

Arborist Report – Bear Valley Parkway, Escondido

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1 INTRODUCTION

This arborist report summarizes Dudek’s field evaluation of trees within and adjacent to the proposed Bear Valley Parkway residential development project (project) site located in Escondido, California. Evaluated trees, including native oak trees, met the City of Escondido’s definition of trees. Oaks measuring more than 4 inches in trunk diameter at 4.5 feet above ground and ornamental trees more than 8 inches at 4.5 feet above ground were included in the evaluation. This report includes a discussion of tree evaluation methods, a summary of findings, identification of anticipated impacts, and tree impact mitigation recommendations consistent with Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City of Escondido’s Municipal Code (Ordinance 2001-21) and the tree removal permit process for the City of Escondido (City). The primary focus of Dudek’s field evaluation was to evaluate trees located on the project site that are considered “protected” or “mature” based on the definition in the City’s Municipal Code and that would be affected by the proposed development.

Dudek staff certified by the International Society of Arboriculture (ISA) as Certified Arborists completed the field evaluations on April 17, 2015. The survey area includes 182 protected trees and 307 “mature” trees, 110 of which would require removal for project-related improvements. Based on the City’s Municipal Code (City of Escondido 2014) and the site’s conditions of approval, a minimum of 195 replacement trees would be required to mitigate project-related tree impacts.

1.1 Site Description

The project site is located off Bear Valley Parkway at 661 Bear Valley Parkway near Zlatibor Ranch Road in Escondido, San Diego County, California (Figure 1). The property encompasses approximately 40.9 acres and is located on the U.S. Geological Survey 7.5-minute Escondido quadrangle map in Section 26, Township 12S, and Range 2W. The majority of the project site was once an avocado orchard, but the orchard was removed and now the site is considered disturbed habitat. There is one residence on site in the central portion of the property that is currently occupied. The remaining portions of the site are undeveloped. Southern coast live oak riparian forest and southern cactus scrub in the southern portion of the project site are the only areas that support native vegetation.

1.2 Project Description

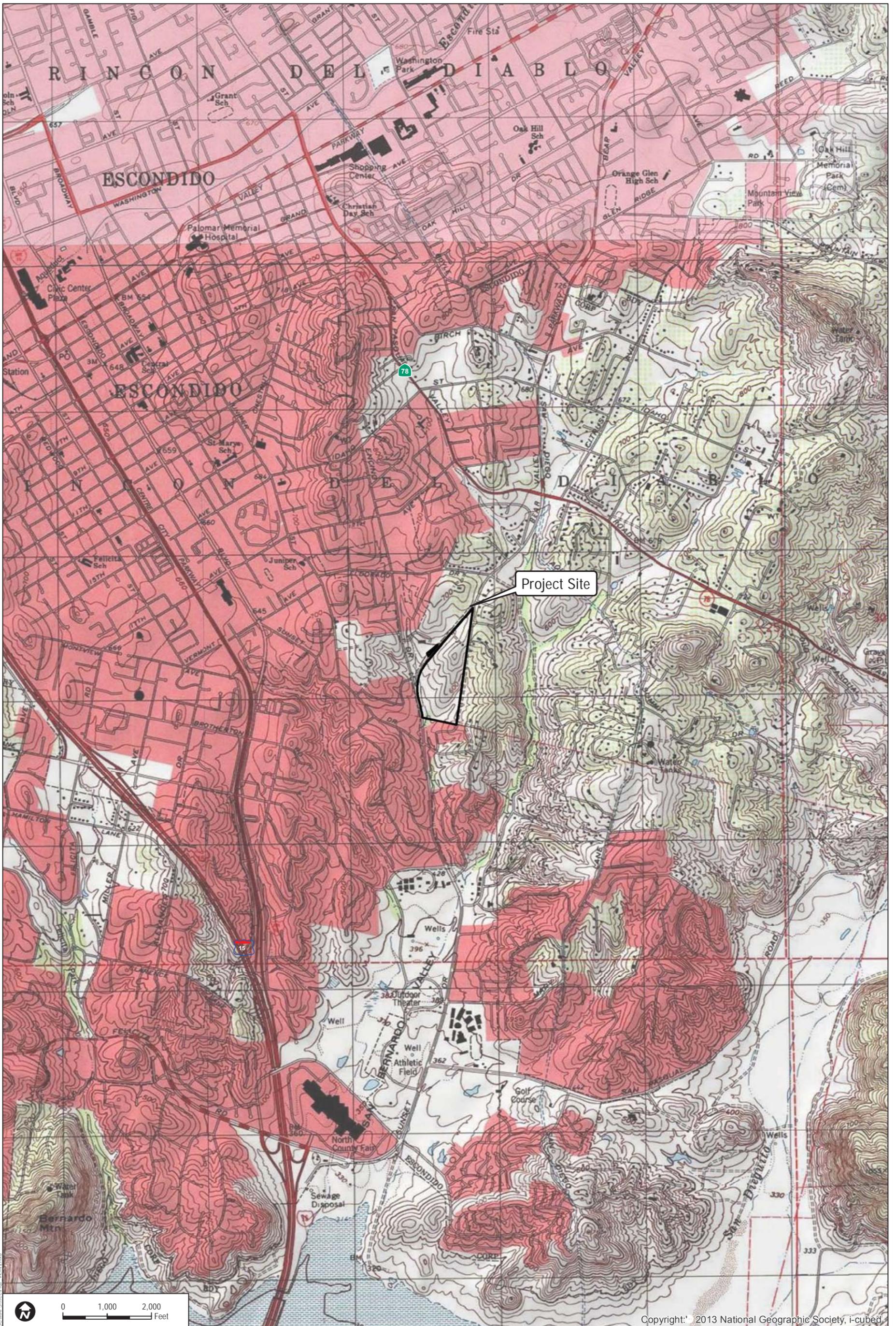
The project would consist of a proposed subdivision of 40.9 acres into 55 residential lots, each containing a minimum of 10,000 square feet. In addition to the residential lots, the project proposes two private street lots, seven open space lots, and one recreation lot. Private open space would occupy 19.47 acres. A main recreation area would be constructed near the secondary access point. Pedestrian linkages would be via non-curb-adjacent private streets where walkways would be

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separated from vehicle traffic by privately maintained parkways. This system would tie into the public Bear Valley Parkway sidewalk system.

The project would take access from Bear Valley Parkway at the intersection of Zlatibor Ranch Road and Bear Valley Parkway. A secondary, gated emergency ingress and egress would be provided on the east side of Bear Valley Parkway, northerly of the intersection of Bear Valley Parkway and Encino. The project would include frontage right-of-way dedication to complete a 51-foot-wide right-of-way from the center line of the existing Bear Valley Parkway right-of-way. In addition, the project would be obligated to construct frontage improvements along Bear Valley Parkway consisting of a curb, gutter, sidewalk, parkway, bike lane, and one full travel lane with transitions that would tie into existing improvements. A portion of these frontage improvement would be located off site of the subject property (Figure 2).

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Project Site



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SOURCE: USGS 7.5-Minute Series Escondido Quadrangle.

FIGURE 2
Vicinity Map

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2015

Bear Valley Parkway Project - Arborist Report

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2 METHODS

2.1 Individual Tree Evaluation

Consistent with Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City's Municipal Code (Ordinance 2001-21), this arborist report is based on information compiled through field reconnaissance and a review of appropriate site reference materials, including aerial photography, U.S. Geological Survey topographic maps, and digital ortho-quarter quadrangle data. Dudek ISA Certified Arborists conducted a tree survey on the project site on April 17, 2015.

The City's Municipal Code protects all "mature" trees, as defined in Section 33-1502. Mature trees, according to Section 33-1502, include all native oak trees larger than 4 inches diameter at breast height (dbh) and ornamental trees larger than 8 inches dbh.

All trees meeting the City's definition of "mature" or "native" located on the project site were assessed, tagged, inventoried, mapped, and plotted on a tree location exhibit (Appendix A). A representative sample of trees was photographed (Appendix B) to document their current conditions. All inventoried trees were tagged with an aluminum tag bearing a unique identification number. Tree tags were placed on the trunk of each inventoried tree. These numbers correspond to the tree locations presented in Appendix A and the tree data matrix in Appendix C.

Concurrent with tree mapping efforts, Dudek arborists collected tree attribute data, including species, quantity of individual trunks, individual trunk diameters, overall height, canopy extent, and general health and structural conditions. Diameter measurements were collected using the standard protocol outlined by the Council of Tree and Landscape Appraisers in the Guide for Plant Appraisal (ISA 2000). Trunk diameter measurements were collected at 4.5 feet (54 inches) above the ground along the trunk axis, with a few common exceptions. In cases where a tree's trunk was located on a slope, the 4.5-foot distance was approximated as the average of the shortest and longest sides of the trunk (i.e., the uphill side and downhill side of a tree's trunk, respectively), and the measurement was made at the circumference of the trunk at that point. Tree height measurements were ocular estimates made by experienced field arborists. Tree canopy diameters were typically estimated by "pacing-off" the measurement based on the investigator's knowledge of his/her stride length or by visually estimating the canopy width. The tree crown diameter measurements were made along an imaginary line intersecting the tree trunk that best approximated the average canopy diameter.

Pursuant to the Guide for Plant Appraisal (ISA 2000), tree health and structure were evaluated based on five tree components: roots, trunk(s), scaffold branches, small branches, and foliage.

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Each component of the tree was assessed for health factors such as insect, fungal, or pathogen damage; fire damage; mechanical damage; presence of decay; presence of wilted or dead leaves; and wound closure. Components were graded as good, fair, poor, or dead, with “good” representing no apparent problems, and “dead” representing a dying and/or dead tree. This method of tree condition rating is comprehensive and results in ratings that are useful for determining the status of trees based on common standards. Trees in natural settings have important habitat value, as evidenced by numerous cavity nesters and insects that thrive on and within oak trees, even when they are considered in poor structural or health condition. This assessment focused on tree condition relating to health and structure to analyze potential project impacts, and, where necessary, to provide recommendations for mitigating potential tree hazards such as trees with weak limb attachments, cavities and rot, or excessive lean.

Upon completion of field data collection and mapping, raw global positioning system (GPS) data was post-processed using GPS Pathfinder Office (v 5.40), and individual tree location data were compiled and updated in geographic information systems (GIS) software. The digital tree locations were linked to individual tree identification numbers and associated tree attribute data. This data set was then evaluated using ArcGIS (v. 10.1) software to determine the position of individual trees relative to the proposed project development areas. Data resulting from this analysis were used to determine individual tree impact totals.

2.2 Scope of Work Limitations

No root crown excavations or investigations, aerial evaluations, or internal probing was performed during the tree assessment. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed. It is recommended that any large tree proposed for preservation in an area that receives human use be thoroughly inspected for internal or subterranean decay by a qualified ISA Certified Arborist before finalizing preservation plans.

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3 OBSERVATIONS

3.1 Individual Trees

There are 489 trees representing 14 different species located within the project tree survey area that meet the City’s criteria as a “mature” tree. As Table 1 indicates, most of the inventoried trees are not native to California: tree of heaven (*Ailanthus altissima*), red gum eucalyptus (*Eucalyptus camaldulensis*), common fig (*Ficus carica*), Arizona ash (*Fraxinus velutina*), jacaranda (*Jacaranda mimosifolia*), Chinese flame tree (*Koelreuteria bipinnata*), crape myrtle (*Lagerstroemia indica*), Chinaberry (*Melia azedarach*), Canary Island date palm (*Phoenix canariensis*), red willow (*Salix laevigata*), Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), and Mexican fan palm (*Washingtonia robusta*). Mature and protected native trees found on site consist of coast live oak (*Quercus agrifolia*). Table 1 provides a summary of the 14 species mapped and evaluated within the tree survey area. The Tree Location Exhibit in Appendix A presents the location of the individual trees mapped and assessed for the project.

Overall, the trees exhibit growth and structural conditions that are typical of their locations as both landscape and natural trees. The trees include various trunk and branch maladies, as well as varying health and structural conditions. As presented in the Tree Information Matrix in Appendix C, most of the individually mapped trees, 85.89% (420 trees), exhibit fair health condition; 7.16% (35 trees) are in good health condition; and 6.95% (34 trees) are in poor health. Dead trees were not evaluated during the tree inventory. Structurally, 2.04% (10 trees) of the individually mapped trees are considered to exhibit good structure, 93.05 % (455 trees) exhibit fair structure, and 4.9% (24 trees) exhibit poor structure. Good condition trees exhibit acceptable vigor, healthy foliage, and adequate structure, and lack of any major maladies. Fair condition trees are typical, with few maladies but declining vigor. Poor condition trees exhibit declining vigor, unhealthy foliage, poor branch structure, and/or excessive lean.

Table 1
Summary of Trees at Project Site

Scientific Name	Common Name	Number of Trees
<i>Ailanthus altissima</i>	Tree of heaven	1
<i>Eucalyptus camaldulensis</i>	Red gum eucalyptus	2
<i>Ficus carica</i>	Common fig	1
<i>Fraxinus velutina</i>	Arizona ash	2
<i>Jacaranda mimosifolia</i>	Jacaranda	2
<i>Koelreuteria bipinnata</i>	Chinese flame tree	2
<i>Lagerstroemia indica</i>	Crape myrtle	3
<i>Melia azedarach</i>	Chinaberry	4

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Table 1
Summary of Trees at Project Site

Scientific Name	Common Name	Number of Trees
<i>Phoenix canariensis</i>	Canary Island date palm	27
<i>Quercus agrifolia</i>	Coast live oak	327
<i>Salix laevigata</i>	Red willow	23
<i>Schinus molle</i>	Peruvian pepper	2
<i>Schinus terebinthifolius</i>	Brazilian pepper	13
<i>Washingtonia robusta</i>	Mexican fan palm	80
Total		489

Trees within the tree survey area vary in size and stature according to species and available growing space. The coast live oak trees on site are primarily single-stemmed with trunk diameters ranging from 4 to 43 inches dbh. Multi-stemmed oak trees with two to five stems have diameters of up to 34 inches dbh. Single- and multi-stemmed ornamental landscape tree species have combined trunk diameters between 4 and 56 inches dbh. Tree heights vary from 3 to 75 feet. The immature Mexican fan palms found on site are the smallest trees. Taller trees (40-plus feet) are represented primarily by red gum eucalyptus, coast live oak, Peruvian pepper, red willow, Canary Island palm, Chinese flame tree, Arizona ash, and Mexican fan palm. Tree canopy extents range from 1 foot to nearly 60 feet. Nearly 45% of the trees on site exhibit canopy spreads that are greater than 20 feet across at their widest points.

4 POTENTIAL TREE IMPACTS

4.1 Regulatory Definitions and Requirements

The following section summarizes the relevant policies regulating tree impact and removal associated with the project.

4.1.1 City of Escondido

Tree protection, removal, and replacement standards are included in the City’s General Plan (City of Escondido 2012) and in Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City’s Municipal Code (Ordinance 2001-21). The Escondido General Plan recognizes oak trees and other mature trees, as defined below, as significant aesthetic and ecological resources deserving protection within the boundaries of the City. Sections 33-1502 and 33-1068 of the City’s Municipal Code set forth rules and standards related to mature tree removal, protection, and replacement.

Section 33-1502 (Definitions)

1. A **mature tree** is any self-supporting woody perennial plant, native or ornamental, with a single well-defined stem or multiple stems supporting a crown of branches.
 - a. The single stem, or one of multiple stems, of any oak tree (*Quercus* species) shall have a diameter four inches or greater when measured at four-and-one-half feet (DBH) above the tree’s natural grade.
 - b. All other mature trees shall have a DBH of 8 inches, or greater, for a single stem or one of the multiple stems.
2. A **protected tree** is any oak (*Quercus* species) that has a ten-inch or greater DBH, or any other tree species or individual specimen listed on the historic register, or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code.

Section 33-1068 (Vegetation Clearing and Protection)

The purpose of Section 33-1068 is to establish regulations and standards for the preservation, protection, and selected removal of mature and protected trees. A vegetation removal permit is required prior to clearing, pruning, or destroying vegetation, and prior to any encroachments by construction activities that disturb the root system within the dripline¹ of mature trees. Issuance

¹ The dripline is the area directly under the outer circumference of the tree branches. This is where the feeder roots are located that take up water and nutrients for the tree.

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of a vegetation removal permit requires the submittal of a tree survey and a tree replacement and/or protection plan.

Section 33-1069 (Vegetation Protection and Replacement)

Pursuant to Section 33-1069, every feasible effort and measure to avoid damage to existing trees to remain on site must be taken by the owner and developer during clearing, grading, and construction activities. If mature trees cannot be preserved on site, they must be replaced at a minimum ratio of 1:1. Protected oak trees must be replaced at a minimum ratio of 2:1. However, the number, size, and species of replacement trees can be determined on a case-by-case basis by the City's Director of Planning and Building.

4.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 requires tree removal and potentially disturbing construction activities to occur during certain months to avoid harassment of nesting birds. According to this act, no construction or other disturbing activities can occur within 500 feet of an active bird nest from January through June each year. Biological surveys are typically required to provide clearance for project initiation.

4.2 Impacts

Tree impacts were determined through use of GIS technology to determine the locations of trees relative to the project impact areas (limits of grading). Impacts were further determined based on Dudek arborists' experience with native and non-native trees, and the typical reactions of trees to disturbances such as soil compaction, excavation, and remedial grading. The impact analysis results presented herein were used for developing appropriate mitigation measures for the project.

Impacts to trees can be classified as either direct or indirect. Direct impacts to trees related to site improvements are typically the result of physical injuries or changes caused by construction machinery. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds, among others. Indirect impacts to trees are the result of changes to the site that may cause tree decline, even when the tree is not directly injured. Indirect impacts include alterations to stream flow rates, diversion of groundwater flow, introduction of exotic plant species, and alterations to disturbance regimes. Wider-scale alterations to the area near trees and specific changes that occur around the trees are important considerations.

In general, there is a great deal of variation in tolerance to construction impacts among tree species, ages, and conditions. It is important to know how a certain tree, based on its species, age, and condition, will respond to different types of disturbance. The trees in the proposed project area are of varying ages and conditions. Mature specimens are typically more sensitive to

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root disturbance and grade changes. In general, healthy trees will respond better to changes in their growing environment. Trees of poor health or stressed conditions may not be vigorous enough to cope with direct or indirect impacts from construction activities.

Impacts totals presented herein are based on conceptual disturbance limits and development plans as of the date of this Arborist Report. As such, the actual number of trees that are subject to direct and indirect impacts may change as the detailed site planning process proceeds.

4.2.1 On-Site Project Direct Tree Impacts

For the purposes of this report, direct impacts are those associated with tree removal or encroachment within the dripline. Tree removal is expected to be required when the trunk is located inside or within 2 feet of the proposed limits of grading. Encroachment is expected when soil and roots are disturbed within the tree protected zone (canopy drip line plus 5 feet or 15 feet from trunk, whichever is greater). Table 2 summarizes the total number of trees by species that are expected to be subject to direct construction-related impacts. The locations of impacted trees, by impact type, are presented in the map in Appendix D. Measures to minimize the extent of impact to preserved trees are provided in Appendix E.

Table 2
Summary of All Direct Tree Impacts – Bear Valley Parkway, Escondido

Scientific Name	Common Name	Removal	Encroachment
<i>Ailanthus altissima</i>	Tree of heaven	1	0
<i>Eucalyptus camaldulensis</i>	Red gum	2	0
<i>Jacaranda mimosifolia</i>	Jacaranda	2	0
<i>Koelreuteria bipinnata</i>	Chinese flame tree	1	1
<i>Lagerstroemia indica</i>	Crape myrtle	3	0
<i>Melia azedarach</i>	Chinaberry	4	0
<i>Phoenix canariense</i>	Canary Island date palm	1	1
<i>Quercus agrifolia</i>	Coast live oak	60 (32)*	32 (14)*
<i>Salix laevigata</i>	Red willow	1	0
<i>Schinus molle</i>	Peruvian pepper	0	1
<i>Schinus terebinthifolius</i>	Brazilian pepper	13	0
<i>Washingtonia robusta</i>	Mexican fan palm	22	4
Totals		110 (32)*	39 (14)*

* Number in parenthesis represents the quantity of removals that meet the City's criteria of a "protected tree" and is included in the totals.

4.2.1.1 On-Site Tree Impact Summary

Based on proposed project development plans, it is estimated that 103 (21.1%) mature trees and 8 (1.6%) protected trees will require removal, 39 (7.8%) will experience encroachment into the tree protected zone, 81 (16.6%) will be indirectly impacted, and 340 (69.5%) will be preserved in

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place with no direct impacts. Of the 110 trees identified for removal, 46 meet the criteria for classification as a protected tree, as defined by the City. Of the 39 encroached upon trees, 18 meet size criteria to be classified as protected trees. Of the 60 trees identified for removal in the Bear Valley Parkway road and walkway improvements, 29 meet the criteria for classification as a protected tree, as defined by the City. Of the 28 encroached upon trees, 14 meet size criteria to be classified as protected trees.

Table 3 presents only the number of trees expected to be directly impacted by the Bear Valley Parkway road and walkway improvements.

Table 3
Summary of Direct Tree Impacts from Bear Valley
Parkway Road and Walkway Improvements

Scientific Name	Common Name	Removal	Encroachment
<i>Koelreuteria bipinnata</i>	Chinese flame tree	1	1
<i>Phoenix canariensis</i>	Canary Island palm	0	1
<i>Quercus agrifolia</i>	Coast live oak	55 (29)	22 (14)
<i>Salix laevigata</i>	Red willow	1	0
<i>Washingtonia robusta</i>	Mexican fan palm	3	4
Totals		60 (29)*	28 (14)*

* Number in parenthesis represents the quantity of removals that meet the City's criteria of a "protected tree" and is included in the cell total.

4.2.2 Indirect Tree Impacts

Indirect impacts to trees are the result of changes to the site that may cause tree decline, even when the tree is not directly injured. Site-wide changes affecting trees include diverting runoff and stormwater, creating retention and detention ponds, relocating streams or making improvements to streams, lowering or raising water tables, altering the capacity for soil moisture recharge, removing vegetation, and damming underground water flow (Matheny and Clark 1998). For the purposes of this report, indirect tree impacts are expected for trees within 25 feet of the project's limits of grading and not subject to removal or encroachment. Trees located in fuel modification zones are also typically considered indirectly impacted; however, no trees are located in proposed fuel modification zones that would not be otherwise impacted (removal or encroachment).

Other potential indirect impacts may include firewood harvesting, vandalism, and deliberate or accidental wildfire ignition in oak-willow woodland drainage areas. These potential indirect impacts can be minimized by implementing woodland management and protection measures, including educational material provided to homeowners and long-term management of oak-willow-dominated habitat on the site.

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Table 4 presents the number of trees expected to be indirectly impacted by the proposed project. If any encroached-upon trees fail during the 5-year monitoring period, it will be replaced at City replacement ratios.

Table 4
Summary of Indirect Tree Impacts – Bear Valley Parkway, Escondido

Scientific Name	Common Name	Indirect Impacts
<i>Phoenix canariensis</i>	Canary Island palm	5
<i>Quercus agrifolia</i>	Coast live oak	62 (14)*
<i>Salix laevigata</i>	Red willow	4
<i>Washingtonia robusta</i>	Mexican fan palm	20
Total		91

* Number in parenthesis represents the quantity of removals that meet the City's criteria of a "protected tree" and is included in the cell total.

4.2.3 Total Project Tree Impacts

For comparison, Table 5 summarizes the total number of trees, by species, that are expected to be subject to direct construction-related impacts, encroachments, and indirect impacts. Based on the proposed project and Bear Valley Parkway road and walkway improvements, it is estimated that 110 trees would require removal and an additional 40 trees would be preserved in place with protections, but encroached upon. In addition, it is estimated that 91 trees could be indirectly impacted by the proposed project. The locations of impacted trees, by impact type, for the proposed improvements, are presented in the map in Appendix D. Measures to minimize the extent of impacts to preserved trees are provided in Appendix E.

Table 5
Summary of All Direct Tree Impacts – Bear Valley Creek, Escondido

Scientific Name	Common Name	Removal	Encroachment	Indirect Impacts
<i>Ailanthus altissima</i>	Tree of heaven	1	0	0
<i>Eucalyptus camaldulensis</i>	Red gum	2	0	0
<i>Jacaranda mimosifolia</i>	Jacaranda	2	0	0
<i>Koelreuteria bipinnata</i>	Chinese flame tree	1	1	0
<i>Lagerstroemia indica</i>	Crape myrtle	3	0	0
<i>Melia azedarach</i>	Chinaberry	4	0	0
<i>Phoenix canariense</i>	Canary Island date palm	1	1	5
<i>Quercus agrifolia</i>	Coast live oak	60 (32)*	32 (14)*	62 (14)*
<i>Salix laevigata</i>	Red willow	1	0	4
<i>Schinus molle</i>	Peruvian pepper	0	1	0
<i>Schinus terebinthifoliosus</i>	Brazilian pepper	13	0	0
<i>Washingtonia robusta</i>	Mexican fan palm	22	4	20
Totals		110 (32)*	39 (14)*	91 (14)*

* Number in parenthesis represents the quantity of removals that meet the City's criteria of a "protected tree" and is included in the cell total.

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5 MITIGATION

Section 33-1069 of the City’s Municipal Code identifies tree replacement standards for projects affecting mature and/or protected trees. Minimum mitigation planting requirements for removal and encroachment on 103 mature trees (1:1 replacement ratio) and 46 protected trees (2:1 replacement ratio) is 195 trees (138 coast live oaks and 57 other suitable native or ornamental species).

The proposed project’s tree mitigation program focuses on preservation (the project will preserve more than 69.5% of the trees on site), restoration and enhancement of preserved oak trees/stands through sustainable tree plantings, and native tree planting in the transition area between open space and developed areas throughout the proposed project site.

5.1 Proposed Mitigation Program

The proposed mitigation program was designed to provide mitigation for direct impacts to 103 mature trees and 46 protected trees associated with the Bear Valley Parkway Project. The goal of the proposed mitigation program is to offset tree impacts through a sustainable, customized plan that is suitable for the site’s unique opportunities for oak tree preservation, enhancement, and establishment. Dudek recommends that the tree mitigation program focus on the inclusion of native and ornamental trees (e.g., larger container sizes (15-gallon), deep tree pots, “D40” pots, 24-inch boxes) within project landscape areas. Tree species recommended for individual mitigation include coast live oak, blue elderberry (*Sambucus mexicana*), western redbud (*Cercis occidentalis*), desert museum palo verde (*Cercidium* “desert museum”), flowering pear (*Pyrus calleryana* “Chanticleer”), and New Zealand Christmas tree (*Metrosideros excels*). Use of a variety of species will result in a more robust tree population that is less susceptible to pests and disease that typically are host-species-specific.

5.2 Mitigation Details

As indicated in Table 6, the total number of plantings required to meet the intent of the City’s tree protection and replacement requirements is 195 trees. Therefore, the mitigation program proposes that a minimum of 195 trees (including coast live oak and other suitable native or ornamental species) are planted within the development landscape areas, as presented in the Landscape Concept Plan (Appendix F). Table 7 provides recommended replacement species and totals for the 149 individually impacted trees. The 773 landscape trees provide mitigation for the 149 individual tree impacts from the site at a ratio of 5.2:1. The 5.2:1 mitigation ratio exceeds the minimum required City replacement ratio of 2:1.

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**Table 6
Landscape Tree Replacement Calculation**

Trees Impacted				
Tree Type	Grading Related	Replacement Ratio	Replacement Species	Total Number Replacement Trees
<i>Ailanthus altissima</i>	1	1:1	Ornamental	1
<i>Eucalyptus camaldulensis</i>	2	1:1	Ornamental	2
<i>Jacaranda mimosifolia</i>	2	1:1	Ornamental	2
<i>Koelreuteria bipinnata</i>	2	1:1	Ornamental	2
<i>Lagerstroemia indica</i>	3	1:1	Ornamental	3
<i>Melia azedarach</i>	4	1:1	Ornamental	4
<i>Phoenix canariensis</i>	2	1:1	Ornamental	2
<i>Quercus agrifolia</i>	92	1:1 and 2:1	<i>Quercus agrifolia</i>	138
<i>Salix laevigata</i>	1	1:1	<i>Sambucus mexicana</i>	1
<i>Schinus molle</i>	1	1:1	Ornamental	1
<i>Schinus terebinthifolius</i>	13	1:1	Ornamental	13
<i>Washingtonia robusta</i>	26	1:1 and 2:1	Ornamental	26
Minimum Required Escondido Mitigation Tree Plantings				195

**Table 7
Recommended Landscape Planting Quantities**

Trees Impacted			
Tree Type	Common Name	Size	Replacement Quantity
<i>Cercidium</i> (desert museum)	Desert museum palo verde	15 gallons	4
<i>Cercis occidentalis</i>	Western redbud	15 gallons	147
<i>Metrosideros excels</i>	New Zealand Christmas tree	24-inch box	197
<i>Pyrus calleryana</i> (Chanticleer)	Flowering pear	24-inch box	57
<i>Sambucus mexicana</i>	Blue elderberry	15 gallons	144
<i>Quercus agrifolia</i>	Coast live oak	24-inch box	224
Minimum Proposed Landscape Plantings			773

* Replacement species will be a combination of native oak and elderberry in the riparian areas, and native oak and other landscape trees within the urbanized areas of the project site.

5.3 Mitigation Discussion

The total number of mitigation trees proposed (773 trees) for anticipated tree impacts is considered more than appropriate, and results in a minimum of 5.2:1 replacement, which is higher than the 1:1 and 2:1 replacement ratios as required by the City. Therefore, no additional mitigation is recommended.

Arborist Report – Bear Valley Parkway, Escondido

Tree Relocation

Relocation of impacted trees was analyzed during the tree assessment, and a single tree is considered a “candidate.” However, tree relocation is not a requirement of the City. As the landscape plan is finalized, if the individual candidate tree can be relocated, it will be evaluated further. Tree relocation is a stressful process for native oaks, and unless they are superior specimens, it is preferable to purchase large, nursery-grown trees as a replacement.

5.4 Tree Removal Permit

Consistent with Section 33-1068 of the City’s Municipal Code (City of Escondido 2014), a vegetation removal permit is required prior to clearing, pruning, or destroying vegetation, and prior to any encroachments by construction activities that disturb the root system within the dripline of mature trees.

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Arborist Report – Bear Valley Parkway, Escondido

6 CONCLUSIONS

Dudek inventoried and evaluated 489 mature and protected trees within the Bear Valley Parkway residential redevelopment project site. A total of 149 trees would be impacted by the proposed project. Tree impacts associated with the project would be mitigated through replacement tree planting, as defined in the City's General Plan and in Chapter 33 (Zoning), Article 55 (Grading and Erosion Control) of the City's Municipal Code (Ordinance 2001-21) and in the Conditions of Approval for Sub 13-0003, Sub 13-0010, Sub 13-0011, and Tract 889. In total, 195 trees should be planted to mitigate for project-related impacts. Planting locations, types, and maintenance must be consistent with the Conditions of Approval for Sub 13-0003, Sub 13-0010, Sub 13-0011, and Tract 889. The recommended tree mitigation/replacement meets the minimum requirements of the City's Tree Protection Ordinance (City of Escondido 2014).

Arborist's Statement

This report provides conclusions and recommendations based on an examination of the trees and surrounding site by ISA Certified Arborists. Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees.

No root crown excavations or investigations or internal probing was performed during the tree assessments. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed. It is recommended that any large tree proposed for preservation in an area that receives human use be thoroughly inspected for internal or subterranean decay by a qualified arborist before finalizing preservation plans.

Arborists cannot detect every condition that could possibly lead to the failure of a tree. Trees are living organisms that fail in ways not fully understood. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances or for a specified period. There are no guarantees that a tree's condition will not change over a short or long period due to weather or cultural or environmental conditions. Trees can be managed but not controlled.

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Arborist Report – Bear Valley Parkway, Escondido

7 REFERENCES

City of Escondido. 2012. City of Escondido General Plan. May 2012. <http://www.escondido.org/general-plan.aspx>.

City of Escondido. 2014. Escondido Municipal Code. <http://www.qcode.us/codes/escondido/>.

ISA (International Society of Arboriculture). 2000. *Guide for Plant Appraisal* (9th Edition).

Matheny and Clark. 1998. Trees and Development. A Technical Guide to Preservation of Trees During Land Development. ISBN: 1-881956-20-2. International Society of Arboriculture, Champaign, Illinois. www.isa-arbor.com 183.

Arborist Report – Bear Valley Parkway, Escondido

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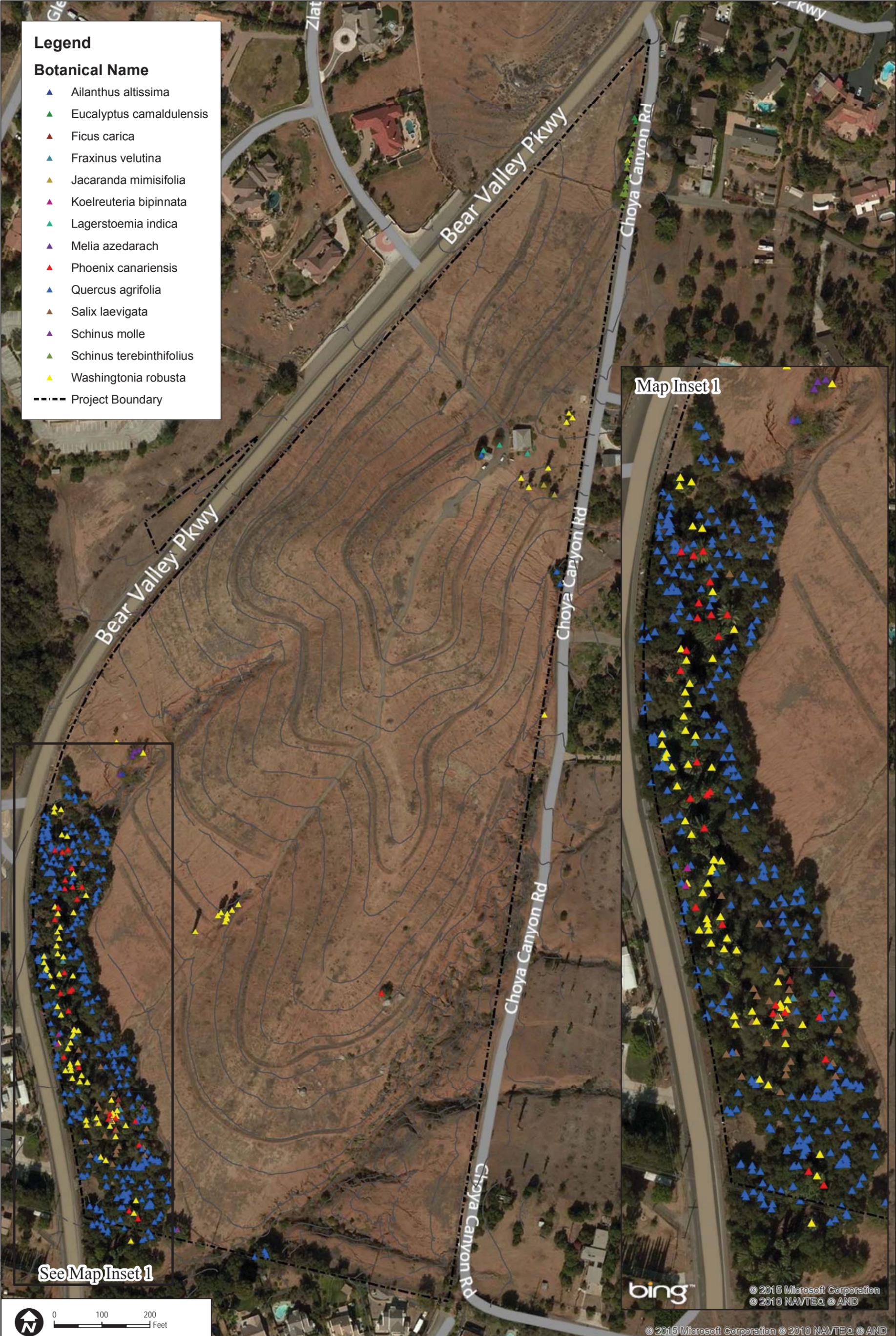
APPENDIX A

Tree Location Exhibit

Legend

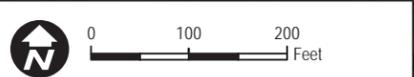
Botanical Name

- ▲ Ailanthus altissima
- ▲ Eucalyptus camaldulensis
- ▲ Ficus carica
- ▲ Fraxinus velutina
- ▲ Jacaranda mimosifolia
- ▲ Koelreuteria bipinnata
- ▲ Lagerstoemia indica
- ▲ Melia azedarach
- ▲ Phoenix canariensis
- ▲ Quercus agrifolia
- ▲ Salix laevigata
- ▲ Schinus molle
- ▲ Schinus terebinthifolius
- ▲ Washingtonia robusta
- Project Boundary



Map Inset 1

See Map Inset 1



APPENDIX B
Photograph Log

Photograph Log

Arborist Report – Bear Valley Project



Photograph 1: View of riparian woodland



Photograph 2: View of riparian woodland



Photograph 3: View of riparian woodland



Photograph 4: View of open ground and Mexican fan palms



Photograph 5: View of riparian oak woodland and open ground



Photograph 6: View of riparian oak woodland and open ground



Photograph 7: View of riparian oak woodland



Photograph 8: View of riparian oak woodland



Photograph 9: View of riparian woodland and surrounding open ground



Photograph 10: View of coast live oak and buildings



Photograph 11: View of riparian oak woodland



Photograph 12: View of riparian oak woodland

APPENDIX C

Tree Data Matrix

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
1	<i>Eucalyptus camaldulensis</i>	Red gum eucalyptus	1	13	13					50	20	Fair	Poor		Remove - Grading	1		6315084.04	1981608.96
2	<i>Eucalyptus camaldulensis</i>	Red gum eucalyptus	2	11.4018	11	3				30	20	Fair	Poor		Remove - Grading	1		6315086.96	1981601.22
3	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	5.19615	1	2	3	3	2	10	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315084.58	1981575.56
4	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	7.87401	6	2	3	3	2	10	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315081.62	1981555.47
5	<i>Schinus terebinthifolius</i>	Brazillian pepper	2	8.48528	6	6				12	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315076.03	1981540.07
6	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.32456	3	3	3	2	3	12	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315075.76	1981532.11
7	<i>Washingtonia robusta</i>	Mexican fan palm	1	16	16					40	12	Fair	Fair		Remove - Grading	1		6315069.55	1981520.75
8	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.08276	4	3	2	2	2	13	12	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315069.78	1981514.88
9	<i>Schinus terebinthifolius</i>	Brazillian pepper	2	7.2111	6	4				13	12	Poor	Poor		Remove - Grading	1	Multi-stemmed	6315067.82	1981503.89
10	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	4.47214	2	2	2	2	2	13	12	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315069.57	1981484.48
11	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	5.91608	3	3	3	2	2	13	12	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315065.21	1981471.39
12	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.85565	4	3	3	3	2	14	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315065.44	1981465.15
13	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.85565	4	3	3	3	2	14	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315065.11	1981454.38
14	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.85565	4	3	3	3	2	14	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315058.41	1981451.2
15	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.85565	4	3	3	3	2	14	16	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315064.46	1981449.83
16	<i>Schinus terebinthifolius</i>	Brazillian pepper	5	6.85565	4	3	3	3	2	12	14	Fair	Fair		Remove - Grading	1	Multi-stemmed	6315058.64	1981425.33
17	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					10	10	Fair	Fair		Remove - Grading	1		6314946.7	1980990.92
18	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					10	10	Fair	Fair		Remove - Grading	1		6314954.25	1980980.72
19	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					12	10	Fair	Fair		Remove - Grading	1		6314941.85	1980971.73
20	<i>Washingtonia robusta</i>	Mexican fan palm	1	17	17					35	10	Fair	Fair		Remove - Grading	1		6314904.21	1980876.49
21	<i>Jacaranda mimosifolia</i>	Jacaranda	4	10.3923	9	3	3	3		18	15	Fair	Fair		Remove - Grading	1		6314916.8	1980820.43
22	<i>Jacaranda mimosifolia</i>	Jacaranda	1	8.2	8.2					18	15	Fair	Fair		Remove - Grading	1		6314894.41	1980840.89
23	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					30	10	Fair	Fair		Remove - Grading	1		6314863.52	1980835.92
24	<i>Washingtonia robusta</i>	Mexican fan palm	1	16	16					8	9	Fair	Fair		Remove - Grading	1		6314847.1	1980854.8
25	<i>Lagerstoemia indica</i>	Lagerstoemia indica	3	7.07107	4	3	5			16	14	Fair	Fair		Remove - Grading	1		6314861.09	1980907.59
26	<i>Lagerstoemia indica</i>	Lagerstoemia indica	5	9.43398	4	5	4	4	4	16	16	Good	Fair		Remove - Grading	1		6314802.61	1980924.61
27	<i>Lagerstoemia indica</i>	Lagerstoemia indica	5	9.43398	4	5	4	4	4	16	16	Good	Fair		Remove - Grading	1		6314768.82	1980913.29
28	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					24	20	Good	Fair	Yes	Remove - Grading	2	Relocation candidate	6314764.59	1980904.36
29	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					9	8	Fair	Poor		Remove - Grading	1		6314920.59	1980657.95
30	<i>Quercus agrifolia</i>	Coast live oak	1	25.8	25.8					20	33	Good	Fair	Yes	Remove - Grading	2		6314922.76	1980659.09
31	<i>Quercus agrifolia</i>	Coast live oak	2	10.6301	8	7				18	16	Good	Fair	Yes	Remove - Grading	2		6314928.57	1980633.18
32	<i>Washingtonia robusta</i>	Mexican fan palm	1	8	8					7	8	Good	Fair		Remove - Grading	2		6314896.08	1980359.47
33	<i>Phoenix canariensis</i>	Canary island date palm	1	36	36					4	20	Good	Fair		Remove - Grading	2		6314555.32	1979776.07
34	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					10	10	Good	Good		Remove - Grading	2		6314256.98	1979962.48
35	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					20	12	Good	Good		Remove - Grading	2		6314243.72	1979951.31
36	<i>Washingtonia robusta</i>	Mexican fan palm	1	19	19					40	12	Good	Good		Remove - Grading	1		6314234.14	1979943.54
37	<i>Washingtonia robusta</i>	Mexican fan palm	1	19	19					25	12	Good	Good		Remove - Grading	2		6314232.88	1979936.58
38	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					23	12	Good	Good		Remove - Grading	1		6314232.89	1979933.1
39	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					23	12	Good	Good		Remove - Grading	2		6314229.46	1979926.69
40	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					23	12	Good	Good		Remove - Grading	2		6314220.63	1979946.47
41	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					23	12	Good	Good		Remove - Grading	2		6314214.85	1979940.28

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
42	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					28	12	Good	Good		Remove - Grading	1		6314166.95	1979905.99
43	<i>Washingtonia robusta</i>	Mexican fan palm	1	9	9					30	12	Good	Good		Remove - Grading	2		6314057.88	1980280.53
44	<i>Melia azedarach</i>	Chinaberry	3	14.0712	9	9	6			30	30	Good	Fair		Remove - Grading	1		6314049.92	1980286.25
45	<i>Melia azedarach</i>	Chinaberry	4	10.0995	5	5	6	4		30	30	Good	Fair		Remove - Grading	1		6314040.25	1980283.19
46	<i>Melia azedarach</i>	Chinaberry	5	15	10	8	6	4	3	18	30	Good	Fair		Remove - Grading	1		6314036.24	1980274.35
48	<i>Melia azedarach</i>	Chinaberry	2	10.3923	6	6			6	18	30	Good	Fair		Remove - Grading	1		6314009.83	1980235.99
49	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					12	18	Fair	Fair		Indirect - BVP	N/A		6313935.03	1980188.6
50	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					28	20	Fair	Fair		Indirect - BVP	N/A		6313917.12	1980179.23
51	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					28	20	Fair	Fair		Indirect - BVP	N/A		6313904.8	1980186.59
52	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					28	20	Fair	Fair		Indirect - BVP	N/A		6313916.23	1980189.06
53	<i>Quercus agrifolia</i>	Coast live oak	2	7.61577	7	3				30	15	Fair	Fair		Indirect - BVP	N/A		6313899.16	1980191.08
55	<i>Quercus agrifolia</i>	Coast live oak	2	14.1421	10	10				20	30	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313900.97	1980216.54
54	<i>Quercus agrifolia</i>	Coast live oak	2	5.65685	4	4				6	12	Fair	Fair		Indirect - BVP	N/A		6313904.86	1980217.76
56	<i>Quercus agrifolia</i>	Coast live oak	4	16.8819	12	10	4	5		25	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313897.52	1980228.89
57	<i>Quercus agrifolia</i>	Coast live oak	3	14.4568	8	8	9			30	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313893.28	1980230.99
47	<i>Ailanthus altissima</i>	Tree of heaven	4	5.56776	3	3	3	2		16	16	Poor	Fair		Remove - Grading	1		6314015.47	1980236.91
48	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					8	8	Good	Fair		Remove - Grading	2		6314002.57	1980302.33
59	<i>Washingtonia robusta</i>	Mexican fan palm	5	23.8537	10	10	9	12	12	20	30	Good	Fair		Remove - Bear Valley Parkway	1		6313886.87	1980161.82
60	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					14	12	Good	Fair		Remove - Bear Valley Parkway	1		6313873.55	1980166.96
61	<i>Washingtonia robusta</i>	Mexican fan palm	1	9	9					7	10	Good	Fair		Remove - Bear Valley Parkway	2		6313872.43	1980157.07
62	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					25	24	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313852.09	1980149.33
63	<i>Quercus agrifolia</i>	Coast live oak	2	8.48528	6	6				12	18	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313859.53	1980143.6
64	<i>Quercus agrifolia</i>	Coast live oak	2	13.4536	10	9				23	24	Good	Fair		Remove - Bear Valley Parkway	1		6313862.06	1980131.94
65	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					10	10	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313849.02	1980120.55
66	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					10	10	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313860.1	1980122.79
67	<i>Quercus agrifolia</i>	Coast live oak	2	4.24264	3	3				10	10	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313859.65	1980114.02
68	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					23	12	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313857.61	1980115.77
69	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					23	12	Poor	Poor		Remove - Bear Valley Parkway	1		6313855.98	1980108.9
70	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					28	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313861.5	1980110.47
71	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					22	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313862.41	1980103.89
72	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					23	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313859.22	1980100.76
73	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					15	12	Fair	Poor		Remove - Bear Valley Parkway	1		6313847.08	1980108.22
74	<i>Quercus agrifolia</i>	Coast live oak	3	16.7631	10	10	9			15	18	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313846.77	1980101.51
75	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					17	10	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313848.56	1980093.62
76	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					17	10	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313845.37	1980077.18
77	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	5	Fair	Fair		Indirect - BVP	N/A		6313868.86	1980084.57
78	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					16	5	Poor	Fair		Indirect - BVP	N/A		6313865.65	1980087.2
79	<i>Quercus agrifolia</i>	Coast live oak	2	21.9317	15	16				40	20	Poor	Poor		Encroachment - Bear Valley Parkway	1	Bees	6313867.73	1980085.65
80	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					12	8	Poor	Poor	Yes	Indirect - BVP	N/A		6313870.2	1980078.23
81	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					18	8	Fair	Fair		Indirect - BVP	N/A		6313864.92	1980077.38
82	<i>Phoenix canariensis</i>	Canary island date palm	1	18	18					6	20	Fair	Fair		Indirect - BVP	N/A		6313874.26	1980076
83	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					25	20	Fair	Fair		Preservation	N/A		6313889.64	1980085.64

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
84	<i>Phoenix canariensis</i>	Canary island date palm	1	19	19					10	20	Fair	Fair		Preservation	N/A		6313900.95	1980076.78
85	<i>Phoenix canariensis</i>	Canary island date palm	1	19	19					12	20	Fair	Fair		Preservation	N/A		6313889.49	1980071.29
86	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					20	12	Fair	Fair		Indirect - BVP	N/A		6313881.56	1980079.98
87	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					30	15	Fair	Fair		Preservation	N/A		6313887.07	1980060.91
88	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	4	Poor	Poor		Indirect - BVP	N/A		6313871.03	1980059.39
89	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	25	Good	Fair	Yes	Remove - Bear Valley Parkway	2		6313853.53	1980067.08
90	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					30	23	Fair	Fair		Remove - Bear Valley Parkway	1		6313853.21	1980064.76
91	<i>Quercus agrifolia</i>	Coast live oak	4	13.3791	8	4	3	9	3	24	20	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313857.53	1980052.95
92	<i>Quercus agrifolia</i>	Coast live oak	2	16.2788	12	11				28	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313848.38	1980040.48
93	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					30	14	Fair	Fair	Yes	Indirect - BVP	N/A		6313865.91	1980049.8
94	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					26	12	Fair	Fair	Yes	Indirect - BVP	N/A		6313877.02	1980047.82
95	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					22	8	Poor	Fair		Preservation	N/A		6313885.38	1980045.64
96	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					20	8	Fair	Fair	Yes	Indirect - BVP	N/A		6313863.93	1980033.85
97	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	8	Fair	Fair		Indirect - BVP	N/A		6313857.09	1980027.24
98	<i>Quercus agrifolia</i>	Coast live oak	1	17	17					30	45	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313862.58	1980027.77
99	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					20	20	Fair	Fair	Yes	Indirect - BVP	N/A		6313868.76	1980028.58
100	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					20	20	Fair	Fair	Yes	Indirect - BVP	N/A		6313870.96	1980027.71
101	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					20	12	Fair	Fair	Yes	Indirect - BVP	N/A		6313873.56	1980011.56
102	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					20	12	Fair	Fair	Yes	Preservation	N/A		6313898.64	1980031.09
103	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					35	12	Fair	Fair		Preservation	N/A		6313912.69	1980027.25
104	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	12	Fair	Fair		Preservation	N/A		6313912.83	1980018.6
105	<i>Phoenix canariensis</i>	Canary island date palm	2	24.7588	18	17				20	30	Fair	Fair		Preservation	N/A		6313895.51	1980013.43
106	<i>Quercus agrifolia</i>	Coast live oak	1	22	22					55	53	Fair	Fair		Preservation	N/A		6313908.8	1980009.91
107	<i>Phoenix canariensis</i>	Canary island date palm	1	36	36					18	20	Fair	Fair		Preservation	N/A		6313910.83	1979998.94
108	<i>Phoenix canariensis</i>	Canary island date palm	1	30	30					8	20	Fair	Fair		Preservation	N/A		6313894.09	1979995.39
109	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					12	10	Fair	Fair	Yes	Indirect - BVP	N/A		6313872.02	1980002.64
110	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	20	Fair	Fair	Yes	Indirect - BVP	N/A		6313866.26	1979994.29
111	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					18	20	Fair	Fair	Yes	Indirect - BVP	N/A		6313864.2	1979997.76
112	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					22	20	Fair	Fair	Yes	Preservation	N/A		6313884.68	1979996.96
113	<i>Quercus agrifolia</i>	Coast live oak	1	17	17					40	20	Fair	Fair	Yes	Preservation	N/A		6313873.65	1979979.85
114	<i>Washingtonia robusta</i>	Mexican fan palm	1	9	9					6	12	Fair	Fair		Preservation	N/A		6313873.95	1979957.97
115	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					70	12	Fair	Fair		Preservation	N/A		6313880.62	1979944.31
116	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					12	20	Fair	Fair		Preservation	N/A		6313880.71	1979956.43
117	<i>Phoenix canariensis</i>	Canary island date palm	2	45.2548	32	32				45	40	Fair	Fair		Indirect - BVP	N/A		6313873.33	1979931.78
118	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	13	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313842.71	1979978.81
119	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	12	Fair	Fair		Remove - Bear Valley Parkway	1		6313828.68	1979985.23
120	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					10	8	Poor	Fair		Remove - Bear Valley Parkway	1		6313834.74	1979972.68
121	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					30	20	Poor	Fair		Remove - Bear Valley Parkway	1		6313826.98	1979969.65
122	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					20	12	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313834.77	1979899.04
123	<i>Quercus agrifolia</i>	Coast live oak	2	14.4222	8	12				35	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313833.97	1979901.15
124	<i>Quercus agrifolia</i>	Coast live oak	2	4.47214	4	2				12	8	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313830.97	1979925.53
125	<i>Salix laevigata</i>	Red willow	1	20	20					30	30	Fair	Fair		Indirect - BVP	N/A		6313860.03	1979922.03

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
126	<i>Quercus agrifolia</i>	Coast live oak	2	10	8	6				12	10	Poor	Fair		Remove - Bear Valley Parkway	1		6313830.21	1979887.73
127	<i>Quercus agrifolia</i>	Coast live oak	2	10	8	6				14	10	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313828.61	1979882.42
128	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					14	10	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313841.96	1979852.17
129	<i>Quercus agrifolia</i>	Coast live oak	2	19.2094	15	12				35	30	Poor	Fair	Yes	Remove - Bear Valley Parkway	2		6313837.53	1979849.84
130	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					24	18	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313841.47	1979847.95
131	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					30	18	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313840.16	1979847.17
132	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	18	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313840.56	1979843.4
133	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					30	18	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313852.89	1979854.84
134	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					35	12	Fair	Fair		Indirect - BVP	N/A		6313851.43	1979854.15
135	<i>Washingtonia robusta</i>	Mexican fan palm	2	14.1421	10	10				30	20	Fair	Fair		Encroachment - Bear Valley Parkway	2		6313851.38	1979841.49
136	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					35	30	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313856	1979831.59
137	<i>Quercus agrifolia</i>	Coast live oak	2	12.7279	9	9				28	30	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313856.71	1979827.73
138	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					65	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313854.8	1979825.6
139	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					65	12	Fair	Fair		Indirect - BVP	N/A		6313856.57	1979830.86
140	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	8	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313852.1	1979818.43
141	<i>Quercus agrifolia</i>	Coast live oak	3	5.38516	4	3	2			20	12	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313845.19	1979814.18
142	<i>Quercus agrifolia</i>	Coast live oak	1	18	18					40	40	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313851.67	1979814.33
143	<i>Washingtonia robusta</i>	Mexican fan palm	1	16	16					65	12	Fair	Fair		Indirect - BVP	N/A		6313862.92	1979813.94
144	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	8	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313856.77	1979813.37
145	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					70	12	Fair	Fair		Indirect - BVP	N/A		6313882.84	1979817.19
146	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	24	Fair	Fair		Remove - Bear Valley Parkway	1		6313838.48	1979795.67
147	<i>Quercus agrifolia</i>	Coast live oak	3	21.5639	14	13	10			30	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313857.84	1979785.8
148	<i>Phoenix canariensis</i>	Canary island date palm	2	43.8634	32	30				20	30	Fair	Fair		Indirect - BVP	N/A		6313885.54	1979775.95
149	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					70	12	Fair	Fair		Indirect - BVP	N/A		6313869.25	1979790.66
150	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					35	20	Fair	Fair		Remove - Bear Valley Parkway	1		6313855.78	1979749.96
151	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	25	Fair	Fair		Remove - Bear Valley Parkway	1		6313861.3	1979753.03
152	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					16	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313872.65	1979755.92
153	<i>Washingtonia robusta</i>	Mexican fan palm	1	32	32					20	24	Fair	Fair		Indirect - BVP	N/A		6313879.12	1979748.9
154	<i>Washingtonia robusta</i>	Mexican fan palm	1	25	25					30	20	Fair	Fair		Indirect - BVP	N/A		6313886.8	1979731.88
155	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					16	30	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313874.42	1979736.3
156	<i>Quercus agrifolia</i>	Coast live oak	2	17.6918	13	12				25	30	Fair	Fair		Remove - Bear Valley Parkway	1		6313865.79	1979714.34
157	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					30	16	Fair	Fair		Remove - Bear Valley Parkway	1		6313867.77	1979694.58
158	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	8	Fair	Fair	Yes	Indirect - BVP	N/A		6313886.03	1979694.61
159	<i>Koelreuteria bipinnata</i>	Chinese flame tree	1	10	10					50	30	Poor	Fair		Encroachment - Bear Valley Parkway	2		6313881.9	1979691.42
160	<i>Washingtonia robusta</i>	Mexican fan palm	1	32	32					30	30	Good	Fair		Encroachment - Bear Valley Parkway	2		6313881.5	1979672.63
161	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					35	28	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313874.9	1979673.1
162	<i>Koelreuteria bipinnata</i>	Chinese flame tree	1	11	11					45	20	Fair	Fair		Remove - Bear Valley Parkway	1		6313879.96	1979669.99
163	<i>Washingtonia robusta</i>	Mexican fan palm	1	16	16					30	12	Fair	Fair		Preservation	N/A		6313912.6	1979691.81
164	<i>Washingtonia robusta</i>	Mexican fan palm	1	16	16					30	12	Fair	Fair		Indirect - BVP	N/A		6313910.9	1979687.15
165	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					60	12	Fair	Fair		Preservation	N/A		6313913.73	1979701.44
166	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					60	12	Fair	Fair		Preservation	N/A		6313914.75	1979700.96
167	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					25	12	Fair	Fair		Preservation	N/A		6313923.02	1979699.71

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
168	<i>Quercus agrifolia</i>	Coast live oak	1	25	25					30	30	Fair	Fair		Preservation	N/A		6313916.99	1979685.07
169	<i>Salix laevigata</i>	Red willow	1	13	13					45	30	Fair	Fair		Preservation	N/A		6313923.2	1979657.4
170	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					30	28	Fair	Fair		Preservation	N/A		6313935.14	1979646.11
171	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					75	12	Fair	Fair		Preservation	N/A		6313941.56	1979591.03
172	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					75	12	Fair	Fair		Indirect - BVP	N/A		6313926.23	1979592.52
173	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					75	12	Fair	Fair		Indirect - BVP	N/A		6313910.68	1979599.28
174	<i>Phoenix canariensis</i>	Canary island date palm	1	40	40					24	30	Fair	Fair		Indirect - BVP	N/A		6313924.2	1979622.11
175	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					25	12	Fair	Fair		Indirect - BVP	N/A		6313921.91	1979631.42
176	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					70	12	Fair	Fair		Indirect - BVP	N/A		6313905.15	1979628.92
177	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					70	12	Fair	Fair		Indirect - BVP	N/A		6313906.91	1979622.77
178	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					40	12	Fair	Fair		Indirect - BVP	N/A		6313907.76	1979615.09
179	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					65	12	Fair	Fair		Preservation	N/A		6313929.93	1979605.43
180	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					65	12	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313896.12	1979615.2
181	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					10	25	Fair	Fair		Encroachment - Bear Valley Parkway	2		6313892.01	1979643.13
182	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					70	12	Fair	Fair		Indirect - BVP	N/A		6313906.61	1979672.59
183	<i>Washingtonia robusta</i>	Mexican fan palm	1	11	11					70	12	Fair	Fair		Indirect - BVP	N/A		6313900.74	1979660.87
184	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					24	8	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313879.15	1979648.4
185	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					14	6	Fair	Fair		Remove - Bear Valley Parkway	1		6313879.33	1979642.81
186	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					24	12	Fair	Fair		Remove - Bear Valley Parkway	1		6313877.56	1979638.73
187	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					28	16	Fair	Fair		Remove - Bear Valley Parkway	1		6313876.76	1979625.69
188	<i>Quercus agrifolia</i>	Coast live oak	3	9.43398	9	2	2			12	12	Fair	Poor		Remove - Bear Valley Parkway	1		6313883.04	1979603.18
189	<i>Quercus agrifolia</i>	Coast live oak	2	16.9706	12	12				25	25	Fair	Fair		Remove - Bear Valley Parkway	1		6313893.89	1979566.54
190	<i>Quercus agrifolia</i>	Coast live oak	2	15.2643	13	8				30	16	Fair	Fair		Remove - Bear Valley Parkway	1		6313895.18	1979548.39
191	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					20	14	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313906.67	1979564.94
192	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					40	20	Fair	Fair		Indirect - BVP	N/A		6313922.18	1979572.19
193	<i>Quercus agrifolia</i>	Coast live oak	2	18.3848	13	13				40	30	Fair	Fair		Indirect - BVP	N/A		6313932.58	1979536.45
194	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					38	28	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313925.8	1979528.03
195	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					32	20	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313928.09	1979515.67
196	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					20	20	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313919.35	1979520.18
197	<i>Quercus agrifolia</i>	Coast live oak	3	13.1529	10	8	3			20	20	Fair	Fair		Remove - Bear Valley Parkway	1		6313911.7	1979526.06
198	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					65	12	Fair	Fair		Indirect - BVP	N/A		6313940.38	1979500.47
199	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					65	12	Fair	Fair		Indirect - BVP	N/A		6313938.84	1979511.11
200	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					30	25	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313905.32	1979512.98
201	<i>Quercus agrifolia</i>	Coast live oak	2	17.0294	13	11				35	35	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313906.53	1979509.3
202	<i>Salix laevigata</i>	Red willow	1	12	12					5	30	Fair	Fair		Indirect - BVP	N/A		6313940.89	1979465.69
203	<i>Quercus agrifolia</i>	Coast live oak	1	36	36					45	50	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313936.71	1979466.73
204	<i>Salix laevigata</i>	Red willow	1	32	32					25	35	Fair	Fair		Remove - Bear Valley Parkway	2		6313929.21	1979464.15
205	<i>Salix laevigata</i>	Red willow	1	15	15					30	35	Fair	Fair		Indirect - BVP	N/A		6313947.67	1979436.89
206	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					38	35	Fair	Fair	Yes	Preservation	N/A		6313965.23	1979430.23
207	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					35	30	Fair	Fair		Indirect - BVP	N/A		6313960.14	1979432.94
208	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					6	20	Fair	Poor		Indirect - BVP	N/A		6313961.78	1979429.9
209	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					40	25	Fair	Fair	Yes	Preservation	N/A		6313965.2	1979426.8

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
210	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					70	12	Fair	Fair		Preservation	N/A		6313969.55	1979433.25
211	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	28	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313943.74	1979416.99
212	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					65	12	Fair	Fair		Preservation	N/A		6313980.14	1979426.39
213	<i>Salix laevigata</i>	Red willow	3	17	12	9	8			35	40	Fair	Fair		Preservation	N/A		6313994.83	1979418.03
214	<i>Quercus agrifolia</i>	Coast live oak	2	14.2127	11	9				30	28	Fair	Poor	Yes	Preservation	N/A		6314002.37	1979394.83
215	<i>Quercus agrifolia</i>	Coast live oak	3	22.561	14	13	12			37	45	Fair	Fair	Yes	Indirect - BVP	N/A		6313979.7	1979393.53
216	<i>Quercus agrifolia</i>	Coast live oak	2	10.6301	8	7				20	12	Fair	Fair	Yes	Indirect - BVP	N/A		6313984.02	1979372.49
217	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					22	18	Fair	Fair	Yes	Indirect - BVP	N/A		6313981.63	1979375.39
218	<i>Quercus agrifolia</i>	Coast live oak	3	4.89898	4	2	2			16	12	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313941.47	1979397.22
219	<i>Quercus agrifolia</i>	Coast live oak	4	7.07107	4	4	3	3		16	15	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313934.81	1979392.9
220	<i>Quercus agrifolia</i>	Coast live oak	2	7.2111	6	4				16	15	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313930.45	1979396.45
221	<i>Quercus agrifolia</i>	Coast live oak	2	7.28011	7	2	0	0	0	16	18	Fair	Fair	Yes	Remove - Bear Valley Parkway	2		6313947.18	1979331.01
222	<i>Quercus agrifolia</i>	Coast live oak	5	23.8118	14	9	15	4	7	30	36	Fair	Fair		Remove - Bear Valley Parkway	1		6313945.98	1979329.83
223	<i>Quercus agrifolia</i>	Coast live oak	2	3.16228	3	1				12	8	Fair	Fair		Encroachment - Bear Valley Parkway	1		6313960.86	1979328.55
224	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					24	8	Fair	Fair	Yes	Encroachment - Bear Valley Parkway	2		6313960.99	1979322.63
225	<i>Quercus agrifolia</i>	Coast live oak	2	3.60555	3	2				12	8	Poor	Fair	Yes	Preservation	N/A		6313970.62	1979321.26
226	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					18	16	Poor	Fair		Preservation	N/A		6313973.53	1979307.18
227	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	16	Fair	Fair		Preservation	N/A		6313983.46	1979301.6
228	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					24	16	Fair	Fair	Yes	Preservation	N/A		6313995.83	1979297.58
229	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					18	8	Fair	Fair		Preservation	N/A		6314010.71	1979303.42
230	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					20	8	Fair	Fair	Yes	Preservation	N/A		6314010.27	1979302.94
231	<i>Quercus agrifolia</i>	Coast live oak	4	34.4964	25	12	14	15		35	40	Good	Fair	Yes	Preservation	N/A		6314010.5	1979327.41
232	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	25	Fair	Fair	Yes	Preservation	N/A		6314022.4	1979341.05
233	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					20	12	Fair	Fair		Preservation	N/A		6314017.21	1979328.1
235	<i>Phoenix canariensis</i>	Canary island date palm	2	45.9674	32	33				25	40	Fair	Fair		Preservation	N/A		6314028.94	1979321.18
234	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					35	20	Fair	Fair		Preservation	N/A		6314011.81	1979328.04
236	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					30	12	Fair	Fair		Preservation	N/A		6314039.06	1979315.85
237	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					20	25	Fair	Fair		Preservation	N/A		6314047.43	1979304.74
238	<i>Quercus agrifolia</i>	Coast live oak	2	4.24264	3	3				12	8	Poor	Fair	Yes	Preservation	N/A		6314024.42	1979346.34
239	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	6	Poor	Fair	Yes	Preservation	N/A		6314026.16	1979349.22
240	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	6	Fair	Fair		Preservation	N/A		6314024.57	1979352.41
241	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					28	8	Fair	Fair		Preservation	N/A		6314022.84	1979354.46
242	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					36	22	Fair	Fair	Yes	Preservation	N/A		6314017.96	1979352.33
243	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					24	16	Fair	Fair	Yes	Preservation	N/A		6314013.42	1979351.78
244	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	10	Fair	Fair		Preservation	N/A		6314003.8	1979350.01
245	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	10	Fair	Fair		Preservation	N/A		6314002.57	1979346.41
246	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					28	16	Fair	Fair	Yes	Preservation	N/A		6314018.12	1979360.17
247	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					20	8	Poor	Poor		Preservation	N/A		6314027.05	1979359.57
248	<i>Quercus agrifolia</i>	Coast live oak	3	10.4881	9	5	2			38	35	Fair	Fair	Yes	Preservation	N/A		6314030.19	1979361.44
249	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					40	45	Fair	Fair	Yes	Preservation	N/A		6314027.56	1979348.88
250	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					13	8	Fair	Fair	Yes	Preservation	N/A		6314017.77	1979372.88
251	<i>Quercus agrifolia</i>	Coast live oak	2	12.8062	8	10				30	24	Fair	Fair	Yes	Preservation	N/A		6314015.43	1979385.94

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
252	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					35	18	Fair	Fair	Yes	Preservation	N/A		6314026.78	1979391.77
253	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					28	18	Fair	Fair		Preservation	N/A		6314035.14	1979384.74
254	<i>Quercus agrifolia</i>	Coast live oak	1	24	24					38	40	Fair	Fair		Preservation	N/A		6314052.39	1979370.63
255	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					24	12	Fair	Fair	Yes	Preservation	N/A		6314066.54	1979382.96
256	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					30	24	Fair	Fair		Preservation	N/A		6314075.17	1979374.25
257	<i>Quercus agrifolia</i>	Coast live oak	1	22	22					40	33	Fair	Fair	Yes	Preservation	N/A		6314077.05	1979355.38
258	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					35	20	Fair	Fair	Yes	Preservation	N/A		6314072.06	1979352.93
259	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					18	8	Fair	Fair	Yes	Preservation	N/A		6314056.08	1979344.01
260	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					45	30	Fair	Fair	Yes	Preservation	N/A		6314072.51	1979338.89
261	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	8	Fair	Fair		Preservation	N/A		6314075.58	1979336.81
262	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	8	Fair	Fair	Yes	Preservation	N/A		6314075.38	1979333.29
263	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					22	14	Fair	Fair	Yes	Preservation	N/A		6314075.62	1979329.92
264	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					22	14	Fair	Fair	Yes	Preservation	N/A		6314067.83	1979331.78
265	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					22	14	Fair	Fair	Yes	Preservation	N/A		6314067.13	1979331.07
266	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					22	14	Fair	Fair	Yes	Preservation	N/A		6314065.65	1979329.3
267	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					16	12	Fair	Fair		Preservation	N/A		6314043	1979342.12
268	<i>Quercus agrifolia</i>	Coast live oak	3	20.7123	14	13	8			33	40	Fair	Fair	Yes	Preservation	N/A		6314098.34	1979390.2
269	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					10	8	Fair	Fair		Preservation	N/A		6314111.37	1979378.7
270	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					10	8	Fair	Fair		Preservation	N/A		6314108.25	1979351.52
271	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	32	Fair	Fair		Preservation	N/A		6314110.22	1979341.32
272	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					23	24	Fair	Fair		Preservation	N/A		6314095.28	1979314.7
273	<i>Quercus agrifolia</i>	Coast live oak	2	14.2127	11	9				23	24	Fair	Fair		Preservation	N/A		6314095.49	1979314.44
274	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					15	8	Fair	Fair	Yes	Preservation	N/A		6314091.32	1979305.67
275	<i>Quercus agrifolia</i>	Coast live oak	2	14.8661	10	11				18	24	Fair	Fair		Preservation	N/A		6314082.21	1979298.1
276	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					35	40	Fair	Fair	Yes	Preservation	N/A		6314069.27	1979279.04
277	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					24	27	Fair	Fair		Preservation	N/A		6314075.2	1979270.38
278	<i>Quercus agrifolia</i>	Coast live oak	2	16.9706	12	12				24	27	Fair	Fair	Yes	Preservation	N/A		6314076.09	1979267.31
279	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					24	8	Fair	Fair	Yes	Preservation	N/A		6314061.83	1979263.22
280	<i>Quercus agrifolia</i>	Coast live oak	2	8.544	8	3				22	20	Fair	Fair	Yes	Preservation	N/A		6314055.32	1979259.78
281	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					75	12	Fair	Fair		Preservation	N/A		6314032.8	1979258.22
282	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	20	Fair	Fair	Yes	Preservation	N/A		6314018.75	1979285.58
283	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					35	20	Fair	Fair	Yes	Preservation	N/A		6313984	1979275.43
284	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					35	20	Fair	Fair	Yes	Preservation	N/A		6313985.36	1979281.61
285	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	12	Fair	Fair	Yes	Preservation	N/A		6313975.18	1979281.38
286	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					20	12	Fair	Fair	Yes	Preservation	N/A		6313971.33	1979289.07
287	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	38	Fair	Fair		Preservation	N/A		6313971.38	1979292.53
288	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					20	38	Fair	Fair		Preservation	N/A		6313962.36	1979296.9
289	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					16	12	Fair	Fair	Yes	Preservation	N/A		6313953.27	1979290.47
290	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					20	18	Fair	Fair	Yes	Preservation	N/A		6313951.84	1979294.47
291	<i>Quercus agrifolia</i>	Coast live oak	2	17.0294	13	11				30	28	Fair	Fair	Yes	Preservation	N/A		6314122.5	1979283.45
292	<i>Schinus molle</i>	Peruvian pepper	2	42.9418	38	20				30	40	Fair	Fair		Preservation	N/A		6314129.89	1979282.05
293	<i>Quercus agrifolia</i>	Coast live oak	2	10	8	6				28	30	Fair	Fair		Preservation	N/A		6314291.16	1979224.14

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
294	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					20	25	Fair	Fair	Yes	Preservation	N/A		6314311.63	1979237.28
295	<i>Quercus agrifolia</i>	Coast live oak	1	22	22					38	45	Fair	Fair	Yes	Preservation	N/A		6314314.33	1979233.45
296	<i>Quercus agrifolia</i>	Coast live oak	1	19	19					30	38	Fair	Fair	Yes	Preservation	N/A		6314315.87	1979227.24
297	<i>Quercus agrifolia</i>	Coast live oak	2	16.4012	13	10				24	30	Fair	Fair		Preservation	N/A		6314090.19	1979421.82
298	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					28	30	Fair	Fair	Yes	Preservation	N/A		6314080.84	1979425.57
299	<i>Quercus agrifolia</i>	Coast live oak	3	17.3781	11	10	9			30	34	Fair	Fair		Preservation	N/A		6314062.28	1979422.3
300	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					34	36	Fair	Fair	Yes	Preservation	N/A		6314056.28	1979416.71
301	<i>Quercus agrifolia</i>	Coast live oak	3	5.83095	4	3	3			20	16	Fair	Fair	Yes	Preservation	N/A		6314056.35	1979411.78
302	<i>Quercus agrifolia</i>	Coast live oak	2	5.83095	5	3				20	16	Fair	Fair	Yes	Preservation	N/A		6314052.79	1979416.53
303	<i>Quercus agrifolia</i>	Coast live oak	2	12.8062	10	8				20	26	Fair	Fair		Preservation	N/A		6314049.51	1979413
304	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					20	26	Fair	Fair	Yes	Preservation	N/A		6314046.84	1979410.17
305	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					20	12	Fair	Fair	Yes	Preservation	N/A		6314036.05	1979411.7
306	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					18	12	Fair	Fair	Yes	Preservation	N/A		6314036.79	1979413.03
307	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	25	Fair	Fair		Preservation	N/A		6314040.64	1979412.16
308	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					10	12	Fair	Fair		Preservation	N/A		6314039.62	1979421.46
309	<i>Quercus agrifolia</i>	Coast live oak	2	13.8924	12	7				45	40	Fair	Fair		Preservation	N/A		6314023.29	1979411.83
310	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					25	40.02	Fair	Fair	Yes	Preservation	N/A		6314008.28	1979412.88
311	<i>Salix laevigata</i>	Red willow	1	9	9					35	14	Fair	Fair		Preservation	N/A		6314001.42	1979438.97
312	<i>Salix laevigata</i>	Red willow	2	13.4536	9	10				35	30	Fair	Fair		Preservation	N/A		6314002.4	1979447.07
313	<i>Salix laevigata</i>	Red willow	3	13.3041	7	8	8			35	50	Fair	Fair		Preservation	N/A		6314007.39	1979455.35
314	<i>Phoenix canariensis</i>	Canary island date palm	2	50.9117	36	36				18	45	Fair	Fair		Preservation	N/A		6314049.68	1979458.08
315	<i>Salix laevigata</i>	Red willow	1	18	18					45	40	Fair	Fair		Preservation	N/A		6314058.61	1979453.51
316	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					25	20	Fair	Fair	Yes	Preservation	N/A		6314055.37	1979449.57
317	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					30	20	Fair	Fair	Yes	Preservation	N/A		6314067.34	1979444.97
318	<i>Salix laevigata</i>	Red willow	1	11	11					38	25	Fair	Fair		Preservation	N/A		6314061.58	1979437.33
319	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					30	18	Fair	Fair		Preservation	N/A		6314060.89	1979429.36
320	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					18	6	Fair	Fair		Preservation	N/A		6314066.1	1979419.81
321	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					28	20	Fair	Fair	Yes	Preservation	N/A		6314073.45	1979428.71
322	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					28	18	Fair	Fair	Yes	Preservation	N/A		6314073.86	1979430.33
323	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					20	16	Fair	Fair	Yes	Preservation	N/A		6314075.8	1979430.87
324	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					38	20	Fair	Fair	Yes	Preservation	N/A		6314086.71	1979427.5
325	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					5	6	Poor	Poor		Preservation	N/A		6314092.63	1979425.72
326	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					20	6	Fair	Fair	Yes	Preservation	N/A		6314056.27	1979478.94
327	<i>Salix laevigata</i>	Red willow	1	12	12					30	25	Fair	Fair		Indirect - Grading	N/A		6314065.81	1979493.86
328	<i>Quercus agrifolia</i>	Coast live oak	2	16.4012	13	10				20	24	Fair	Fair		Encroachment - Grading	1		6314070.43	1979510.88
329	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					22	20	Fair	Fair		Encroachment - Grading	1		6314073.31	1979515.35
330	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					24	24	Fair	Fair		Indirect - Grading	N/A		6314060.74	1979520.38
331	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					20	12	Fair	Fair	Yes	Preservation	N/A		6314059.53	1979509.66
332	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					40	45	Fair	Fair	Yes	Preservation	N/A		6314048.92	1979516.2
333	<i>Quercus agrifolia</i>	Coast live oak	2	8.48528	6	6				12	10	Poor	Poor		Preservation	N/A		6314046.08	1979507.6
334	<i>Phoenix canariensis</i>	Canary island date palm	1	38	38					10	20	Poor	Poor		Preservation	N/A		6314042.12	1979509.46
335	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					38	22	Poor	Poor	Yes	Preservation	N/A		6314036.53	1979538.58

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
336	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					25	1	Fair	Fair		Encroachment - Grading	1	6314063.09	1979531.24	
337	<i>Schinus molle</i>	Peruvian pepper	1	42	42					45	50	Fair	Fair		Encroachment - Grading	1	6314057.62	1979538.77	
338	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					65	12	Fair	Fair		Preservation	N/A	6314021.85	1979500.27	
339	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					12	30	Fair	Fair		Preservation	N/A	6314014.59	1979516.96	
340	<i>Fraxinus velutina</i>	Arizona ash	1	12	12					50	30	Fair	Fair		Preservation	N/A	6314010.73	1979532.85	
341	<i>Washingtonia robusta</i>	Mexican fan palm	1	10	10					12	10	Fair	Fair		Preservation	N/A	6314003.78	1979530.53	
342	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					12	10	Fair	Fair		Preservation	N/A	6314002.37	1979519.13	
343	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					65	12	Fair	Fair		Preservation	N/A	6313996.29	1979521.3	
344	<i>Salix laevigata</i>	Red willow	1	14	14					30	20	Fair	Fair		Preservation	N/A	6313981.58	1979529.06	
345	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					3	12	Fair	Fair		Preservation	N/A	6313993.84	1979508.56	
346	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					25	18	Fair	Fair		Preservation	N/A	6314000.47	1979515.53	
347	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					20	12	Fair	Fair		Preservation	N/A	6313994.63	1979525.58	
348	<i>Phoenix canariensis</i>	Canary island date palm	1	38	38					12	12	Fair	Fair		Preservation	N/A	6313989.14	1979524.27	
349	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					65	12	Fair	Fair		Preservation	N/A	6313960.61	1979516.38	
350	<i>Salix laevigata</i>	Red willow	1	32	32					20	25	Fair	Fair		Preservation	N/A	6313961	1979503.86	
351	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					12	10	Fair	Fair		Preservation	N/A	6313965.97	1979504.68	
352	<i>Phoenix canariensis</i>	Canary island date palm	1	36	36					12	18	Fair	Fair		Preservation	N/A	6313985.92	1979513.81	
353	<i>Salix laevigata</i>	Red willow	1	32	32					55	40	Fair	Fair		Preservation	N/A	6313991.55	1979510.17	
354	<i>Washingtonia robusta</i>	Mexican fan palm	2	21.2132	15	15				30	24	Fair	Fair		Preservation	N/A	6313988.7	1979499	
355	<i>Phoenix canariensis</i>	Canary island date palm	1	36	36					18	28	Fair	Fair		Preservation	N/A	6314000.6	1979491.42	
356	<i>Salix laevigata</i>	Red willow	1	18	18					30	25	Fair	Fair		Preservation	N/A	6314001.86	1979489.72	
357	<i>Washingtonia robusta</i>	Mexican fan palm	1	18	18					12	12	Fair	Fair		Preservation	N/A	6314001.04	1979476.89	
358	<i>Salix laevigata</i>	Red willow	1	11	11					20	30	Fair	Fair		Preservation	N/A	6313978.19	1979478.1	
359	<i>Salix laevigata</i>	Red willow	1	15	15					45	28	Fair	Fair		Preservation	N/A	6313966.46	1979535.47	
360	<i>Salix laevigata</i>	Red willow	1	10	10					12	10	Fair	Fair		Preservation	N/A	6313962.28	1979544.36	
361	<i>Salix laevigata</i>	Red willow	1	25	25					60	30	Fair	Fair		Preservation	N/A	6314005.62	1979542.85	
362	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					20	12	Fair	Fair		Preservation	N/A	6313991.88	1979552.34	
363	<i>Salix laevigata</i>	Red willow	1	18	18					15	15	Fair	Fair		Preservation	N/A	6313995.11	1979565.55	
364	<i>Ficus carica</i>	Fig tree	1	8	8					30	20	Fair	Fair		Preservation	N/A	6314006.29	1979554.39	
365	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					34	18	Fair	Fair		Preservation	N/A	6314029.1	1979566.1	
366	<i>Quercus agrifolia</i>	Coast live oak	2	19.2094	12	15				30	50	Fair	Fair		Preservation	N/A	6314023.92	1979586.03	
367	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					25	18	Fair	Fair		Encroachment - Grading	1	6314048.64	1979558.59	
368	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					40	15	Fair	Fair		Preservation	N/A	6313974.81	1979566.79	
369	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					35	15	Fair	Fair		Preservation	N/A	6313992.32	1979579.57	
370	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					35	20	Fair	Fair		Preservation	N/A	6314008.77	1979600.66	
371	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					35	30	Fair	Fair		Preservation	N/A	6314009.21	1979585.59	
372	<i>Quercus agrifolia</i>	Coast live oak	2	13.4536	10	9				30	40	Fair	Fair		Indirect - Grading	N/A	6314013.87	1979623.86	
373	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					30	28	Fair	Fair		Preservation	N/A	6314004.07	1979613.9	
374	<i>Quercus agrifolia</i>	Coast live oak	1	36	36					40	60	Fair	Fair		Preservation	N/A	6313980	1979623.18	
375	<i>Salix laevigata</i>	Red willow	1	12	12					14	15	Fair	Fair		Preservation	N/A	6313969.45	1979623.2	
376	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					14	8	Fair	Fair		Preservation	N/A	6313997.75	1979633.92	
377	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					30	24	Fair	Fair		Preservation	N/A	6313998.04	1979624.58	

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
378	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					30	24	Fair	Fair		Indirect - Grading	N/A		6314025.39	1979608.51
379	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					30	24	Fair	Fair		Encroachment - Grading	1		6314028.18	1979619.63
380	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					35	22	Fair	Fair		Remove - Grading	1		6314038.77	1979639.5
381	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					28	16	Fair	Fair		Encroachment - Grading	1		6314020	1979650.32
382	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					32	18	Fair	Fair		Encroachment - Grading	1		6314021.17	1979652.52
383	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					32	28	Fair	Fair		Encroachment - Grading	1		6314019.74	1979664.83
384	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					14	8	Fair	Fair		Indirect - Grading	N/A		6314014.03	1979660.81
385	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					25	12	Fair	Fair		Indirect - Grading	N/A		6314011.13	1979649.75
386	<i>Quercus agrifolia</i>	Coast live oak	2	5.65685	4	4				20	12	Fair	Fair		Indirect - Grading	N/A		6313995.74	1979654.46
387	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					14	8	Fair	Fair		Indirect - Grading	N/A		6314000.12	1979648.23
388	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					22	14	Fair	Fair		Preservation	N/A		6313986.62	1979646.78
389	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					35	28	Fair	Fair		Preservation	N/A		6313965.11	1979650.46
390	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					12	14	Fair	Fair		Indirect - Grading	N/A		6313988.42	1979683.08
391	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					30	30	Fair	Fair		Indirect - Grading	N/A		6313987.69	1979691.05
392	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					14	8	Fair	Fair		Preservation	N/A		6313976.52	1979680.28
393	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					38	32	Fair	Fair		Preservation	N/A		6313974.87	1979688.74
394	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	22	Fair	Fair		Preservation	N/A		6313972.27	1979682.01
395	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					45	20	Fair	Fair		Preservation	N/A		6313961.93	1979675.76
396	<i>Quercus agrifolia</i>	Coast live oak	2	11.3137	8	8				30	28	Fair	Fair		Preservation	N/A		6313945.37	1979679.21
397	<i>Quercus agrifolia</i>	Coast live oak	4	28.5132	14	14	14	15		28	35	Fair	Fair		Preservation	N/A		6313973.09	1979694.42
398	<i>Quercus agrifolia</i>	Coast live oak	3	21.6564	15	10	12			30	30	Poor	Poor		Indirect - Grading	N/A		6313978.28	1979714.83
399	<i>Quercus agrifolia</i>	Coast live oak	1	22	22					45	50	Poor	Poor		Preservation	N/A		6313951.92	1979739.18
400	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					20	20	Poor	Poor		Indirect - BVP	N/A		6313902.32	1979739.85
401	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					30	20	Fair	Fair		Preservation	N/A		6313941.09	1979755.59
402	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					12	20	Fair	Fair		Preservation	N/A		6313952.79	1979759.9
403	<i>Quercus agrifolia</i>	Coast live oak	3	3	2	1	2			10	6	Fair	Fair		Preservation	N/A		6313959.04	1979765.74
404	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					30	20	Fair	Fair		Preservation	N/A		6313936.52	1979774.59
405	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					20	20	Fair	Fair		Preservation	N/A		6313944.61	1979778.83
406	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					35	40	Fair	Fair		Preservation	N/A		6313930.91	1979786.08
407	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					20	20	Fair	Fair		Preservation	N/A		6313909.5	1979784.08
408	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					20	20	Fair	Fair		Preservation	N/A		6313905.6	1979780.39
409	<i>Quercus agrifolia</i>	Coast live oak	3	16.7929	13	8	7			25	20	Fair	Fair		Preservation	N/A		6313943.88	1979803.35
410	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					40	30	Fair	Fair		Preservation	N/A		6313938.05	1979802.28
411	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					16	8	Fair	Fair		Preservation	N/A		6313929.64	1979808.09
412	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					60	12	Fair	Fair		Preservation	N/A		6313911.38	1979813.54
413	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					25	25	Fair	Fair		Preservation	N/A		6313893.37	1979820.14
414	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					24	25	Fair	Fair		Preservation	N/A		6313933.6	1979811.66
415	<i>Quercus agrifolia</i>	Coast live oak	2	10.7703	10	4				35	20	Fair	Fair		Preservation	N/A		6313938.14	1979812.28
416	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					20	18	Fair	Fair		Preservation	N/A		6313936.32	1979826.02
417	<i>Quercus agrifolia</i>	Coast live oak	3	9.38083	6	6	4			20	22	Fair	Fair		Preservation	N/A		6313932.65	1979836.53
418	<i>Quercus agrifolia</i>	Coast live oak	2	14.8661	10	11				28	30	Fair	Fair		Preservation	N/A		6313933.15	1979838.67
419	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	12	Fair	Fair		Preservation	N/A		6313926.04	1979825.68

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
420	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					45	40	Fair	Fair		Preservation	N/A		6313906.54	1979851.96
421	<i>Fraxinus velutina</i>	Arizona ash	1	10	10					45	20	Fair	Fair		Preservation	N/A		6313890.79	1979844.08
422	<i>Washingtonia robusta</i>	Mexican fan palm	2	16.4012	13	10				45	12	Fair	Fair		Preservation	N/A		6313891.95	1979852.5
423	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					75	12	Fair	Fair		Indirect - BVP	N/A		6313879.64	1979858.81
424	<i>Washingtonia robusta</i>	Mexican fan palm	1	13	13					75	12	Fair	Fair		Preservation	N/A		6313877.49	1979875.92
425	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					75	12	Fair	Fair		Preservation	N/A		6313879.09	1979905.33
426	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					55	12	Fair	Fair		Preservation	N/A		6313884.64	1979915.84
427	<i>Washingtonia robusta</i>	Mexican fan palm	1	15	15					55	12	Fair	Fair		Preservation	N/A		6313882.76	1979891.36
428	<i>Quercus agrifolia</i>	Coast live oak	2	19.105	14	13				30	25	Fair	Fair		Preservation	N/A		6313902.61	1979878.78
429	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					30	20	Fair	Fair		Preservation	N/A		6313905.41	1979877.63
430	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					8	6	Poor	Poor		Preservation	N/A		6313917.56	1979852.61
431	<i>Quercus agrifolia</i>	Coast live oak	1	10	10					14	4	Poor	Poor		Preservation	N/A		6313923.36	1979864.77
432	<i>Quercus agrifolia</i>	Coast live oak	5	24.779	14	15	11	6	6	30	35	Poor	Poor		Preservation	N/A		6313927.14	1979860.13
433	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					30	16	Poor	Poor		Preservation	N/A		6313920.27	1979865.52
434	<i>Quercus agrifolia</i>	Coast live oak	2	3.16228	3	1				16	12	Fair	Fair		Preservation	N/A		6313914.9	1979899.65
435	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					20	8	Fair	Fair		Preservation	N/A		6313900.53	1979907.82
436	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					20	8	Fair	Fair		Preservation	N/A		6313910.04	1979914.6
437	<i>Quercus agrifolia</i>	Coast live oak	1	20	20					45	55	Fair	Fair		Preservation	N/A		6313917.08	1979923.32
438	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					24	18	Fair	Fair		Preservation	N/A		6313920.84	1979933.8
439	<i>Quercus agrifolia</i>	Coast live oak	1	16	16					38	40	Fair	Fair		Preservation	N/A		6313930.47	1979926.39
440	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					16	12	Fair	Fair		Preservation	N/A		6313912.71	1979946.52
441	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					35	25	Fair	Fair		Preservation	N/A		6313931.26	1979944.26
442	<i>Quercus agrifolia</i>	Coast live oak	2	19.105	13	14				30	25	Fair	Fair		Preservation	N/A		6313930.13	1979956.24
443	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					12	25	Fair	Fair		Preservation	N/A		6313937.89	1979960.18
444	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					38	25	Fair	Fair		Indirect - Grading	N/A		6313957.06	1979966.15
445	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					18	12	Fair	Fair		Indirect - Grading	N/A		6313960.74	1979974.49
446	<i>Quercus agrifolia</i>	Coast live oak	2	13.9284	13	5				18	15	Fair	Fair		Indirect - Grading	N/A		6313959.25	1979977.45
447	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					8	4	Fair	Fair		Indirect - Grading	N/A		6313960.08	1979985.7
448	<i>Washingtonia robusta</i>	Mexican fan palm	1	14	14					65	12	Fair	Fair		Preservation	N/A		6313938.84	1979981.79
449	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					18	20	Fair	Fair		Preservation	N/A		6313919.55	1979973.44
450	<i>Phoenix canariensis</i>	Canary island date palm	1	32	32					24	20	Fair	Fair		Preservation	N/A		6313930.35	1979999.39
451	<i>Quercus agrifolia</i>	Coast live oak	1	7	7					22	8	Fair	Fair		Indirect - Grading	N/A		6313966.65	1979992.79
452	<i>Quercus agrifolia</i>	Coast live oak	1	19	19					35	40	Fair	Fair		Encroachment - Grading	1		6313975.67	1980018.01
453	<i>Quercus agrifolia</i>	Coast live oak	1	22	22					30	38	Fair	Fair		Indirect - Grading	N/A		6313965.43	1980012.27
454	<i>Quercus agrifolia</i>	Coast live oak	1	18	18					28	30	Fair	Fair		Encroachment - Grading	1.00		6313975.11	1980036
455	<i>Quercus agrifolia</i>	Coast live oak	2	13.4536	10	9				25	28	Fair	Fair		Preservation	N/A		6313963.9	1980040.69
456	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					14	8	Fair	Fair		Preservation	N/A		6313951.73	1980044.04
457	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					35	20	Fair	Fair		Preservation	N/A		6313940.6	1980038.77
458	<i>Quercus agrifolia</i>	Coast live oak	2	14.4222	12	8				30	24	Fair	Fair		Preservation	N/A		6313949.9	1980048.35
459	<i>Salix laevigata</i>	Red willow	1	14	14					25	20	Fair	Fair		Preservation	N/A		6313933.1	1980049.14
460	<i>Phoenix canariensis</i>	Canary island date palm	1	14	14					6	18	Fair	Fair		Preservation	N/A		6313909.21	1980039.35
461	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					35	14	Fair	Fair		Preservation	N/A		6313915.53	1980048.32

Appendix C - Tree Information Matrices

Tree #	Botanical Name	Common Name	Stems	D.B.H (in.)*	Individual Stem Diameter at Breast Height (in.)					Height (ft.)	Canopy (ft.)	Health	Structure	Protected	Tree Disposition	Mitigation Requirement	Notes	X	Y
					D1	D2	D3	D4	D5										
462	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					18	6	Fair	Fair		Preservation	N/A		6313921.16	1980060.22
463	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					18	6	Fair	Fair		Preservation	N/A		6313908.85	1980057.6
464	<i>Quercus agrifolia</i>	Coast live oak	1	13	13					30	22	Fair	Fair		Preservation	N/A		6313918.36	1980073.59
465	<i>Quercus agrifolia</i>	Coast live oak	2	12.53	11	6				30	18	Fair	Fair		Preservation	N/A		6313911.83	1980085.03
466	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					24	8	Fair	Fair		Preservation	N/A		6313912.33	1980090.77
467	<i>Quercus agrifolia</i>	Coast live oak	2	19.799	14	14				40	28	Fair	Fair		Preservation	N/A		6313925.61	1980096.09
468	<i>Quercus agrifolia</i>	Coast live oak	1	43	43					40	30	Fair	Fair		Preservation	N/A		6313933.05	1980074.97
469	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					14	8	Fair	Fair		Preservation	N/A		6313944	1980071.57
470	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					20	10	Fair	Fair		Preservation	N/A		6313899.82	1980104.86
471	<i>Washingtonia robusta</i>	Mexican fan palm	1	12	12					20	10	Fair	Fair		Indirect - BVP	N/A		6313888.46	1980107.89
472	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					15	12	Fair	Fair		Indirect - BVP	N/A		6313896.6	1980121.8
473	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					13	8	Fair	Fair		Preservation	N/A		6313906.82	1980112.64
474	<i>Quercus agrifolia</i>	Coast live oak	3	4.12311	3	2	2			13	8	Fair	Fair		Indirect - BVP	N/A		6313910.65	1980128.73
475	<i>Quercus agrifolia</i>	Coast live oak	1	5	5					14	10	Fair	Fair		Preservation	N/A		6313918.57	1980114.48
476	<i>Quercus agrifolia</i>	Coast live oak	1	6	6					14	5	Fair	Fair		Preservation	N/A		6313937.95	1980111.77
477	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					14	5	Fair	Fair		Preservation	N/A		6313942.44	1980103.17
478	<i>Quercus agrifolia</i>	Coast live oak	4	9.64365	4	6	5	4		14	5	Fair	Fair		Indirect - Grading	N/A		6313976.71	1980070.71
479	<i>Quercus agrifolia</i>	Coast live oak	1	8	8					20	10	Fair	Fair		Indirect - Grading	N/A		6313982.59	1980090.85
480	<i>Quercus agrifolia</i>	Coast live oak	2	10	8	6				20	10	Fair	Fair		Indirect - Grading	N/A		6313984.45	1980099.48
481	<i>Quercus agrifolia</i>	Coast live oak	1	14	14					35	20	Fair	Fair		Preservation	N/A		6313974.79	1980101.64
482	<i>Quercus agrifolia</i>	Coast live oak	1	11	11					15	10	Fair	Fair		Indirect - Grading	N/A		6313982.51	1980111
483	<i>Quercus agrifolia</i>	Coast live oak	2	3.16228	3	1				12	6	Fair	Fair		Preservation	N/A		6313975.93	1980110.59
484	<i>Quercus agrifolia</i>	Coast live oak	2	17.8885	16	8				40	50	Fair	Fair		Preservation	N/A		6313960.98	1980092.52
485	<i>Quercus agrifolia</i>	Coast live oak	1	15	15					25	24	Fair	Fair		Preservation	N/A		6313976.02	1980115.14
486	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					20	14	Fair	Fair		Preservation	N/A		6313970.94	1980117.97
487	<i>Quercus agrifolia</i>	Coast live oak	1	4	4					13	8	Fair	Fair		Preservation	N/A		6313963.11	1980132.77
488	<i>Quercus agrifolia</i>	Coast live oak	1	9	9					18	12	Fair	Fair		Preservation	N/A		6313960.8	1980141.19
489	<i>Quercus agrifolia</i>	Coast live oak	1	12	12					18	12	Fair	Fair		Preservation	N/A		6313952.39	1980147.98