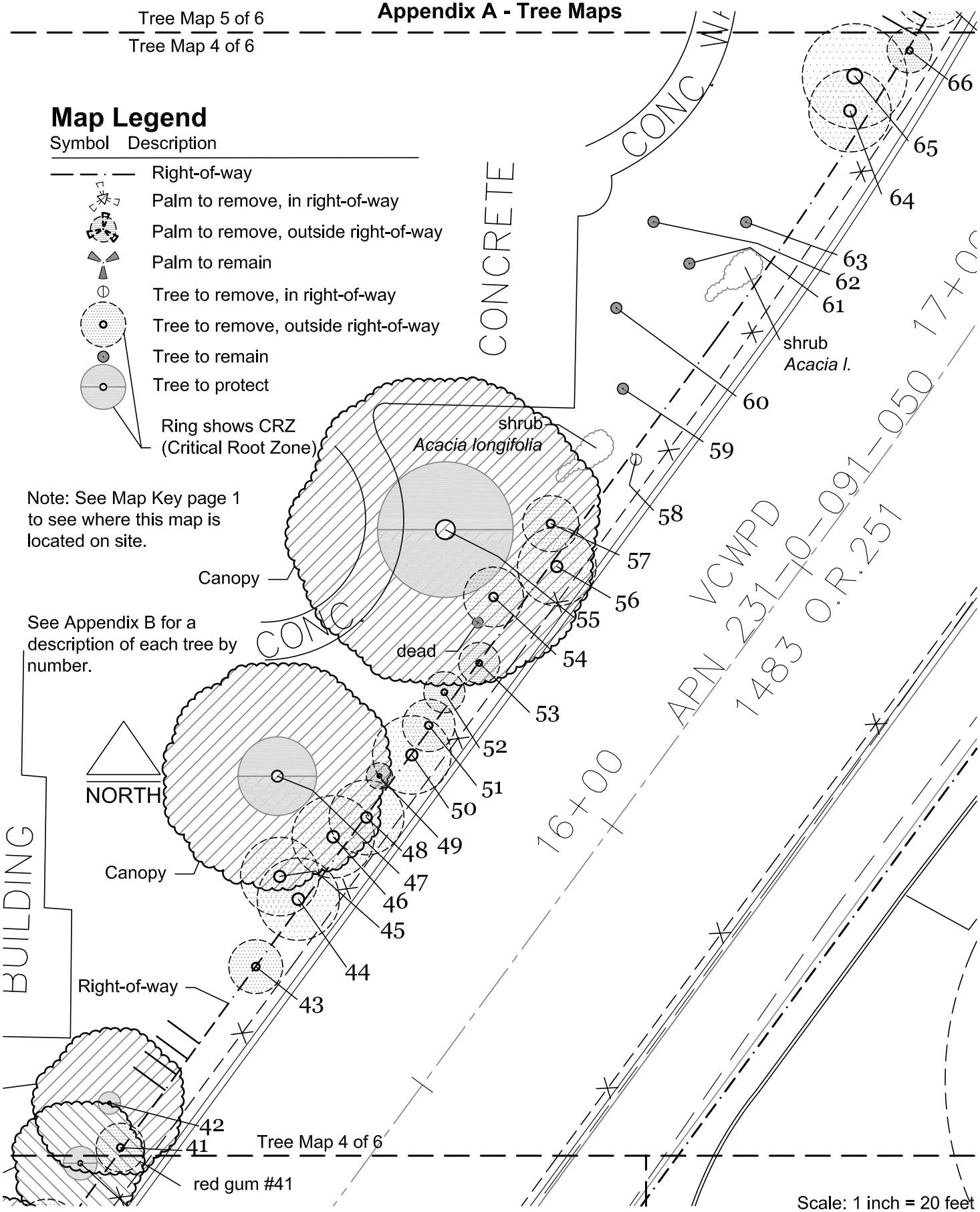


Note: See Map Key page 1 to see where this map is located on site.

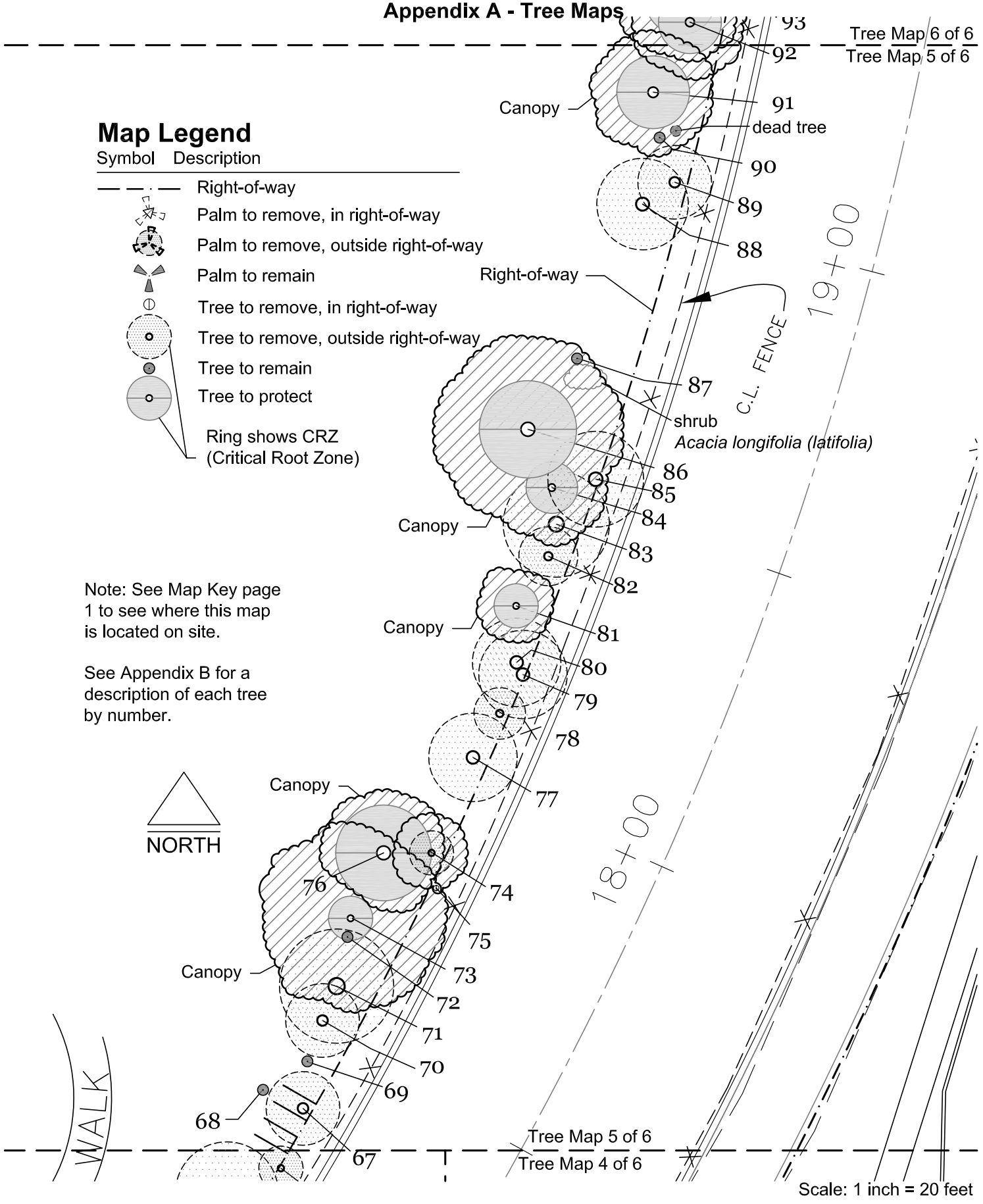
See Appendix B for a description of each tree by number.

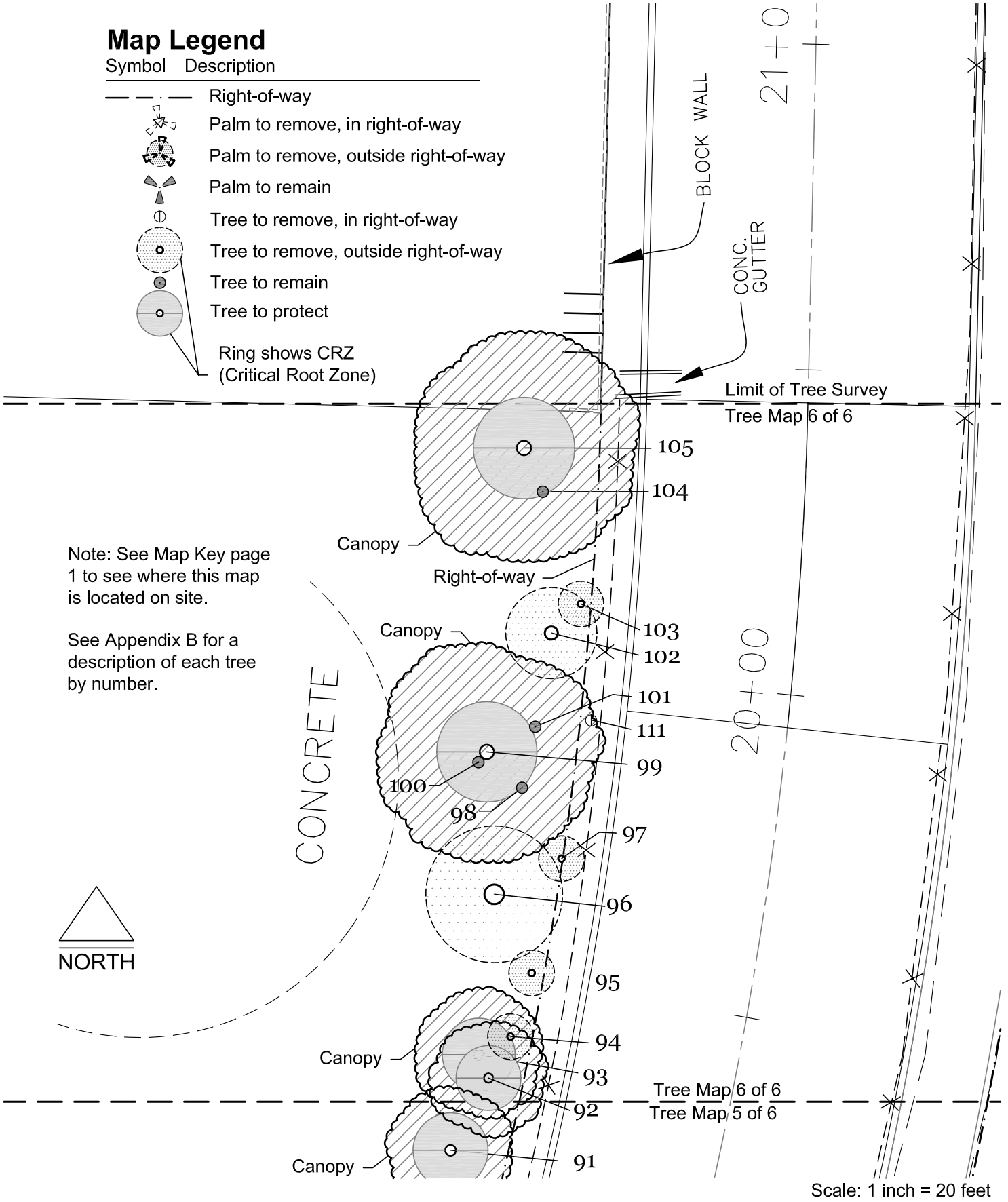
Tree Map 3 of 6
Tree Map 2 of 6

Scale: 1 inch = 20 feet



Scale: 1 inch = 20 feet


Tree Map 6 of 6
Tree Map 5 of 6
Map Legend
Symbol Description
Right-of-way
Palm to remove, in right-of-way
Palm to remove, outside right-of-way
Palm to remain
Tree to remove, in right-of-way
Tree to remove, outside right-of-way
Tree to remain
Tree to protect
Ring shows CRZ
(Critical Root Zone)
Note: See Map Key page 1 to see where this map is located on site.
See Appendix B for a description of each tree by number.
NORTH
Canopy
dead tree
Right-of-way
C.L. FENCE
shrub
Acacia longifolia (latifolia)
19+00
18+00
WALK
TRAIL
93
92
91
90
89
88
87
86
85
84
83
82
81
80
79
78
77
76
74
75
73
72
71
70
69
68
67
Tree Map 5 of 6
Tree Map 4 of 6
Scale: 1 inch = 20 feet



Scale: 1 inch = 20 feet

Appendix B All Tree Spreadsheet

Instruction for using this All Tree Appraisal Spreadsheet

Appendix B is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

This Appendix lists all the trees in this study in numerical order.

Appendix D has this same information but separates trees into five lists based on Status.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	**Tree ID #**
Identification			Size				Condition					Location			

Heading definitions:

Identification

Tree ID #: unique number assigned to this tree for this report

Status: one of the five options below

RW needs removed and is in the right-of-way

X needs removed but is outside the right-of-way

P1 observe excavation, prune roots and evaluate

P need palm fronds protected and is outside the right-of-way

NA no significant impact on this tree

Name: Common name followed by botanical name in parenthesis.

For multi trunk trees this field has an "M" followed by the number of trunks, i.e. M3.

For multitrunk trees, the diameters are shown in this field, I.e. d. = 17.5, 12, 14

Size

Trunk Dia.: measured at 4.5 feet above ground, based on measuring circumference

Trunk Area: trunk cross sectional area calculated from diameter

For multi trunk trees, trunk area is the sum of the areas of the various trunks

Height ft.: estimated tree height

Spread ft.: estimated canopy spread

Condition

Scores five parts of the tree based on a four point system. 4 = no apparent problems

Location

Site : reflects the relative market value of the property

Contribution: relative functional and aesthetic contribution of this tree

Placement: how well this tree fulfills it's function and aesthetics

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID

Heading definitions:

Identification

Tree ID #: unique number assigned to this tree for this report

Status: one of the five options below

RW needs removed and is in the right-of-way

X needs removed but is outside the right-of-way

P1 observe excavation, prune roots and evaluate

P need palm fronds protected and is outside the right-of-way

NA no significant impact on this tree

Replacement Tree

For most trees in this study, the five values used in this section are taken from the ISA Western Chapter supplement dated 2004. Palm trees are the only exception, the cost of replacement palms was based on phone conversations with two local wholesale nureries.

For all trees except palms, replacement tree diameter is based on how fast that species grows. For this study, all the trees are characterized as fast or very fast growing.

Trunk Formula Calculations

Unit Tree Cost

The cost for one square inch of the replacement tree trunk. This cost is taken from the Western Chapter suppliment, Table 11, page 2.

Appraised Trunk Area. This value is taken from the previous page. See Trunk Area note.

Trunk Area Increase shows how much larger the existing tree is from the replacement tree.

Basic Tree Cost

A measure of value based soley on size, the existing tree's trunk cross section

Species Rating

Reduces Basic Tree Cost by adjusting it for the value of its species based on the Western Chapter supplement, California, Coastal

Condition Percent further reduces the value of this specific tree based on this study.

Location Percent further reduces the value of this specific tree based on this study.

Appraised Value is the monetary value of this tree based on this study.

Appendix B All Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
1	P1	red ironbark M3 d.= 17.5, 12, 14 *(Eucalyptus sideroxylon)*	M3	513	52	30	4	3	4	4	4	70	80	85	1
2	X	myoporum *M4 dia.= 5, 6, 5, 5 (Myoporum laetum)*	M4	88	14	16	2	3	2	2	0	70	70	85	2
3	NA	red gum *(Eucalyptus camaldulensis)*	16.9	224	60	27	2	2	4	4	4	70	90	85	3
4	X	myoporum *(Myoporum laetum)*	4	13	6	6	4	3	2	2	0	70	50	60	4
5	X	myoporum *M2 dia.= 9, 9 (Myoporum laetum)*	M2	128	6	6	4	3	2	2	0	70	50	60	5
6	X	windmill palm *(Trachycarpus fortunei)*	palm		8.5	5	4	4			4	70	70	85	6
7	X	red ironbark *(Eucalyptus sideroxylon)*	13.4	140	53	20	2	2	2	4	4	70	80	60	7
8	X	red gum *(Eucalyptus camaldulensis)*	24.2	460	53	30	1	4	3	4	4	70	80	60	8
9	P1	myoporum *(Myoporum laetum)*	3	7	7	5	3	3	3	2	1	70	65	60	9
10	X	red gum *(Eucalyptus camaldulensis)*	19.4	296	53	16	2	3	2	4	4	70	80	60	10
11	X	red gum *(Eucalyptus camaldulensis)*	22.3	390	53	20	1	2	2	4	4	70	80	60	11
12	X	myoporum *(Myoporum laetum)*	12	113	14	14	2	3	3	1	1	70	60	40	12
13	RW	myoporum *(Myoporum laetum)*	8	50	14	14	2	3	2	1	1	70	20	-	13
14	X	myoporum *(Myoporum laetum)*	12	113	14	14	2	3	2	1	1	70	60	40	14
15	P	windmill palm *(Trachycarpus fortunei)*	palm		6	4	4	3			3	70	50	60	15
16	P	windmill palm double *9.5, 7 (Trachycarpus fortunei)*	palm		16.5	4	4	3			4	70	60	60	16
17	P	windmill palm *(Trachycarpus fortunei)*	palm		7	3	3	4			4	70	50	60	17
18	RW	myoporum *M4 dia.= 5, 4, 4, 5 (Myoporum laetum)*	M4	66	16	16	3	3	2	1	1	70	20	-	18
19	P	windmill palm triple *4, 3, 6 (Trachycarpus fortunei)*	palm		13	4	4	3			4	70	60	60	19
20	P1	myoporum *M2 dia.= 4, 3 (Myoporum laetum)*	M2	20	12	10	1	3	2	2	1	70	40	20	20
21	X	red gum *(Eucalyptus camaldulensis)*	24.8	484	60	34	1	4	3	4	4	70	80	50	21
22	NA	dead tree, probably myoporum	dead									70			22
23	X	red gum *(Eucalyptus camaldulensis)*	13.4	140	60	34	2	3	3	4	4	70	80	60	23

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
1	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	513	480	$24,374	50%	76%	78%	$ 7,255	1
2	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	88	64.3	$ 6,766	60%	36%	75%	$ 1,096	2
3	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	224	190	$11,353	50%	64%	82%	$ 2,967	3
4	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	13	-11	$ 2,116	60%	44%	60%	$ 335	4
5	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	128	104	$ 9,246	60%	44%	60%	$ 1,464	5
6	X			$ 723	$ 723	$1,445				$ 1,445	90%	80%	75%	$ 780	6
7	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	140	107	$ 7,609	50%	56%	70%	$ 1,491	7
8	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	460	427	$21,984	50%	64%	70%	$ 4,924	8
9	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	7.07	-17	$ 1,748	60%	48%	65%	$ 327	9
10	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	296	263	$14,621	50%	60%	70%	$ 3,070	10
11	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	390	357	$18,845	50%	52%	70%	$ 3,430	11
12	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	113	89.3	$ 8,318	60%	40%	57%	$ 1,131	12
13	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	50.2	26.5	$ 4,424	60%	36%	30%	$ 287	13
14	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	113	89.3	$ 8,318	60%	36%	57%	$ 1,018	14
15	P			$ 510	$ 510	$1,020				$ 1,020	90%	67%	60%	$ 367	15
16	P			$1,403	$1,403	$2,805				$ 2,805	90%	73%	63%	$ 1,172	16
17	P			$ 595	$ 595	$1,190				$ 1,190	90%	73%	60%	$ 471	17
18	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	66	42.3	$ 5,402	60%	40%	30%	$ 389	18
19	P			$1,105	$1,105	$2,210				$ 2,210	90%	73%	63%	$ 924	19
20	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	20	-3.8	$ 2,550	60%	36%	43%	$ 239	20
21	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	484	451	$23,087	50%	64%	67%	$ 4,925	21
22	NA													$ -	22
23	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	140	107	$ 7,609	50%	64%	70%	$ 1,705	23

Appendix B All Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
24	X	red ironbark M2 d.= 6, 5 *(Eucalyptus sideroxylon)*	M2	48	14	8	1	1	1	3	3	70	20	60	24
25	P	windmill palm *(Trachycarpus fortunei)*	palm		5.5	3	3	3			4	70	60	55	25
26	P	windmill palm *(Trachycarpus fortunei)*	palm		6.5	3	3	3			4	70	60	50	26
27	P	windmill palm *(Trachycarpus fortunei)*	palm		9	3	3	3			4	70	60	50	27
28	X	myoporum *M3 dia.= 7, 3, 3* *(Myoporum laetum)*	M3	52	9	8	2	2	1	1	1	70	40	50	28
29	X	red ironbark *(Eucalyptus sideroxylon)*	M2	88	50	14	2	1	2	4	4	70	60	50	29
30	X	red gum *(Eucalyptus camaldulensis)*	18.0	254	60	38	2	2	2	4	4	70	60	50	30
31	NA	windmill palm double 9, 8 *(Trachycarpus fortunei)*	palm		17	3	3	3			4	70	80	60	31
32	NA	windmill palm *(Trachycarpus fortunei)*	palm		12	3	3	3			4	70	60	50	32
33	NA	windmill palm *(Trachycarpus fortunei)*	palm		11	3	3	3			4	70	60	50	33
34	X	red gum *(Eucalyptus camaldulensis)*	28.0	615	60	24	3	3	2	3	4	70	80	60	34
35	P1	red gum *(Eucalyptus camaldulensis)*	20.0	314	60	24	3	3	2	3	4	70	80	60	35
36	X	silver dollar gum *(Eucalyptus polyanthemos)*	9.5	71	38	12	4	2	2	2	4	70	50	70	36
37	NA	silver dollar gum *(Eucalyptus polyanthemos)*	7.0	38	39	15	3	2	3	2	3	70	50	60	37
38	P1	silver dollar gum *(Eucalyptus polyanthemos)*	6.0	28	38	13	2	2	2	2	3	70	50	60	38
39	X	Monterey Pine *(Pinus radiata)*	17.2	232	40	20	3	4	3	4	4	70	60	70	39
40	P1	myoporum *(Myoporum laetum)*	9	64	25	30	2	1	2	4	2	70	50	30	40
41	X	red gum *(Eucalyptus camaldulensis)*	13.0	133	45	20	3	4	3	4	4	70	55	70	41
42	P1	myoporum *(Myoporum laetum)*	6	28	23	23	1	0	2	2	1	70	20	40	42
43	X	myoporum *(Myoporum laetum)*	14.3	161	25	20	1	2	2	2	1	70	50	10	43
44	X	myoporum *M5 di.= 12,10,8,6,6* *(Myoporum laetum)*	M5	298	25	25	1	2	2	2	1	70	50	30	44
45	X	red gum *(Eucalyptus camaldulensis)*	21.0	346	55	35	2	1	2	3	4	70	50	30	45
46	X	myoporum *M4 di.= 9,10,12,4* *(Myoporum laetum)*	M4	269	25	30	4	1	2	2	1	70	55	50	46

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
24	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	48	14.8	$ 3,449	50%	36%	50%	$ 310	24
25	P			$ 468	$ 468	$ 935				$ 935	90%	67%	62%	$ 346	25
26	P			$ 553	$ 553	$1,105				$ 1,105	90%	67%	60%	$ 398	26
27	P			$ 765	$ 765	$1,530				$ 1,530	90%	67%	60%	$ 551	27
28	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	52	28.3	$ 4,534	60%	28%	53%	$ 406	28
29	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	88	54.8	$ 5,249	50%	52%	60%	$ 819	29
30	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	254	221	$12,735	50%	56%	60%	$ 2,139	30
31	NA			$1,445	$1,445	$2,890				$ 2,890	90%	67%	70%	$ 1,214	31
32	NA			$1,020	$1,020	$2,040				$ 2,040	90%	67%	60%	$ 734	32
33	NA			$ 935	$ 935	$1,870				$ 1,870	90%	67%	60%	$ 673	33
34	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	615	582	$28,984	50%	60%	70%	$ 6,087	34
35	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	314	281	$15,419	50%	60%	70%	$ 3,238	35
36	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	70.8	37.7	$ 4,477	50%	56%	63%	$ 794	36
37	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	38.5	5.3	$ 3,020	50%	52%	60%	$ 471	37
38	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	28.3	-4.9	$ 2,561	50%	44%	60%	$ 338	38
39	X	6.5	33.2	$1,482	$1,300	$2,782	45	232	199	$11,740	50%	72%	67%	$ 2,818	39
40	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	63.6	39.8	$ 5,252	60%	44%	50%	$ 693	40
41	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	133	99.5	$ 7,259	50%	72%	65%	$ 1,699	41
42	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	24%	43%	$ 191	42
43	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	161	137	$11,262	60%	32%	43%	$ 937	43
44	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	298	274	$19,786	60%	32%	50%	$ 1,899	44
45	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	346	313	$16,868	50%	48%	50%	$ 2,024	45
46	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	269	245	$17,988	60%	40%	58%	$ 2,518	46

Appendix B All Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
47	P1	red gum *(Eucalyptus camaldulensis)*	21.0	346	65	35	3	4	2	3	3	70	80	80	47
48	X	myoporum *M4 di.= 3,10,6,10* *(Myoporum laetum)*	M4	193	25	15	2	2	2	2	1	70	40	40	48
49	X	myoporum *(Myoporum laetum)*	7	38	9	4	1	1	1	1	1	70	20	40	49
50	X	myoporum *M4 di.= 12,8,9,4* *(Myoporum laetum)*	M4	240	25	15	3	2	2	2	1	70	40	40	50
51	X	myoporum *M5 di.= 7,6,3,4,7* *(Myoporum laetum)*	M5	124	30	30	3	2	2	2	1	70	40	40	51
52	X	myoporum *(Myoporum laetum)*	11	95	20	10	3	1	2	2	1	70	40	40	52
53	X	myoporum *(Myoporum laetum)*	11	95	20	18	3	1	1	2	1	70	40	40	53
54	X	myoporum *(Myoporum laetum)*	15.9	199	30	20	3	2	2	3	3	70	30	30	54
55	P1	red gum *(Eucalyptus camaldulensis)*	36.3	1034	67	45	3	3	3	4	4	70	70	70	55
56	X	myoporum *M5 di.= 4,8,3,8,13* *(Myoporum laetum)*	M5	253	23	20	2	2	2	2	1	70	50	40	56
57	X	myoporum *(Myoporum laetum)*	15	177	12	12	1	1	1	1	1	70	20	50	57
58	RW	myoporum *M2 di.= 5,5* *(Myoporum laetum)*	M2	40	14	14	2	1	1	1	1	70	-		58
59	NA	myoporum *(Myoporum laetum)*	2	3	12	10	4	2	3	2	1	70	40	50	59
60	NA	London plan tree *(Platanus acerifolia)*	16	201	33	25	3	2	3	3	4	70	50	60	60
61	NA	myoporum *M5 di.= 2,3,1,7,6* *(Myoporum laetum)*	M5	79	20	20	3	2	2	4	1	70	40	50	61
62	NA	California sycamore *(Platanus racemosa)*	11.5	104	35	20	4	4	3	3	3	70	50	50	62
63	NA	myoporum *M3 di.= 3,4,3* *(Myoporum laetum)*	M3	27	35	20	3	2	2	2	1	70	25	50	63
64	X	myoporum *M6 di.= 1,8,4,7,4,12* *(Myoporum laetum)*	M6	230	21	21	2	1	1	1	1	70	25	50	64
65	X	red gum *(Eucalyptus camaldulensis)*	28.0	615	50	38	3	4	2	3	4	70	80	50	65
66	X	myoporum *M3 di.= 4,8,5* *(Myoporum laetum)*	M3	83	20	20	2	1	1	1	1	70	20	50	66
67	X	myoporum *M8 di.= 6,5,5,5,8,12,4,5* *(Myoporum laetum)*	M8	284	20	20	3	2	2	2	1	70	40	40	67
68	NA	red ironbark *(Eucalyptus sideroxylon)*	10.5	87	30	15	4	2	2	3	3	70	40	50	68
69	NA	myoporum *(Myoporum laetum)*	3.2	8	12	17	2	1	1	1	1	70	20	50	69

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
47	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	346	313	$16,868	50%	60%	77%	$ 3,880	47
48	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	193	169	$13,276	60%	36%	50%	$ 1,434	48
49	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	38.5	14.7	$ 3,694	60%	20%	43%	$ 192	49
50	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	240	216	$16,190	60%	40%	50%	$ 1,943	50
51	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	124	100	$ 8,998	60%	40%	50%	$ 1,080	51
52	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	95	71.2	$ 7,199	60%	36%	50%	$ 777	52
53	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	95	71.2	$ 7,199	60%	32%	50%	$ 691	53
54	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	199	175	$13,645	60%	52%	43%	$ 1,845	54
55	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	1034	1001	$47,837	50%	68%	70%	$ 11,385	55
56	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	253	229	$16,996	60%	36%	53%	$ 1,958	56
57	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,260	60%	20%	47%	$ 687	57
58	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	40	16.3	$ 3,790	60%	24%	23%	$ 127	58
59	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	3.14	-21	$ 1,504	60%	48%	53%	$ 231	59
60	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	201	168	$10,333	70%	60%	60%	$ 2,604	60
61	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	79	55.3	$ 6,208	60%	48%	53%	$ 953	61
62	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	104	70.6	$ 5,961	90%	68%	57%	$ 2,067	62
63	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	27	3.25	$ 2,984	60%	40%	48%	$ 346	63
64	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	230	206	$15,570	60%	24%	48%	$ 1,084	64
65	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	615	582	$28,984	50%	64%	67%	$ 6,183	65
66	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	83	59.3	$ 6,456	60%	24%	47%	$ 434	66
67	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	284	260	$18,918	60%	40%	50%	$ 2,270	67
68	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	86.5	53.4	$ 5,184	50%	56%	53%	$ 774	68
69	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	8.04	-16	$ 1,808	60%	24%	47%	$ 121	69

Appendix B All Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
70	X	myoporum *M4 di.= 5,8,10,10* *(Myoporum laetum)*	M4	228	25	25	1	1	1	1	1	70	30	40	70
71	X	red gum *(Eucalyptus camaldulensis)*	31.0	754	65	40	3	3	4	4	4	70	80	50	71
72	NA	myoporum *(Myoporum laetum)*	3	7	12	8	2	1	1	1	1	70	20	50	72
73	P1	red ironbark M2 d.= 12, 11 *(Eucalyptus sideroxylon)*	M2	208	50	30	3	2	2	3	4	70	50	50	73
74	X	red gum *(Eucalyptus camaldulensis)*	8.0	50	12	4	3	2	2	2	3	70	10	10	74
75	RW	red ironbark M2 d.= 2,3 *(Eucalyptus sideroxylon)*	M2	10	15	12	3	2	1	2	2	70	20	-	75
76	P1	red ironbark M2 d.= 12, 14 *(Eucalyptus sideroxylon)*	M2	267	50	20	3	2	2	3	4	70	45	50	76
77	X	myoporum *M5 di.= 15,6,6,8,7* *(Myoporum laetum)*	M5	321	25	25	3	2	2	3	4	70	60	50	77
78	X	myoporum *M4 di.= 8,6,6,6* *(Myoporum laetum)*	M4	134	30	20	3	2	2	3	1	70	60	70	78
79	X	myoporum *di.= 9,8,8,8,3,3,3,3,6,11* *(Myoporum laetum)*	M11	372	20	15	3	2	2	2	1	70	60	70	79
80	X	myoporum *di.= 6,3,4,8,6,6,7,6,5,3* *(Myoporum laetum)*	M10	247	18	18	2	2	2	2	1	70	40	40	80
81	P1	myoporum *M2 di.= 4,8* *(Myoporum laetum)*	M2	63	10	5	1	1	1	1	1	70	15	60	81
82	X	myoporum *M2 di.= 10,6* *(Myoporum laetum)*	M2	107	18	15	1	1	1	2	1	70	15	30	82
83	X	red ironbark *(Eucalyptus sideroxylon)*	28.7	647	65	35	4	2	3	4	4	70	80	60	83
84	P1	myoporum *M3 di.= 8,6,3* *(Myoporum laetum)*	M3	85	22	17	2	1	1	2	1	70	40	30	84
85	X	myoporum *di.= 6,8,6,6,12,6,6* *(Myoporum laetum)*	M8	303	22	17	2	2	2	2	1	70	40	60	85
86	P1	red gum *(Eucalyptus camaldulensis)*	29.0	660	60	30	3	3	4	4	4	70	70	60	86
87	NA	myoporum *di.= 6,8,6,6,12,6,6* *(Myoporum laetum)*	M8	303	25	25	2	2	3	2	1	70	40	40	87
88	X	red gum *(Eucalyptus camaldulensis)*	24.8	484	65	30	3	2	3	3	4	70	65	50	88
89	X	myoporum *M5 di.= 12,7,8,3,10* *(Myoporum laetum)*	M5	287	21	19	1	1	1	2	1	70	40	40	89
90	NA	myoporum *(Myoporum laetum)*	6	28	8	10	1	1	1	1	1	70	10	40	90
91	P1	red ironbark *(Eucalyptus sideroxylon)*	19.7	306	40	20	4	3	2	4	4	70	60	50	91
92	P1	myoporum *di.= 6,8,6,6,12,6,6* *(Myoporum laetum)*	M8	303	25	17	2	2	2	2	1	70	40	60	92

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
70	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	228	204	$15,446	60%	20%	47%	$ 865	70
71	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	754	721	$35,237	50%	72%	67%	$ 8,457	71
72	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	7.07	-17	$ 1,748	60%	24%	47%	$ 117	72
73	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	208	175	$10,649	50%	56%	57%	$ 1,690	73
74	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	50.2	17.1	$ 3,550	50%	48%	30%	$ 256	74
75	RW	6.5	33.2	$1,482	$1,300	$2,782	$ 45	10	-23	$ 1,739	50%	40%	30%	$ 104	75
76	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	267	234	$13,304	50%	56%	55%	$ 2,049	76
77	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	321	297	$21,212	60%	56%	60%	$ 4,276	77
78	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	134	110	$ 9,618	60%	44%	67%	$ 1,693	78
79	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	372	348	$24,374	60%	40%	67%	$ 3,900	79
80	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	247	223	$16,624	60%	36%	50%	$ 1,795	80
81	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	63	39.3	$ 5,216	60%	20%	48%	$ 302	81
82	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	107	83.3	$ 7,944	60%	24%	38%	$ 438	82
83	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	647	613	$30,386	50%	68%	70%	$ 7,232	83
84	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	85	61.3	$ 6,580	60%	28%	47%	$ 516	84
85	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	36%	57%	$ 2,460	85
86	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	660	627	$30,998	50%	72%	67%	$ 7,439	86
87	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	40%	50%	$ 2,411	87
88	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	484	451	$23,068	50%	60%	62%	$ 4,268	88
89	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	287	263	$19,104	60%	24%	50%	$ 1,375	89
90	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	20%	40%	$ 147	90
91	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	306	273	$15,048	50%	68%	60%	$ 3,070	91
92	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	36%	57%	$ 2,460	92

Appendix B All Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
93	P1	red ironbark *(Eucalyptus sideroxylon)*	19.1	286	38	20	2	2	3	4	4	70	60	60	93
94	X	myoporum *M2 di.= 12,8* *(Myoporum laetum)*	M2	163	20	15	3	3	2	2	1	70	50	40	94
95	X	myoporum *M2 di.= 12,9* *(Myoporum laetum)*	M2	177	25	20	2	2	3	2	1	70	60	40	95
96	P1	red gum *M3 di.=20,17,21* *(Eucalyptus camaldulensis)*	M3	888	60	30	2	2	3	4	4	70	70	60	96
97	X	myoporum *M3 di.= 4,6,3* *(Myoporum laetum)*	M3	48	10	12	2	2	2	2	1	70	70	40	97
98	NA	red ironbark M2 d.= 4,7 *(Eucalyptus sideroxylon)*	M2	51	20	12	3	2	3	3	4	70	20	40	98
99	P1	red gum *(Eucalyptus camaldulensis)*	26.1	535	45	35	2	4	2	4	4	70	70	50	99
100	NA	myoporum *(Myoporum laetum)*	5	20	12	10	1	1	1	1	1	70	10	40	100
101	NA	myoporum *M3 di.= 5,5,3* *(Myoporum laetum)*	M3	47	18	10	2	2	2	2	1	70	30	40	101
102	X	red ironbark *(Eucalyptus sideroxylon)*	14	154	42	30	3	3	2	3	4	70	45	40	102
103	X	myoporum *M2 di.= 14,6* *(Myoporum laetum)*	M2	182	18	15	2	3	4	2	1	70	40	30	103
104	NA	myoporum *M2 di.= 8,6* *(Myoporum laetum)*	M2	78	18	16	2	3	4	2	1	70	40	40	104
105	P1	red gum *(Eucalyptus camaldulensis)*	26.7	560	40	35	3	4	3	3	4	70	70	50	105
106	RW	windmill palm *(Trachycarpus fortunei)*	palm		5	5	4	4			4	70	20	-	106
107	RW	myoporum *(Myoporum laetum)*	4	13	12	10	1	1	1	1	1	70	20	-	107
108	RW	myoporum *(Myoporum laetum)*	15	177	12	10	1	1	1	1	1	70	20	-	108
109	RW	windmill palm *(Trachycarpus fortunei)*	palm		8	5	4	4			4	70	20	-	109
110	RW	myoporum *(Myoporum laetum)*	7	38	9	4	1	1	1	1	1	70	20	-	110
111	RW	myoporum *(Myoporum laetum)*	6	28	8	10	1	1	1	1	1	70	20	-	111
112	NA	windmill palm *(Trachycarpus fortunei)*	palm		13	3	3	3			4	70	60	50	112

Appendix B All Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
93	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	286	253	$14,176	50%	60%	63%	$ 2,693	93
94	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	163	139	$11,416	60%	44%	53%	$ 1,607	94
95	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,284	60%	40%	57%	$ 1,671	95
96	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	888	855	$41,249	50%	60%	67%	$ 8,250	96
97	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	48	24.3	$ 4,286	60%	36%	60%	$ 555	97
98	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	51	17.8	$ 3,584	50%	60%	43%	$ 466	98
99	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	535	502	$25,353	50%	64%	63%	$ 5,138	99
100	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	19.6	-4.1	$ 2,526	60%	20%	40%	$ 121	100
101	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	47	23.3	$ 4,224	60%	36%	47%	$ 426	101
102	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	154	121	$ 8,213	50%	60%	52%	$ 1,273	102
103	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	182	158	$12,594	60%	48%	47%	$ 1,693	103
104	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	78	54.3	$ 6,146	60%	48%	50%	$ 885	104
105	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	560	526	$26,472	50%	68%	63%	$ 5,700	105
106	RW			$ 425	$ 425	$ 850				$ 850	90%	80%	30%	$ 184	106
107	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	12.6	-11	$ 2,088	60%	20%	30%	$ 75	107
108	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,260	60%	20%	30%	$ 441	108
109	RW			$ 680	$ 680	$1,360				$ 1,360	90%	80%	30%	$ 294	109
110	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	38.5	14.7	$ 3,694	60%	20%	30%	$ 133	110
111	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	20%	30%	$ 110	111
112	NA			$1,105	$1,105	$2,210				$ 2,210	90%	67%	60%	$ 796	112

Total Appraised Value of all study trees **$ 203,966**

Total number of study trees **112**

Above Tree 1, Red Ironbark (*Eucalyptus sideroxylon*) looking southeast

Tree 1, multi-trunk

Above left **Tree 3, Red Gum** (Eucalyptus camaldulensis) far right **Tree 2, Myoporum** (*Myoporum laetum*) looking northeast

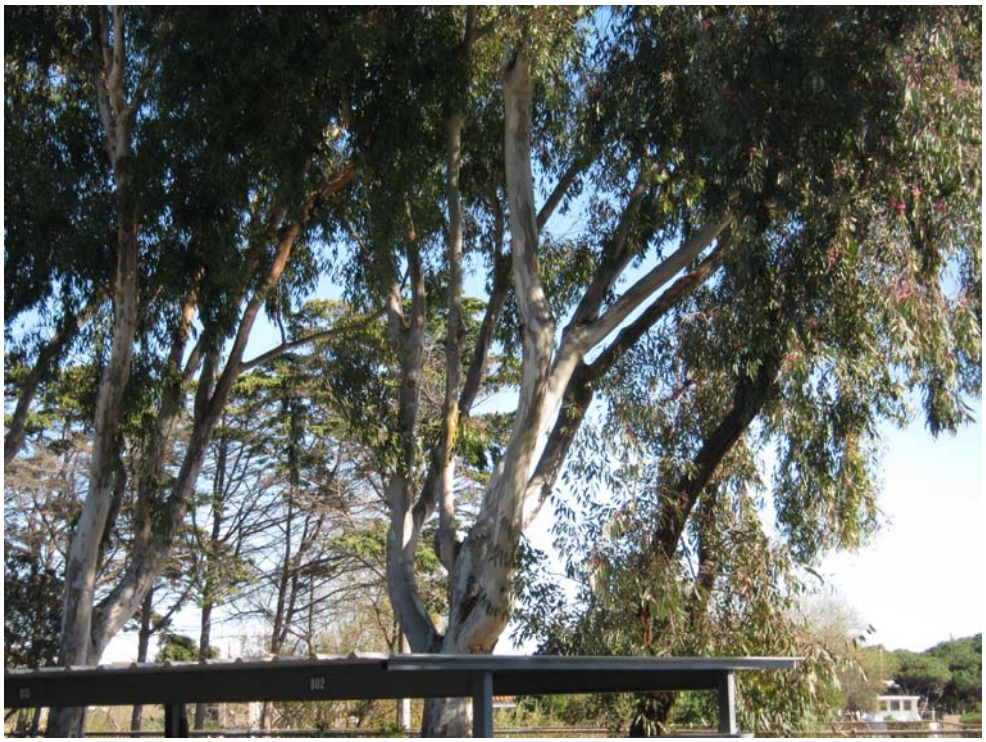
Above center Tree 3, Red Gum (Eucalyptus camaldulensis) looking east

Above center **Tree 4, Myoporum** looking southwest Tree 2 in background

Above right Tree 5, Myoporum looking northeast

Above Tree 5, root crown

Above left Tree 6, Windmill Palm (*Trachycarpus fortunei*)



Above left to right Tree 10 and **Tree 8, Red Gum** on far right **Tree 7, Red Ironbark**. Looking east

Above left to right **Tree 7, Red Ironbark**, **Tree 8, Red Gum**, Tree 9 Myoporum. Looking northeast.

Above center **Tree 9, Myoporum**. On the far left is the trunk of a Red Gum Tree 8. Tree 9 is the low foliage to the right of the Red Gum trunk. Looking northeast

Above left to right **Tree 13 Myoporum, Tree 11 Red Gum, Tree 12 Myoporum and Tree 10 Red Gum**. Canopies in top photo, trunks on the bottom. Photo looking east

Above left to right, **Tree 10 and 11 Red Gum and Tree 12 Myoporum**. Looking northeast

Above left to right Tree 10 and 11 Red Gum and **Tree 12 and Tree 13 Myoporum**. Looking northeast

Above left to right, **Tree 12, Tree 13, Tree 14** and Tree 18 all Myoporum. All four are to the right of the 8" concrete wall. On the left side of the wall you can see a Red Gum trunk and a palm trunk. Looking northeast

Above left to right, **Tree 14 and 13 Myoporum**, Tree 11 Red Gum and behind it on the far right is Tree 12 a Myoporum. Looking southeast.

Above center shows the root crown of **Tree 14 Myoporum** behind the trunk of Tree 13. Looking northeast.

Above left to right, Tree 20 Myoporum, Trees 19, 17, **16, 15 Windmill Palms**. Looking northeast.

Above left to right, **Tree 16 double Windmill Palm, Tree 15 Windmill Palm**. Looking east.

Above left to right, **Tree 20 Myoporum, Tree 19 double Windmill Palm**, Tree 18 Myoporum, **Tree 17 Windmill Palm**. Looking east.

Above left to right, **Tree 18 Myoporum, Tree 19 double Windmill Palm**, **Tree 20 Myoporum**, Looking into the sun (south).

Above left to right, **Tree 20 Myoporum, Tree 19 Windmill Palm**, Tree 20 Myoporum, Looking SE.

Above L to R **Tree 23 Red Gum,** Tree 22 dead**, Tree 21 Red Gum,** Looking E in the left photo, SE right photo

Above L to R **Tree 21 Red Gum,** Tree 22 dead (dead branches)**, Tree 23 Red Gum,** Looking NE

Above L to R Tree 25 Windmill Palm, **Tree 24 Red Ironbark,** Tree 23 Red Gum Looking SE

Above L to R **Tree 26 and 25 Windmill Palm**. Looking SE

Above L to R red ironbark 29, myoporum 28, palms 27, 26, 25 Looking NE

Above L to R Palms 32 and 31, Red Gum 30, Red Ironbark 29 Looking E

Above L to R Palm 33 and red gum 34, canopy of red gum 35 visible, in the distance silver dollar eucalyptus 36, 37 and 38. Looking NE

Above L to R red gum 34 and 35 Looking N

Above L to R silver dollar gum 37 38 and 36 with the pine tree and myoporum behind. Looking NE

Above L to R (ignore foreground tree) myoporum 42, red gum 41, myoporum 40, pine 39. Looking NE
Picture on the right is of myoporum 40

Above red gum 41 trunk

Above red gum 41 branches

Above L to R myoporum 42, red gum 41, myoporum 40. Looking NE

Above L to R myoporum 44, red gum 45, myoporum 43. Looking NE

L to R: myoporum46, red gum 47, myoporum 44, red gum 45

L to R myoporum 51, 50 49 (small single), 48, 46 behind red gum, red gum 47, myoporum 44 behind red gum 45. Ignore palms. Looking SE

L to R Myoporum 58, 57, red gum 55, myoporum 56, 54, dead tree, 53, 52 (see gate sign) 51

L to R Myoporum 56, 54, 53, 52, 51, red gum 55,45, and 47

L to R myoporum 59, *Acacia longifolia* shrub prostrate, myoporum 58

Above center London plane tree 60

Above L to R myoporum 64, 63, CA sycamore 62, myoporum 61

Above L to R red gum 65 and myoporum 64

Above L to R myoporum 66 (with paint) red gum 65, myo. 64

L to R red gum 71, myoporum 70, 69, red ironbark 68, myoporum 67, 66 and red gum 65

L to R red ironbark 68, myoporum 67, 66. Look SE

L to R myoporum 69, red ironbark 68, myoporum 67. Looking SE

L to R red gum 71, myoporum 70. Looking E

L to R dead tree, red ironbark 75 (small double) 74 behind red ironbark 76, red ironbark 73, and myoporum 72, red gum 71. Looking SE

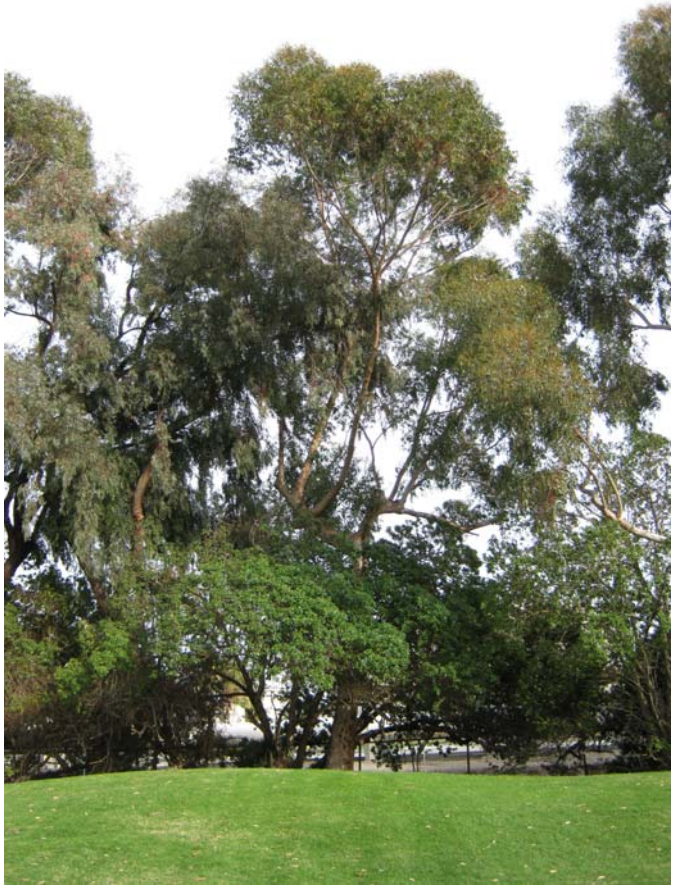
L to R red ironbark 76, red gum 74, red ironbark 75. Looking SE

Above red gum 74

L to R myoporum 84, red gum 83, myoporum 82, 81, 80, 79, 78, 77, stump, red gum 74. Looking SE

L to R myoporum 87, shrub, red gum 86, myoporum 85, 84, red gum 83. Looking SE

L to R myoporum 89, red gum 88, myoporum 87. Looking E



L to R red ironbark 91, myoporum 90 and 89, red gum 88, myoporum 87. Looking E

L to R red gum (M3) 96, myoporum 95, 94, red ironbark 93, myoporum 92, red ironbark 91. Looking SE

L to R myoporum 101 and 100, red gum 99, red ironbark 98, myoporum 97. Looking NE

L to R red gum 105, myoporum 104 and 103, red ironbark 102, myoporum 101, red gum 99 myoporum 100, red ironbark 98, myoporum 97, red gum 96, myoporum 95. Looking NE

L to R myoporum 103, red ironbark 102, myoporum 101. Looking SE

L to R myoporum 106, palm 107. Looking SE

R to L myoporum 108, palm 109. Looking NE

Appendix D Status RW Tree Spreadsheet

Status RW indicates trees that are in the right-of-way.
Ten (10) trees are status RW

Instruction for using this Status RW Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
13	RW	myoporum *(Myoporum laetum)*	8	50	14	14	2	3	2	1	1	70	20	-	**13**
18	RW	myoporum *M4 dia.= 5, 4, 4, 5 (Myoporum laetum)*	M4	66	16	16	3	3	2	1	1	70	20	-	**18**
58	RW	myoporum *M2 di.= 5,5 (Myoporum laetum)*	M2	40	14	14	2	1	1	1	1	70	-	-	**58**
75	RW	red ironbark M2 d.= 2,3 *(Eucalyptus sideroxylon)*	M2	10	15	12	3	2	1	2	2	70	20	-	**75**
106	RW	windmill palm *(Trachycarpus fortunei)*	palm		5	5	4	4			4	70	20	-	**106**
107	RW	myoporum *(Myoporum laetum)*	4	13	12	10	1	1	1	1	1	70	20	-	**107**
108	RW	myoporum *(Myoporum laetum)*	15	177	12	10	1	1	1	1	1	70	20	-	**108**
109	RW	windmill palm *(Trachycarpus fortunei)*	palm		8	5	4	4			4	70	20	-	**109**
110	RW	myoporum *(Myoporum laetum)*	7	38	9	4	1	1	1	1	1	70	20	-	**110**
111	RW	myoporum *(Myoporum laetum)*	6	28	8	10	1	1	1	1	1	70	20	-	**111**

Appendix D Status RW Tree Spreadsheet

Instruction for using this Status RW Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
13	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	50.2	26.5	$ 4,424	60%	36%	30%	$ 287	13
18	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	66	42.3	$ 5,402	60%	40%	30%	$ 389	18
58	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	40	16.3	$ 3,790	60%	24%	23%	$ 127	58
75	RW	6.5	33.2	$1,482	$1,300	$2,782	$ 45	10	-23	$ 1,739	50%	40%	30%	$ 104	75
106	RW			$ 425	$ 425	$ 850				$ 850	90%	80%	30%	$ 184	106
107	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	12.6	-11	$ 2,088	60%	20%	30%	$ 75	107
108	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,260	60%	20%	30%	$ 441	108
109	RW			$ 680	$ 680	$1,360				$ 1,360	90%	80%	30%	$ 294	109
110	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	38.5	14.7	$ 3,694	60%	20%	30%	$ 133	110
111	RW	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	20%	30%	$ 110	111

Total Appraised Value of all trees to be removed that are in the right-of-way **$ 2,144**

Total number of trees to be removed that are in the right-of-way **10**

Appendix D Status X Tree Spreadsheet

Status X trees should be removed and are outside the right-of-way

Fifty-four (54) trees are status X

Instruction for using this Status X Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
2	X	myoporum *M4 dia.= 5, 6, 5, 5* *(Myoporum laetum)*	M4	88	14	16	2	3	2	2	0	70	70	85	**2**
4	X	myoporum *(Myoporum laetum)*	4	13	6	6	4	3	2	2	0	70	50	60	**4**
5	X	myoporum *M2 dia.= 9, 9* *(Myoporum laetum)*	M2	128	6	6	4	3	2	2	0	70	50	60	**5**
6	X	windmill palm *(Trachycarpus fortunei)*	palm		8.5	5	4	4			4	70	70	85	**6**
7	X	red ironbark *(Eucalyptus sideroxylon)*	13.4	140	53	20	2	2	2	4	4	70	80	60	**7**
8	X	red gum *(Eucalyptus camaldulensis)*	24.2	460	53	30	1	4	3	4	4	70	80	60	**8**
10	X	red gum *(Eucalyptus camaldulensis)*	19.4	296	53	16	2	3	2	4	4	70	80	60	**10**
11	X	red gum *(Eucalyptus camaldulensis)*	22.3	390	53	20	1	2	2	4	4	70	80	60	**11**
12	X	myoporum *(Myoporum laetum)*	12	113	14	14	2	3	3	1	1	70	60	40	**12**
14	X	myoporum *(Myoporum laetum)*	12	113	14	14	2	3	2	1	1	70	60	40	**14**
21	X	red gum *(Eucalyptus camaldulensis)*	24.8	484	60	34	1	4	3	4	4	70	80	50	**21**
23	X	red gum *(Eucalyptus camaldulensis)*	13.4	140	60	34	2	3	3	4	4	70	80	60	**23**
24	X	red ironbark M2 d.= 6, 5 *(Eucalyptus sideroxylon)*	M2	48	14	8	1	1	1	3	3	70	20	60	**24**
28	X	myoporum *M3 dia.= 7, 3, 3* *(Myoporum laetum)*	M3	52	9	8	2	2	1	1	1	70	40	50	**28**
29	X	red ironbark *(Eucalyptus sideroxylon)*	M2	88	50	14	2	1	2	4	4	70	60	50	**29**
30	X	red gum *(Eucalyptus camaldulensis)*	18.0	254	60	38	2	2	2	4	4	70	60	50	**30**
34	X	red gum *(Eucalyptus camaldulensis)*	28.0	615	60	24	3	3	2	3	4	70	80	60	**34**

Appendix D Status X Tree Spreadsheet

Instruction for using this Status X Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
2	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	88	64.3	$ 6,766	60%	36%	75%	$ 1,096	2
4	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	13	-11	$ 2,116	60%	44%	60%	$ 335	4
5	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	128	104	$ 9,246	60%	44%	60%	$ 1,464	5
6	X			$ 723	$ 723	$1,445				$ 1,445	90%	80%	75%	$ 780	6
7	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	140	107	$ 7,609	50%	56%	70%	$ 1,491	7
8	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	460	427	$21,984	50%	64%	70%	$ 4,924	8
10	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	296	263	$14,621	50%	60%	70%	$ 3,070	10
11	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	390	357	$18,845	50%	52%	70%	$ 3,430	11
12	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	113	89.3	$ 8,318	60%	40%	57%	$ 1,131	12
14	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	113	89.3	$ 8,318	60%	36%	57%	$ 1,018	14
21	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	484	451	$23,087	50%	64%	67%	$ 4,925	21
23	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	140	107	$ 7,609	50%	64%	70%	$ 1,705	23
24	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	48	14.8	$ 3,449	50%	36%	50%	$ 310	24
28	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	52	28.3	$ 4,534	60%	28%	53%	$ 406	28
29	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	88	54.8	$ 5,249	50%	52%	60%	$ 819	29
30	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	254	221	$12,735	50%	56%	60%	$ 2,139	30
34	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	615	582	$28,984	50%	60%	70%	$ 6,087	34

Appendix D Status X Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
36	X	silver dollar gum *(Eucalyptus polyanthemos)*	9.5	71	38	12	4	2	2	2	4	70	50	70	36
39	X	Monterey Pine *(Pinus radiata)*	17.2	232	40	20	3	4	3	4	4	70	60	70	39
41	X	red gum *(Eucalyptus camaldulensis)*	13.0	133	45	20	3	4	3	4	4	70	55	70	41
43	X	myoporum *(Myoporum laetum)*	14.3	161	25	20	1	2	2	2	1	70	50	10	43
44	X	myoporum *M5 di.= 12,10,8,6,6 (Myoporum laetum)*	M5	298	25	25	1	2	2	2	1	70	50	30	44
45	X	red gum *(Eucalyptus camaldulensis)*	21.0	346	55	35	2	1	2	3	4	70	50	30	45
46	X	myoporum *M4 di.= 9,10,12,4 (Myoporum laetum)*	M4	269	25	30	4	1	2	2	1	70	55	50	46
48	X	myoporum *M4 di.= 3,10,6,10 (Myoporum laetum)*	M4	193	25	15	2	2	2	2	1	70	40	40	48
49	X	myoporum *(Myoporum laetum)*	7	38	9	4	1	1	1	1	1	70	20	40	49
50	X	myoporum *M4 di.= 12,8,9,4 (Myoporum laetum)*	M4	240	25	15	3	2	2	2	1	70	40	40	50
51	X	myoporum *M5 di.= 7,6,3,4,7 (Myoporum laetum)*	M5	124	30	30	3	2	2	2	1	70	40	40	51
52	X	myoporum *(Myoporum laetum)*	11	95	20	10	3	1	2	2	1	70	40	40	52
53	X	myoporum *(Myoporum laetum)*	11	95	20	18	3	1	1	2	1	70	40	40	53
54	X	myoporum *(Myoporum laetum)*	15.9	199	30	20	3	2	2	3	3	70	30	30	54
56	X	myoporum *M5 di.= 4,8,3,8,13 (Myoporum laetum)*	M5	253	23	20	2	2	2	2	1	70	50	40	56
57	X	myoporum *(Myoporum laetum)*	15	177	12	12	1	1	1	1	1	70	20	50	57
64	X	myoporum *M6 di.= 1,8,4,7,4,12 (Myoporum laetum)*	M6	230	21	21	2	1	1	1	1	70	25	50	64
65	X	red gum *(Eucalyptus camaldulensis)*	28.0	615	50	38	3	4	2	3	4	70	80	50	65
66	X	myoporum *M3 di.= 4,8,5 (Myoporum laetum)*	M3	83	20	20	2	1	1	1	1	70	20	50	66
67	X	myoporum *M8 di.= 6,5,5,5,8,12,4,5 (Myoporum laetum)*	M8	284	20	20	3	2	2	2	1	70	40	40	67
70	X	myoporum *M4 di.= 5,8,10,10 (Myoporum laetum)*	M4	228	25	25	1	1	1	1	1	70	30	40	70
71	X	red gum *(Eucalyptus camaldulensis)*	31.0	754	65	40	3	3	4	4	4	70	80	50	71
74	X	red gum *(Eucalyptus camaldulensis)*	8.0	50	12	4	3	2	2	2	3	70	10	10	74

Appendix D Status X Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
36	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	70.8	37.7	$ 4,477	50%	56%	63%	$ 794	36
39	X	6.5	33.2	$1,482	$1,300	$2,782	45	232	199	$11,740	50%	72%	67%	$ 2,818	39
41	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	133	99.5	$ 7,259	50%	72%	65%	$ 1,699	41
43	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	161	137	$11,262	60%	32%	43%	$ 937	43
44	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	298	274	$19,786	60%	32%	50%	$ 1,899	44
45	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	346	313	$16,868	50%	48%	50%	$ 2,024	45
46	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	269	245	$17,988	60%	40%	58%	$ 2,518	46
48	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	193	169	$13,276	60%	36%	50%	$ 1,434	48
49	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	38.5	14.7	$ 3,694	60%	20%	43%	$ 192	49
50	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	240	216	$16,190	60%	40%	50%	$ 1,943	50
51	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	124	100	$ 8,998	60%	40%	50%	$ 1,080	51
52	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	95	71.2	$ 7,199	60%	36%	50%	$ 777	52
53	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	95	71.2	$ 7,199	60%	32%	50%	$ 691	53
54	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	199	175	$13,645	60%	52%	43%	$ 1,845	54
56	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	253	229	$16,996	60%	36%	53%	$ 1,958	56
57	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,260	60%	20%	47%	$ 687	57
64	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	230	206	$15,570	60%	24%	48%	$ 1,084	64
65	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	615	582	$28,984	50%	64%	67%	$ 6,183	65
66	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	83	59.3	$ 6,456	60%	24%	47%	$ 434	66
67	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	284	260	$18,918	60%	40%	50%	$ 2,270	67
70	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	228	204	$15,446	60%	20%	47%	$ 865	70
71	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	754	721	$35,237	50%	72%	67%	$ 8,457	71
74	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	50.2	17.1	$ 3,550	50%	48%	30%	$ 256	74

Appendix D Status X Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
77	X	myoporum *M5 di.= 15,6,6,8,7 (Myoporum laetum)*	M5	321	25	25	3	2	2	3	4	70	60	50	**77**
78	X	myoporum *M4 di.= 8,6,6,6 (Myoporum laetum)*	M4	134	30	20	3	2	2	3	1	70	60	70	**78**
79	X	myoporum *di.= 9,8,8,8,3,3,3,3,3,6,11 (Myoporum laetum)*	M11	372	20	15	3	2	2	2	1	70	60	70	**79**
80	X	myoporum *di.= 6,3,4,8,6,6,7,6,5,3 (Myoporum laetum)*	M10	247	18	18	2	2	2	2	1	70	40	40	**80**
82	X	myoporum *M2 di.= 10,6 (Myoporum laetum)*	M2	107	18	15	1	1	1	2	1	70	15	30	**82**
83	X	red ironbark *(Eucalyptus sideroxylon)*	28.7	647	65	35	4	2	3	4	4	70	80	60	**83**
85	X	myoporum *di.= 6,8,6,6,12,6,6 (Myoporum laetum)*	M8	303	22	17	2	2	2	2	1	70	40	60	**85**
88	X	red gum *(Eucalyptus camaldulensis)*	24.8	484	65	30	3	2	3	3	4	70	65	50	**88**
89	X	myoporum *M5 di.= 12,7,8,3,10 (Myoporum laetum)*	M5	287	21	19	1	1	1	2	1	70	40	40	**89**
94	X	myoporum *M2 di.= 12,8 (Myoporum laetum)*	M2	163	20	15	3	3	2	2	1	70	50	40	**94**
95	X	myoporum *M2 di.= 12,9 (Myoporum laetum)*	M2	177	25	20	2	2	3	2	1	70	60	40	**95**
97	X	myoporum *M3 di.= 4,6,3 (Myoporum laetum)*	M3	48	10	12	2	2	2	2	1	70	70	40	**97**
102	X	red ironbark *(Eucalyptus sideroxylon)*	14	154	42	30	3	3	2	3	4	70	45	40	**102**
103	X	myoporum *M2 di.= 14,6 (Myoporum laetum)*	M2	182	18	15	2	3	4	2	1	70	40	30	**103**

Appendix D Status X Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
77	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	321	297	$21,212	60%	56%	60%	$ 4,276	77
78	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	134	110	$ 9,618	60%	44%	67%	$ 1,693	78
79	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	372	348	$24,374	60%	40%	67%	$ 3,900	79
80	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	247	223	$16,624	60%	36%	50%	$ 1,795	80
82	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	107	83.3	$ 7,944	60%	24%	38%	$ 438	82
83	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	647	613	$30,386	50%	68%	70%	$ 7,232	83
85	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	36%	57%	$ 2,460	85
88	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	484	451	$23,068	50%	60%	62%	$ 4,268	88
89	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	287	263	$19,104	60%	24%	50%	$ 1,375	89
94	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	163	139	$11,416	60%	44%	53%	$ 1,607	94
95	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	177	153	$12,284	60%	40%	57%	$ 1,671	95
97	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	48	24.3	$ 4,286	60%	36%	60%	$ 555	97
102	X	6.5	33.2	$1,482	$1,300	$2,782	$ 45	154	121	$ 8,213	50%	60%	52%	$ 1,273	102
103	X	5.5	23.8	$1,482	$1,300	$2,782	$ 62	182	158	$12,594	60%	48%	47%	$ 1,693	103

Total Appraised Value of all trees to be removed that are outside the right-of-way **$ 112,212**

Total number of trees to be removed that are outside the right-of-way **56**

Appendix D Status P1 Tree Spreadsheet

Status P1 trees should be observed by an arborist or qualified observer during excavation within that trees Protected Zone (canopy) as indicated on the tree maps

Twenty (20) trees are status P1

Instruction for using this Status P1 Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
1	P1	red ironbark M3 d.= 17.5, 12, 14 *(Eucalyptus sideroxylon)*	M3	513	52	30	4	3	4	4	4	70	80	85	**1**
9	P1	myoporum *(Myoporum laetum)*	3	7	7	5	3	3	3	2	1	70	65	60	**9**
20	P1	myoporum *M2 dia.= 4, 3 (Myoporum laetum)*	M2	20	12	10	1	3	2	2	1	70	40	20	**20**
35	P1	red gum *(Eucalyptus camaldulensis)*	20.0	314	60	24	3	3	2	3	4	70	80	60	**35**
38	P1	silver dollar gum *(Eucalyptus polyanthemos)*	6.0	28	38	13	2	2	2	2	3	70	50	60	**38**
40	P1	myoporum *(Myoporum laetum)*	9	64	25	30	2	1	2	4	2	70	50	30	**40**
42	P1	myoporum *(Myoporum laetum)*	6	28	23	23	1	0	2	2	1	70	20	40	**42**
47	P1	red gum *(Eucalyptus camaldulensis)*	21.0	346	65	35	3	4	2	3	3	70	80	80	**47**
55	P1	red gum *(Eucalyptus camaldulensis)*	36.3	1034	67	45	3	3	3	4	4	70	70	70	**55**
73	P1	red ironbark M2 d.= 12, 11 *(Eucalyptus sideroxylon)*	M2	208	50	30	3	2	2	3	4	70	50	50	**73**
76	P1	red ironbark M2 d.= 12, 14 *(Eucalyptus sideroxylon)*	M2	267	50	20	3	2	2	3	4	70	45	50	**76**
81	P1	myoporum *M2 di.= 4,8 (Myoporum laetum)*	M2	63	10	5	1	1	1	1	1	70	15	60	**81**
84	P1	myoporum *M3 di.= 8,6,3 (Myoporum laetum)*	M3	85	22	17	2	1	1	2	1	70	40	30	**84**
86	P1	red gum *(Eucalyptus camaldulensis)*	29.0	660	60	30	3	3	4	4	4	70	70	60	**86**
91	P1	red ironbark *(Eucalyptus sideroxylon)*	19.7	306	40	20	4	3	2	4	4	70	60	50	**91**
92	P1	myoporum *di.= 6,8,6,6,12,6,6 (Myoporum laetum)*	M8	303	25	17	2	2	2	2	1	70	40	60	**92**

Appendix D Status P1 Tree Spreadsheet

Instruction for using this Status P1 Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
1	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	513	480	$24,374	50%	76%	78%	$ 7,255	1
9	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	7.07	-17	$ 1,748	60%	48%	65%	$ 327	9
20	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	20	-3.8	$ 2,550	60%	36%	43%	$ 239	20
35	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	314	281	$15,419	50%	60%	70%	$ 3,238	35
38	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	28.3	-4.9	$ 2,561	50%	44%	60%	$ 338	38
40	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	63.6	39.8	$ 5,252	60%	44%	50%	$ 693	40
42	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	24%	43%	$ 191	42
47	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	346	313	$16,868	50%	60%	77%	$ 3,880	47
55	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	1034	1001	$47,837	50%	68%	70%	$11,385	55
73	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	208	175	$10,649	50%	56%	57%	$ 1,690	73
76	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	267	234	$13,304	50%	56%	55%	$ 2,049	76
81	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	63	39.3	$ 5,216	60%	20%	48%	$ 302	81
84	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	85	61.3	$ 6,580	60%	28%	47%	$ 516	84
86	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	660	627	$30,998	50%	72%	67%	$ 7,439	86
91	P1	6.5	33.2	$1,482	$1,300	$2,782	$ 45	306	273	$15,048	50%	68%	60%	$ 3,070	91
92	P1	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	36%	57%	$ 2,460	92

Appendix D Status P1 Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
93	P1	red ironbark *(Eucalyptus sideroxylon)*	19.1	286	38	20	2	2	3	4	4	70	60	60	**93**
96	P1	red gum *M3 di.=20,17,21* *(Eucalyptus camaldulensis)*	M3	888	60	30	2	2	3	4	4	70	70	60	**96**
99	P1	red gum *(Eucalyptus camaldulensis)*	26.1	535	45	35	2	4	2	4	4	70	70	50	**99**
105	P1	red gum *(Eucalyptus camaldulensis)*	26.7	560	40	35	3	4	3	3	4	70	70	50	**105**

Appendix D Status P1 Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
93	P1	6.5	33.2	$ 1,482	$ 1,300	$ 2,782	$ 45	286	253	$ 14,176	50%	60%	63%	$ 2,693	93
96	P1	6.5	33.2	$ 1,482	$ 1,300	$ 2,782	$ 45	888	855	$ 41,249	50%	60%	67%	$ 8,250	96
99	P1	6.5	33.2	$ 1,482	$ 1,300	$ 2,782	$ 45	535	502	$ 25,353	50%	64%	63%	$ 5,138	99
105	P1	6.5	33.2	$ 1,482	$ 1,300	$ 2,782	$ 45	560	526	$ 26,472	50%	68%	63%	$ 5,700	105

Total Appraised Value of all trees to be observed during excavation **$ 66,854**

Total number of trees to be observed during excavation **20**

Appendix D Status P Palms Spreadsheet

Status P trees are palms that need trunks or fronds protected during excavation.

Seven (7) palms are status P

Instruction for using this Status P Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
15	P	windmill palm *(Trachycarpus fortunei)*	palm		6	4	4	3			3	70	50	60	**15**
16	P	windmill palm double *9.5, 7* *(Trachycarpus fortunei)*	palm		16.5	4	4	3			4	70	60	60	**16**
17	P	windmill palm *(Trachycarpus fortunei)*	palm		7	3	3	4			4	70	50	60	**17**
19	P	windmill palm triple *4, 3, 6* *(Trachycarpus fortunei)*	palm		13	4	4	3			4	70	60	60	**19**
25	P	windmill palm *(Trachycarpus fortunei)*	palm		5.5	3	3	3			4	70	60	55	**25**
26	P	windmill palm *(Trachycarpus fortunei)*	palm		6.5	3	3	3			4	70	60	50	**26**
27	P	windmill palm *(Trachycarpus fortunei)*	palm		9	3	3	3			4	70	60	50	**27**

Appendix D Status P Palms Spreadsheet

Instruction for using this Status P Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
15	P			$ 510	$ 510	$ 1,020				$ 1,020	90%	67%	60%	$ 367	15
16	P			$ 1,403	$ 1,403	$ 2,805				$ 2,805	90%	73%	63%	$ 1,172	16
17	P			$ 595	$ 595	$ 1,190				$ 1,190	90%	73%	60%	$ 471	17
19	P			$ 1,105	$ 1,105	$ 2,210				$ 2,210	90%	73%	63%	$ 924	19
25	P			$ 468	$ 468	$ 935				$ 935	90%	67%	62%	$ 346	25
26	P			$ 553	$ 553	$ 1,105				$ 1,105	90%	67%	60%	$ 398	26
27	P			$ 765	$ 765	$ 1,530				$ 1,530	90%	67%	60%	$ 551	27

Total Appraised Value of all palms to be protected during excavation **$ 4,229**

Total number of palms to be protected during excavation **7**

Appendix D Status NA Tree Spreadsheet

Status NA trees should not be significantly affected by construction.

Twenty-one (21) trees are status NA

Instruction for using this Status NA Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
3	NA	red gum *(Eucalyptus camaldulensis)*	16.9	224	60	27	2	2	4	4	4	70	90	85	**3**
22	NA	dead tree, probably myoporum	dead									70			**22**
31	NA	windmill palm double 9, 8 *(Trachycarpus fortunei)*	palm		17	3	3	3			4	70	80	60	**31**
32	NA	windmill palm *(Trachycarpus fortunei)*	palm		12	3	3	3			4	70	60	50	**32**
33	NA	windmill palm *(Trachycarpus fortunei)*	palm		11	3	3	3			4	70	60	50	**33**
37	NA	silver dollar gum *(Eucalyptus polyanthemos)*	7.0	38	39	15	3	2	3	2	3	70	50	60	**37**
59	NA	myoporum *(Myoporum laetum)*	2	3	12	10	4	2	3	2	1	70	40	50	**59**
60	NA	London plan tree *(Platanus acerifolia)*	16	201	33	25	3	2	3	3	4	70	50	60	**60**
61	NA	myoporum *M5 di.= 2,3,1,7,6 (Myoporum laetum)*	M5	79	20	20	3	2	2	4	1	70	40	50	**61**
62	NA	California sycamore *(Platanus racemosa)*	11.5	104	35	20	4	4	3	3	3	70	50	50	**62**
63	NA	myoporum *M3 di.= 3,4,3 (Myoporum laetum)*	M3	27	35	20	3	2	2	2	1	70	25	50	**63**
68	NA	red ironbark *(Eucalyptus sideroxylon)*	10.5	87	30	15	4	2	2	3	3	70	40	50	**68**
69	NA	myoporum *(Myoporum laetum)*	3.2	8	12	17	2	1	1	1	1	70	20	50	**69**
72	NA	myoporum *(Myoporum laetum)*	3	7	12	8	2	1	1	1	1	70	20	50	**72**
87	NA	myoporum *di.= 6,8,6,6,12,6,6 (Myoporum laetum)*	M8	303	25	25	2	2	3	2	1	70	40	40	**87**
90	NA	myoporum *(Myoporum laetum)*	6	28	8	10	1	1	1	1	1	70	10	40	**90**
98	NA	red ironbark M2 d.= 4,7 *(Eucalyptus sideroxylon)*	M2	51	20	12	3	2	3	3	4	70	20	40	**98**

Appendix D Status NA Tree Spreadsheet

Instruction for using this Status NA Tree Appraisal Spreadsheet

Appendix D is two pages wide. **The odd numbered pages describe the tree** and the even numbered pages show the Trunk Formula calculations for that tree.

Heading definitions:

See pages 1 and 2 of Appendix B for an explanation of terms shown in the header.

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
3	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	224	190	$11,353	50%	64%	82%	$ 2,967	3
22	NA													$ -	22
31	NA			$1,445	$1,445	$2,890				$ 2,890	90%	67%	70%	$ 1,214	31
32	NA			$1,020	$1,020	$2,040				$ 2,040	90%	67%	60%	$ 734	32
33	NA			$ 935	$ 935	$1,870				$ 1,870	90%	67%	60%	$ 673	33
37	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	38.5	5.3	$ 3,020	50%	52%	60%	$ 471	37
59	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	3.14	-21	$ 1,504	60%	48%	53%	$ 231	59
60	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	201	168	$10,333	70%	60%	60%	$ 2,604	60
61	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	79	55.3	$ 6,208	60%	48%	53%	$ 953	61
62	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	104	70.6	$ 5,961	90%	68%	57%	$ 2,067	62
63	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	27	3.25	$ 2,984	60%	40%	48%	$ 346	63
68	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	86.5	53.4	$ 5,184	50%	56%	53%	$ 774	68
69	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	8.04	-16	$ 1,808	60%	24%	47%	$ 121	69
72	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	7.07	-17	$ 1,748	60%	24%	47%	$ 117	72
87	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	303	279	$20,096	60%	40%	50%	$ 2,411	87
90	NA	5.5	23.8	$1,482	$1,300	$2,782	$ 62	28.3	4.51	$ 3,062	60%	20%	40%	$ 147	90
98	NA	6.5	33.2	$1,482	$1,300	$2,782	$ 45	51	17.8	$ 3,584	50%	60%	43%	$ 466	98

Appendix D Status NA Tree Spreadsheet

Tree ID #	Status	Name	Trunk Dia.	Trk Area	Height ft.	Spread ft.	roots	Trunk	S. Branch	twigs	Foliage	Site	Contribution	Placement	Tree ID #
Identification			Size				Condition					Location			
100	NA	myoporum *(Myoporum laetum)*	5	20	12	10	1	1	1	1	1	70	10	40	**100**
101	NA	myoporum *M3 di.= 5,5,3 (Myoporum laetum)*	M3	47	18	10	2	2	2	2	1	70	30	40	**101**
104	NA	myoporum *M2 di.= 8,6 (Myoporum laetum)*	M2	78	18	16	2	3	4	2	1	70	40	40	**104**
112	NA	windmill palm *(Trachycarpus fortunei)*	palm		13	3	3	3			4	70	60	50	**112**

Appendix D Status NA Tree Spreadsheet

Tree ID #	Status	Replacment Tree Dia.	Replacment Tree Area	Replacment Tree Cost	Installation Cost	Installed Tree Cost	Unit Tree Cost	Appraised Trunk Area	Tree Area Increase	Basic Tree Cost	Species Rating	Condition Percent	Location Percent	Appraised Value	Tree ID #
ID		Replacement Tree					Trunk Formula Calculations								ID
100	NA	5.5	23.8	$ 1,482	$ 1,300	$ 2,782	$ 62	19.6	-4.1	$ 2,526	60%	20%	40%	$ 121	100
101	NA	5.5	23.8	$ 1,482	$ 1,300	$ 2,782	$ 62	47	23.3	$ 4,224	60%	36%	47%	$ 426	101
104	NA	5.5	23.8	$ 1,482	$ 1,300	$ 2,782	$ 62	78	54.3	$ 6,146	60%	48%	50%	$ 885	104
112	NA			$ 1,105	$ 1,105	$ 2,210				$ 2,210	90%	67%	60%	$ 796	112

Total Appraised Value of all study trees Status NA **$ 18,526**

Total number of study trees Status NA **21**