Tree Inventory

Prepared for
Leisure World Mutual 17
Seal Beach, CA

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October 18, 2014

Discussion of Findings

- **East Wall Problems**: When the east wall was installed, a large trench was dug immediately adjacent to the row of trees, cutting 40% of their anchorage roots. Not only are these trees more susceptible to falling inwards to the west, but the loss of roots will also reduce their vigor and ability to heal from the damage. Some of these trees are large enough to pose a hazard to the nearby buildings and parking areas, and these are recommended for removal. See the tree log for a list of these trees.

  Trees remain standing not because they have deep root systems but because they have broad root systems known as a root plates. For every unit of mass above the ground, there is usually at least an equal amount of mass below ground in the root system. The distribution of mass across a broad surface area of soil counterbalances the weight of the tree above ground and keeps it standing. If a portion of the root plate is lost, the tree's center of gravity shifts away from the side with root damage. In this case, the center of gravity of each of these trees has shifted inwards towards Mutual 17.

  There are three general structures that keep trees standing upright:
  - *Tensile Buttress Roots* are the roots that carry the greatest load. They grow on the opposite side of a tree's lean or of the prevailing wind. These roots apply force in tension.
  - *Compressive Buttress Roots* apply force through compression. These roots grow on the same side of a tree as its prevailing lean or on the leeward side of the tree exposed to winds. They apply force by resisting compression.
  - *Tap Roots* grow straight down and also provide resistance to the torque of the trunk. These roots are not nearly as massive as the surface absorption roots and the anchorage roots that comprise the majority of each tree's root system. The tap roots provide the smallest amount of resistance to failure.

  When the wall was installed, the tensile buttress roots of the adjacent trees were severed, leaving only the compressive buttress roots and the tap roots to resist the forces of wind and gravity.

  The prevailing winds in the area blow from west to east, and the western tensile buttress roots are intact on nearly all of these trees. Therefore, these trees have retained a measure of protection against the prevailing winds. The hazard feature would be aggravated if the winds were to reverse and blow from the east to west in a storm. Any vector of wind that contains a component blowing from east to west could be a hazardous wind for these trees because there are no tensile buttress roots to resist the torque applied by a west-blowing wind.

  Wind force does not just act upon the trees alone; therefore the interaction of the trees as a grove should be given consideration. Trees growing in a grove together protect each other from the forces of wind by sharing the load. When trees on the edge of a forest or a grove of trees are removed, the interior trees then have to bear the entire force of the wind. Often these trees are not suited for these forces and ultimately end up failing as well. This is known as the *Forest Edge Effect*. Removal of one or more of the trees along

the east wall would make it more likely for the remaining trees to fail due to the increased wind loads.

In addition to short term strength reduction, consideration should be given to the long-term effects of root damage on the health of the affected trees. Root damage can take one of several forms:

- Acute root damage reduces the rate the tree can absorb water and nutrients from the soil, causing the tree to brown out and die within a year or two. Symptoms of acute root damage to these trees are most likely to appear in the summer of 2015 if there are any.
- Chronic root damage has symptoms that take longer to appear. The reduction in water and nutrients causes the tree to have a slow thinning and decline. Usually, the tree doesn't die as a direct result of chronic root damage, but rather it becomes predisposed to contracting a disease or insect infestation that ultimately kills the tree.
- The slowest onset of symptoms occurs when root damage creates an entry point for disease and decay into the root system. The decay gradually migrates up the roots into the root crown and compromises the tree structurally. When a significant portion of the root crown becomes decayed, the tree is subject to fail mechanically in a windstorm. There are not always above-ground signs that decay is present in the root system. Signs include proliferous fungal blooms and bark loss around the root crown. Root decay occurs on a time scale of three to ten inches of per year, so the effects of root decay won't significantly impact the stability of these trees for at least several years.

Depending on the risk tolerance of the mutual, some of the trees that have been structurally compromised can be retained because they have a lesser extent of injury or because they don't have a high-value target if they were to fall. These trees are listed in the tree log as "consider removal." A dialogue should be started between the Mutual's landscape managers and a certified arborist to discuss the hazard potential of these trees and to facilitate the decision-making process.

For all of the trees that are retained along the newly installed wall, root crown inspections should continue every year for at least seven years because root damage often does not manifest symptoms in the canopy for five to seven years.

- **Previous Mispruning**: Many of the trees in Mutual 17 were previously cared for by crews who made pruning cuts that caused long-lasting damage to the trees' health. A large portion of the short-term pruning strategy revolves around correcting the mistakes from the past and retraining these trees into strong structures. There will therefore be a higher cost of labor in the short term that will gradually lessen over time.

  On the Canary Island Pine trees, lateral limbs have been cut to stumps that are hard for the tree to compartmentalize and heal. These trees have been over-pruned with the intention of reducing the likelihood of failure in the wind. However, by removing a large quantity of foliage, the pruning has actually had the opposite effect. When a full canopy oscillates, the force of the wind is evenly distributed across all the needle and branch

attach points through the physics principle of mass damping. When excessive amounts of foliage are removed, there is less damping of the wind force, and more of it is concentrated on the main trunk, increasing the likelihood of trunk failure.

- **Wrong Tree, Wrong Spot**: Some of the trees began as problems the day they were installed. There are root-aggressive trees that were planted immediately adjacent to hardscape. Over time, trees with aggressive roots will lift and buckle hardscape, turning into costly repairs. There are also several new trees that should have been rejected at the nursery due to poor form and health. Their poor condition will limit their lifespan in the landscape and will ultimately be a waste of money for the mutual. Problems such as these can be avoided by consulting an arborist before planting.

- **Trees Should Be Re-Staked Correctly**: Most trees that are grown in natural form should not be staked for any longer than one year, and in many cases, they shouldn't be staked at all. When the stakes are left on for too long, the trees never develop taper (thicker trunks at the base) and are never able to stand on their own.

  Often the ties that attach the trees to the stakes cause constriction of the trunk and function very much like a tourniquet, cutting off the flow of water and nutrients to the canopy. In extreme cases, mature trees can snap at the points where ties caused constriction in their juvenile stage. Some of the young trees in Mutual 17 need to be addressed immediately.

  Staking problems usually begin with poor nursery stock selection. Weak trees are purchased and planted by inexperienced crews, and they end up needing to be staked just to keep from falling over. If an arborist were to supervise the selection of the trees, then weak trees would be rejected before purchase.

- **Aerial Inspections**: The data collection for this inventory was conducted entirely from the ground. Many of the trees in Mutual 17 that should be inspected by a climber to better inform decisions on care and hazard mitigation. The extent of defects should be observed by a climber, and then subsequent actions can be recommended. See the tree log spreadsheet for the trees recommended for aerial inspections.

- **Anthracnose Canker:** Most of the Chinese Elm trees in Mutual 17 have Chinese Elm Anthracnose Canker. Anthracnose is a fungus that is transmitted by splashing rain and wind, and it is difficult to prevent its transmission. At this point, the trees should simply be monitored, and when they become hazardous, they should be removed and replaced with a different species. Over the next ten years, the Chinese Elms may succumb to it. There is no need to take immediate action, but as the Elms are lost, they should be replaced by resistant species.

Recommendations

- Open a dialogue between the landscape managers and a certified arborist to discuss the risk tolerance of the mutual regarding the trees along the east wall. Many of the trees can be retained if the mutual is willing to accept a small degree of risk. A balance between value and risk exposure should be achieved, and a dialogue will help to discover where that balance point is. This conversation will inform the decisions of whether to retain or remove each tree along the east wall.

- Separate the landscaping from the tree maintenance in the budget. Inexperienced crews should not be allowed to prune or plant trees. There are two options to accomplish this separation:
    1) Create a separate 'tree contract' for a crew that specifically maintains the trees, and then add a limitation clause to the landscaping contract that restricts landscapers from pruning trees.
    2) Add a clause to the landscaping contract that requires a certified arborist to be present on site when any trees are pruned. Then the landscapers can bear the burden of finding and paying an arborist rather than adding additional work to the board's landscape director.

- Get the trees inspected annually by a certified arborist. A report of this magnitude is not necessary, but a trained arborist should at least do a walkthrough of the Mutual and make notes of how the trees have changed in the past year.

- Make sure to ask an arborist before planting a new tree or cutting roots of an existing tree. Many costly problems can be prevented with a simple site visit, or even a phone call and email.

Limitations

Please understand that my observations are based on a strictly visual inspection of the property, and some hidden or buried symptoms and signs may not have been observed. I did not conduct excavation, coring, or aerial inspection to make observations. Specialty arborists would be needed to conduct root crown inspections and extent-of-decay analysis on your trees, if these additional inspections are desired.

Although the condition of your trees will change throughout the year, my analysis is only based on the observations I gathered at the time of inspection. I do not guarantee the safety, health, or condition of any of your trees.

There is no warranty or guarantee, expressed or implied, that problems or deficiencies in your trees may not arise in the future. Furthermore, I am in no way liable for any unforeseen damages caused by the tree pruning crews carrying out my recommendations.

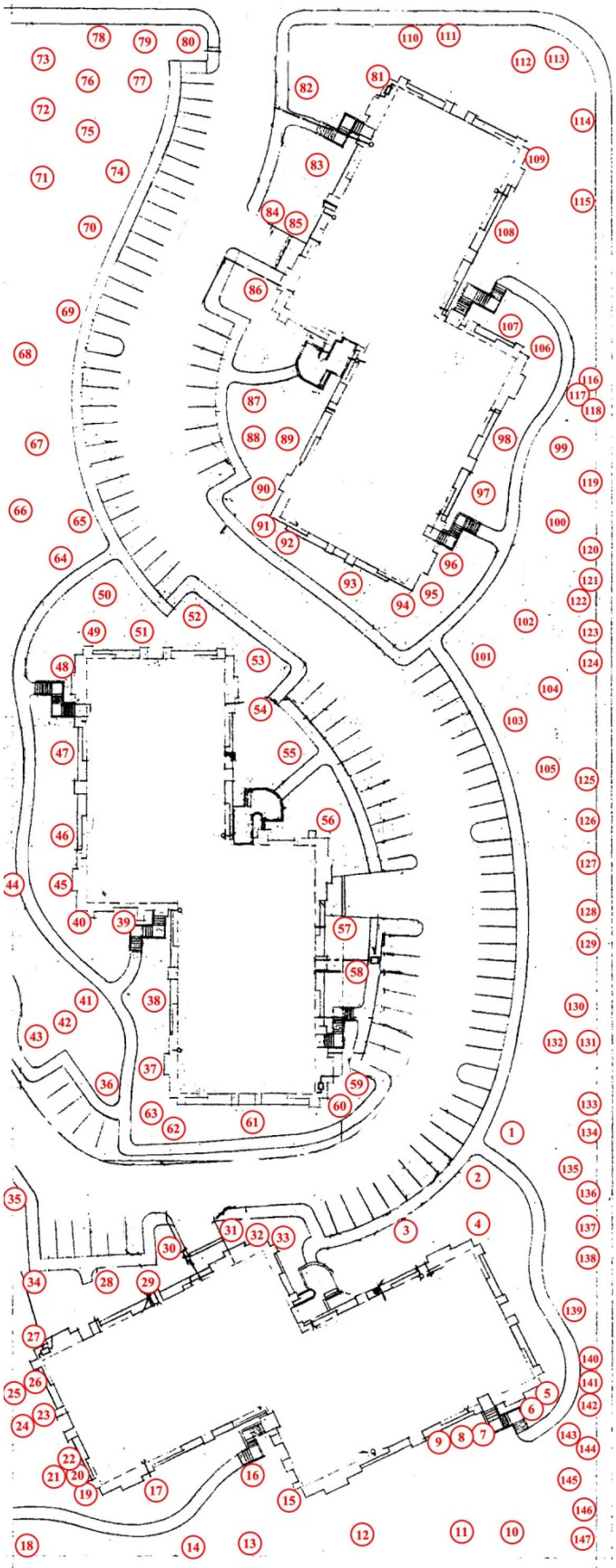
Arborists are tree specialists who use their knowledge, education, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. 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 of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Mutual 17 Site Map



Site 1
Ulmus parvifolia - Chinese Elm

This Chinese Elm is afflicted with the Chinese Elm anthracnose canker. The canker has split open the living bark tissue on many of the scaffold branches and has left a substantial wound site at the base of the tree on the eastern side. The wound is not large enough to raise a concern over a structural deficiency in the tree at this time, but it should be monitored annually.

The canopy is looking slightly sparse, and there is deadwood scattered throughout. The deadwood should be cleaned out before it self-prunes.

One of the large scaffold branches leaning out to the northwest carries approximately 75% of the canopy weight. This part of the canopy should be thinned to reduce the likelihood of this branch tearing out and falling on a vehicle parked below. Before thinning healthy branches, the defective and diseased branches should be removed from this section of the canopy, and no more than 15% of live foliage should be removed in any given year.

Maintenance: 45 min.
Next Service: now
Priority: high

	Site 2 *Ulmus parvifolia* - Chinese Elm This tree has a substantial canker on the south side, approximately 5 feet up the trunk. One of the main scaffold branches pointing to the south will likely fail in a matter of years if not removed. There are two scaffold branches pointing to the south: the lowest one should be removed this year, and the upper one should be inspected next year to assess for possible removal. In addition to the anthracnose canker on this tree, there is some substantial squirrel chew that is older than the canker. Around the squirrel chew wounds, the tree is depositing new cambium tissue that will eventually heal. This contrasts with the anthracnose cankers that are increasing in size as the bark of the tree retreats. This tree should be inspected annually for hazard potential, but it can be retained in the landscape at this time. Chinese Elms have a low weeping natural form, which although attractive, can be a maintenance liability because the fringe needs to be raised every year out of clearance height. This tree should be pruned lightly for clearance. Maintenance: 30 min. Next Service: spring Priority: medium

Site 3
Liquidambar styraciflua - American Sweet Gum

This liquidambar is an attractive choice of tree for this site for aesthetics, but it is already beginning to cause problems with its roots. There is evidence of roots lifting the adjacent sidewalk, and these problems will continue as long as this tree is located here. Cutting the roots or installing a root barrier is not an option because the severing of this tree's anchorage roots would predispose it to falling to the south onto adjacent building. Rather, a decision should be made on whether to keep the tree or to grind the sidewalk every few years.

There is some minor deadwood that should be cleaned out of the tree, and there are a few low branches over the parking area that should be raised and reduced.

There are ties that are impounded in the trunk from when the tree was planted. The ties that affixed the tree to its stake were never removed, and now they constrict the trunk, creating a weak spot approximately 4.5 feet up the trunk. These ties can't be removed at this time without causing further damage, so they should be retained. This weak spot on the trunk should be monitored annually, and if it is determined to be a hazard, the tree may need to be removed and replaced. Currently the tree does not pose an imminent hazard.

Maintenance: 15 min.
Next Service: winter
Priority: medium

Site 4
Liquidambar styraciflua - American Sweet Gum

This tree is an excellent aesthetic choice for this location because it is a tall tree planted on the eastern side of the apartment building, and it will protect the northernmost corner of the building from the eastern morning sun. Unfortunately, this tree species is somewhat root aggressive and will eventually cause the adjacent sidewalk to lift and buckle. A decision should be made on whether the tree should be retained or replaced. If retained, the sidewalk will need to be ground down every few years to reduce trip hazards.

The tree has a co-dominant lead at approximately 10 feet up the trunk. This tree is young enough that the western co-dominant stem could be removed without causing major harm to the tree. If it is to be retained, then a safety line should be installed to mitigate the hazard of one of the stems failing in the wind. The tree can be retained for several more years without installing a safety line. There are a few low branches that should be raised for clearance annually.

Some of the foliage on the south eastern side of the tree that receives the most solar exposure is beginning to show signs of incipient wilt. It is likely that this is a result of the unusually hot and dry summer that Southern California has been experiencing. If the foliage that appears in 2015 continues to show symptoms, the tree should be reassessed by an arborist.

Maintenance: 10 min.
Next Service: winter
Priority: medium

	Site 5 *Pinus canariensis* - Canary Island Pine This tree is part of a stand of five trees on the southern face of building three. It is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. All five of these trees shade the southern face of building three from exposure to the hot midday sun. These trees are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. This tree appears to have been pruned more aggressively than its neighbors. As a result, the growth has been stunted, and the tips have been removed from nearly all of the lateral growing branches. This tree is currently stressed, and it may end up having a shorter lifespan than its neighbors. For now, no action needs to be taken, but the tree should be inspected annually for any signs of developing structural defects. Maintenance: zero Next Service: fall Priority: medium
	Site 6 *Pinus canariensis* - Canary Island Pine This tree is part of a stand of five trees on the southern face of building three. It is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. All five of these trees shade the southern face of building three from exposure to the hot midday sun. These trees are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. This tree has an ideal dense canopy. It should not be thinned at this time because the canopy density is damping the force of the wind on the trunk. Rather, the tree should be inspected annually for structural defects and problematic branches should be removed. Maintenance: two hours with climber Next Service: fall Priority: medium

Site 7
Pinus canariensis - Canary Island Pine

This tree is part of a stand of five trees on the southern face of building three. It is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. All five of these trees shade the southern face of building three from exposure to the hot midday sun. These trees are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade.

This tree is showing the greatest hormonal response of this group of five trees. There are many adventitious shoots that are sprouting out of the trunk of the tree as a result of a plant hormone imbalance. When the tips of the branches were removed in the past, the production sites of the plant hormone auxin were removed. This imbalance in hormones caused the dormant nodes to respond by exploding into new growth. These new shoots are neither a problem nor an asset to the tree; rather, they are an indicator of stress further up the trunk of the tree. They can be retained for now, but they should eventually be removed before they compete with the permanent scaffold.

There is a substantial load of dead needles in the canopy of this tree. Normally, these needles are naturally dislodged from the canopy through the force of wind, but if it is desired, a high-pressure stream of water can knock them out of the canopy for aesthetic purposes. There are no apparent hazard features on this tree, and it can be retained in the landscape at this time. The tree should be inspected annually by a climber for defects.

Maintenance: 2 hours with climber
Next Service: fall
Priority: medium

	Site 8 *Pinus canariensis* - Canary Island Pine This tree is part of a stand of five trees on the southern face of building three. It is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. All five of these trees shade the southern face of building three from exposure to the hot midday sun. These trees are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. Like the tree at Site 7, this tree also has epicormic shoots that are sprouting along the trunk. These shoots can be retained for now but will need to be removed eventually for aesthetic purposes. Maintenance: 90 min. Next Service: 2016 Priority: medium
	Site 9 *Pinus canariensis* - Canary Island Pine This tree is part of a stand of five trees on the southern face of building three. It is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. All five of these trees shade the southern face of building three from exposure to the hot midday sun. These trees are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. This tree is the only pine in this stand that has a double leading form. The southern co-dominant stem should be removed because the northern one is more strongly attached to the rest of the tree. Removal of one of the co-dominant stems would create a disfigured aesthetic appearance on the tree, but it would improve its safety. An installation of a safety line would preserve the aesthetic appearance of the tree, but eventually will of the stems would tear out and need to be removed. This safety line would limit the extent of the damage if a stem were to fail. Maintenance: 4 hours with climber Next Service: 2016 Priority: medium

	Site 10 *Magnolia grandiflora* - Southern Magnolia This is an excellent choice of species for the area. It needs relatively little maintenance. Currently there is no recommended pruning for this tree. There is some minor chlorosis in the foliage, but this is likely a result of the hot and dry summer. The tree should look more aesthetically attractive in the spring. Nothing should be done to this tree at this time. Maintenance: zero Next Service: 2016 Priority: low
	Site 11 *Lophostemon confertus* - Brisbane Box This tree's stakes need to be removed immediately. The stake on the western side is not supporting the tree and is acting as a burden on it. The foliage is a bit sparse, and the tree's low limbs have been removed. The foliage looks healthy, and the tree has a good single leading tip form. Maintenance: 10 min. Next Service: winter Priority: high
	Site 12 *Afrocarpus falcatus* - Yew Pine This tree's stakes need to be removed immediately. There is a metal tie that is tightly binding the tree to its nursery stake and leaving a mark on the trunk. This tie is also constricting the flow of water and nutrients up the trunk. If left alone, it will create a weak spot in the trunk that will eventually become a point of failure in the tree. The tree appears to be strong enough to stand on its own and does not need stakes. Currently, the tree has an ideal single trunk form. The new foliage looks green and healthy. Maintenance: 10 min. Next Service: winter Priority: High

	Site 13 *Salix babylonica* - Weeping Willow This tree will become a beautiful landscape asset as it matures. It is a riparian species that is tolerant of occasional flooding. However, one major problem is the species' root aggressiveness. It is located near a storm drain and a driveway; its roots will eventually grow under these pieces of hardscape and cause it to lift and buckle. It is possible at this early stage to install a root barrier to preemptively deter the roots from growing under these surfaces. Root barriers do not prevent root growth, but they do slow it. It is time for the canopy to be trained. There are many crossing branch defects that should be corrected. The fringe should be raised around the crown for head height clearance. The low interior twigs can be cleaned out to leave a more aesthetically appealing trunk form. Maintenance: one hour Next Service: winter Priority: medium

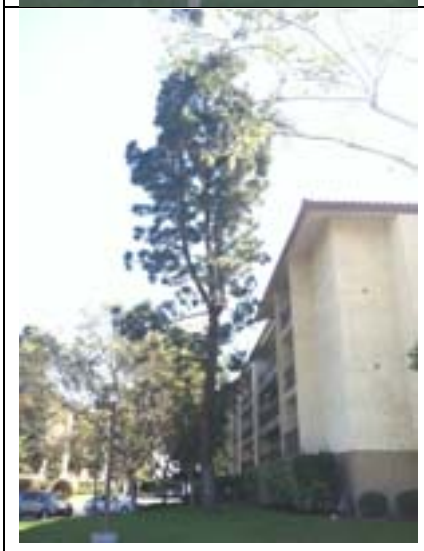
	Site 14 *Liquidambar styraciflua* - American Sweet Gum This tree needs to be trained to a single leading trunk form. It is beginning to grow into a multiple lead form which is a weak structure for this species of tree. The central lead should be selected, and each year one of the competing leaders should be removed until the tree recovers the ideal form. There are several surface roots showing damage from lawnmowers passing over them. The damage is not serious, but it should be avoided if possible. A good mitigation is to add a layer of mulch two to four inches thick around the base of the tree to protect the surface roots from mechanical damage, to insulate them from temperature changes, and to reduce the rate of evaporation from the soil. There is evidence of scorch on some of the leaves, but this is likely due to the recent summer heat. There is a minor bark fungus on this tree that is leaving a spotting pattern. This fungus is not serious and no action needs to be taken. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 15 *Brachychiton sp.* - Bottle Tree This Bottle Tree was a well-chosen species for the site. This tree has good form, and it is easy to maintain. No pruning should be done at this time, but in the future, the branches that contact the adjacent building should be lightly pruned back. Maintenance: 5 min. Next Service: 2016 Priority: low

	Site 16 *Melaleuca quinquenervia* - Paperbark Tree This multi-trunk Paperbark Tree does not have ideal form, but it can be retained the landscape. The multiple trunk form has resulted in the shoots competing with each other for light and spreading out into cantilever. Over time, these trunks should be trained to grow vertical to minimize the amount of cantilever and to reduce the likelihood of a tearout. There are marks on the trunks from where a guy line was constricting them. It appears that no permanent damage was done to the tree thus far, and it will recover when it sheds its outer layer of bark. The foliage looks healthy, and the tree will eventually grow to be a beautiful asset in the landscape. Maintenance: 10 min. Next Service: 2016 Priority: low
	Site 17 *Cupaniopsis anacardioides* - Carrotwood This tree has several crossing structures that should be corrected before they become more problematic defects. There are a few stumps left by the previous pruning that should be removed. The canopy is slightly imbalanced to the south, and growth should be encouraged on the northern side. There is some mechanical damage on the northern side of the tree, likely from a weed whacker. Landscapers should be reminded not to use weed whackers around the bases of trees. As a deterrent, mulch can be spread around the base of the tree to prevent the growth of weeds and eliminate the necessity of using a weed whacker. Maintenance: 15 min. Next Service: 2016 Priority: medium

	Site 18 *Salix babylonica* - Weeping Willow There are some fungal blooms approximately 6 feet from the trunk of the tree growing out of damaged roots. Some surface roots are showing signs of lawnmower damage. Care should be taken when lawnmowers are run over the root zone to not damage the roots. Even if the roots are currently decaying and structurally compromised, this decay is far enough from the trunk that the tree does not appear to be severely structurally deficient. The tree should be monitored for any advance of decay. The foliage is healthy and green, and the tree is growing rapidly. This tree needs to have a fringe raising for head height clearance. Maintenance: 15 min. Next Service: winter Priority: medium
	Site 19 *Corymbia citriodora* - Lemon Scented Gum This tree has some minor cantilever to the southwest over the driveway. It is not so much cantilever that the tree should be rated as a hazard. There is some minor deadwood that should be removed from the tree before it self-prunes. The foliage is green and healthy, and aside from the deadwooding, this tree needs no pruning at this time. Maintenance: 30 minutes Next Service: winter Priority: medium

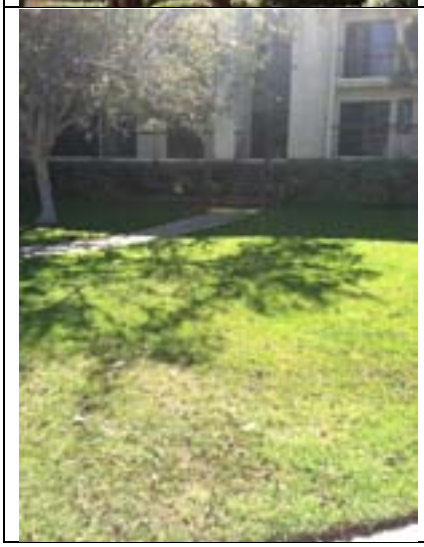
	Site 20 *Lophostemon confertus* - Brisbane Box This tree has good form and healthy foliage. No action needs to be taken at this time. It will grow to become a valuable asset to the adjacent building by shading the units on the west facing side. Maintenance: 5 min. Next Service: fall Priority: low
	Site 21 *Lagerstroemia indica* - Crape Myrtle This tree has good form and healthy foliage. There is a mechanical injury wound on the north side of the root crown. It appears that the tree was damaged by a weed whacker, and the living cambium was stripped off of the northern half of the root crown. With the limited amount of living tissue around the root crown, this tree may become water-stressed in the future. The wound appears to be beginning to heal, but this wound site should be monitored for any potential advance of decay. Maintenance: 5 min. Next Service: 2016 Priority: low
	Site 22 *Lophostemon confertus* - Brisbane Box This tree's stakes should be retained for one more year and then inspected for removal. It has an ideal single trunk form with low lateral branching. The foliage is healthy and green. No action needs to be taken at this time. Maintenance: 10 min. Next Service: 2016 Priority: high

	Site 23 *Lophostemon confertus* - Brisbane Box This tree has good form and healthy foliage. No action needs to be taken at this time. It will grow to become a valuable asset to the adjacent building by shading the units on the west facing side. Maintenance: 5 min. Next Service: fall Priority: low
	Site 24 *Corymbia citriodora* - Lemon Scented Gum This tree has some minor cantilever over the driveway. It is not so much cantilever that the tree should be rated as a hazard. There is some minor deadwood that should be removed from the tree before it self-prunes. The foliage is green and healthy, and aside from the deadwooding, this tree needs no pruning at this time. Maintenance: 30 minutes Next Service: winter Priority: medium
	Site 25 *Corymbia citriodora* - Lemon Scented Gum This tree has some minor cantilever to the northwest over the driveway. It is not so much cantilever that the tree should be rated as a hazard. There is some minor deadwood that should be removed from the tree before it self-prunes. The foliage is green and healthy, and aside from the deadwooding, this tree needs no pruning at this time. Maintenance: 30 minutes Next Service: winter Priority: medium

	Site 26 *Lophostemon confertus* - Brisbane Box This tree has good form and healthy foliage. No action needs to be taken at this time. It will grow to become a valuable asset to the adjacent building by shading the units on the west facing side. Maintenance: 5 min. Next Service: fall Priority: low
	Site 27 *Pinus canariensis* - Canary Island Pine This tree was over-pruned in the past. Most of the lateral limbs were cut back to stumps, and the foliage was excessively thinned. The over-pruning has reduced the tree's ability to dampen the forces of wind applied to it. New foliage should be allowed to regrow to recover the former canopy density. The tree has a multiple leading form beginning at about 20 feet up the trunk. Three co-dominant stems emerge from this point, a likely site of a topping cut from about ten years ago. Currently, the angles of attachment are sufficiently large that they are not weak points on the tree. However, they should be monitored. As the angles of attachment decrease over time, one of these trunks will need to be removed. The remaining two can be mitigated from failure by installing a safety line. No pruning needs to be done at this time, but deadwood should be removed the following year if the foliage dies back. The tree should be inspected by a climber, and any defects should be removed. Maintenance: 90 min. with climber Next Service: 2016 Priority: medium

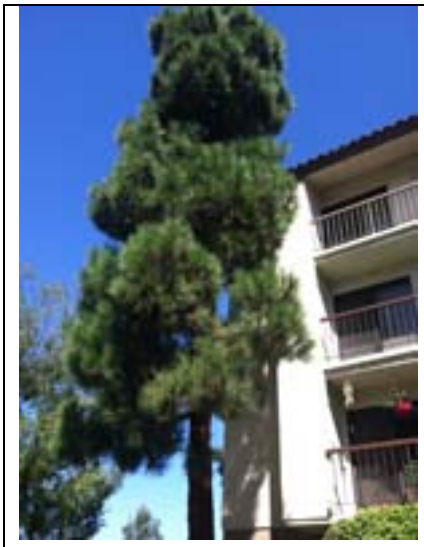
	Site 28 *Ulmus parvifolia* - Chinese Elm This tree has scattered deadwood throughout the canopy that should be removed before it self-prunes. There is a branch over the sidewalk that is pointing out to the south and has a significant anthracnose canker approximately 10 feet up. Though it does not need to be removed immediately, this particular wound area should be monitored on the scaffold branches and should be removed if it is deemed to be a hazard by the inspecting arborist. The Chinese Elm has a natural weeping form, so it will need to be maintained often for crown raising. Maintenance: 90 min. Next Service: winter Priority: medium
	Site 29 *Ulmus parvifolia* - Chinese Elm This tree has scattered deadwood throughout the canopy that should be removed before it self-prunes. The Chinese Elm has a natural weeping form, so it will need to be maintained often for crown raising. Maintenance: 90 min. Next Service: winter Priority: medium

	Site 30 *Ulmus parvifolia* - Chinese Elm This tree has scattered deadwood throughout the canopy that should be removed before it self-prunes. Chinese Elm trees have a natural weeping form, so this tree will need to be maintained often for crown raising. This tree has several low branches arching out over the parking area. These branches are all competing with each other and should be thinned. First, deadwood should be removed; then the branches with the highest concentration of anthracnose canker; finally, if the branch density over the parking area is still too great, then the smallest, weakest branches should be lightly pruned out until significant weight has been reduced to mitigate the falling hazard. The longest leader in this group is too long and is in heavy cantilever to the west. This longest branch should be root reduced back to the next live lateral capable of assuming apical dominance. Maintenance: 90 min. Next Service: winter Priority: high
	Site 31 *Pinus canariensis* - Canary Island Pine This is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. The form of this tree is good, and the density of the foliage is ideal. This tree should not be thinned at this time. Maintenance: 30 min. with climber Next Service: 2016 Priority: medium

	Site 32 *Brachychiton sp.* – Bottle Tree This Bottle Tree was a well-chosen species for the site. This tree has good form, and it is easy to maintain. This tree is planted in a dense bed of ivy, and the ivy should be kept from growing up the trunk. However, care should be taken to not injure the trunk of the tree while the ivy is removed. This tree needs very little maintenance. When branches come in contact with the adjacent building they can be lightly pruned back to the next acceptable live lateral. They do not need to be removed all the way back to the trunk. Maintenance: 15 min. Next Service: spring Priority: low
	Site 33 *Pinus canariensis* - Canary Island Pine This tree is developing a co-dominant lead about 20 feet up the trunk. The developing co-dominant leader should be reduced to de-stimulate growth at its tip. The reduction should be very minor so as not to disrupt the natural form of the tree. Maintenance: 40 min. with climber Next Service: winter Priority: medium
	Site 34 Vacant Planting Site This would be a good site for a decurrent species or an ornamental flowering tree. This site receives strong western exposure from the afternoon sun so it should be heat and light tolerant. It is near the base of a slope, so it will likely receive more irrigation runoff than its neighbors.

	Site 35 *Ulmus parvifolia* - Chinese Elm This tree has good structural form and does not need structural corrections at this time. It only needs to have the deadwood removed before it self-prunes. The anthracnose canker in this tree is relatively minor. There is a small anthracnose canker developing about 2 feet up the trunk on the north side. This canker should be monitored annually. Maintenance: 90 min. Next Service: winter Priority: medium
	Site 36 *Ulmus parvifolia* - Chinese Elm This relatively young Chinese Elm has not yet developed a significant culture of anthracnose. There is some minor deadwood that can be removed for aesthetic purposes. For now, this tree does not need much pruning. It is looking a bit sparse, and it should be reassessed in the spring for the amount of foliage that it will put out. It is likely that the hot summer has contributed to the wilting leaves and reduced canopy density. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 37 *Melaleuca quinquenervia* - Paperbark Tree This recent installation was planted too deep. There is still soil that is covering the root crown that should be carefully excavated away from the trunk of the tree. As much of the live foliage as possible should be retained on the tree because the canopy is already looking sparse. Once the tree regains its vigor, the shoots that are low on the northern trunk can be removed. This will likely be in one to two years. Maintenance: 10 min. Next Service: 2016 Priority: low

	Site 38 *Melaleuca quinquenervia* - Paperbark Tree This tree still has a stake attached to it. The stake should be removed immediately because the tie is causing the stake to press up against the trunk of the tree and cause further injury. There is a mature ant trail leading up the stake; this is often an indicator that there is some sort of injury site on the tree. Further investigation would be warranted after the stake is removed. The tree needs very little pruning and can be retained in its current form. Maintenance: 10 min. Next Service: now Priority: high
	Site 39 *Melaleuca quinquenervia* - Paperbark Tree This is a good choice of species for the site, and the tree has an attractive multi-trunk form. Eventually, the multi-trunk form will run into problems when the trunks begin to grow large enough to press up against each other. Though this won't happen for at least 5 to 10 years, the contact of the trunks will eventually limit the tree's lifespan because the tree will not be able to deposit additional branch union tissue between the trunks, limiting the cross sectional area of the branch union. Eventually, the trunks will grow to a sufficient size that their masses will be greater than the holding capacity of their union, resulting in failure in the wind. This failure is not imminent and the tree can be retained the landscape for at least 5 to 10 years. It should be inspected annually for any developing defects. Maintenance: zero Next Service: 2016 Priority: low

	Site 40 *Pinus canariensis* - Canary Island Pine This tree has a single leading form which is ideal for the species. It should be allowed to grow in its current form. There is ivy climbing up the base of the trunk that should be removed carefully by the landscapers. Care should be taken to not injure the bark of the tree while the ivy is removed. The density of foliage is ideal on this tree because it helps to dampen force of the wind on the trunk of the tree. The branch unions should be inspected by a climber for defects. Only defects should be removed at this time. Maintenance: 60 min. with climber Next Service: winter Priority: medium
	Site 41 *Ulmus parvifolia* – Chinese Elm This Chinese Elm does not show signs of anthracnose canker. There is some minor deadwood in the upper canopy that can be removed for aesthetic purposes. Because this tree has a low weeping natural form, it will need to be maintained annually for clearance. Maintenance: 20 min. Next Service: winter Priority: medium

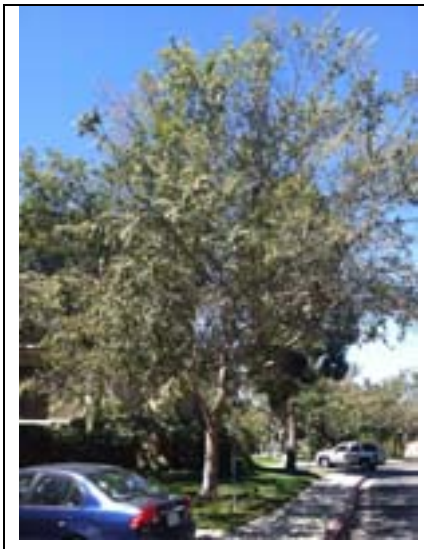
	Site 42 *Ulmus parvifolia* - Chinese Elm This Chinese Elm does not show signs of anthracnose canker. There is some minor deadwood in the upper canopy that can be removed for aesthetic purposes. Because this tree has a low weeping natural form, it will need to be maintained annually for clearance. This tree has several crossing branches in its canopy that should be removed to train the tree to ideal form. It should be allowed to intermingle its canopy with its neighbors' to create an attractive natural ceiling over the walkway. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 43 *Ulmus parvifolia* - Chinese Elm This Chinese Elm does not show signs of anthracnose canker. There is some minor deadwood in the upper canopy that can be removed for aesthetic purposes. Because this tree has a low weeping natural form, it will need to be maintained annually for clearance. This tree has several crossing branches in its canopy that should be removed to train the tree to ideal form. It should be allowed to intermingle its canopy with its neighbors to create an attractive natural ceiling over the walkway. Maintenance: 30 min. Next Service: winter Priority: medium

	Site 44 *Ulmus parvifolia* - Chinese Elm This is an attractive, well placed tree in the landscape. There are several mechanical injuries on some of the scaffold branches. The tree is actively healing over these wounds and will likely cover them with cambium. The tree should be inspected annually for the advance of the cambium to ensure that these wounds heal properly. There are several low branches on the tree that may come into conflict with pedestrians. They should be removed and the tree should be trained to have a higher crown. Maintenance: 30 min. Next Service: winter Priority: high
	Site 45 *Pinus canariensis* - Canary Island Pine This is a good choice of species for this site because it is tall and located on the western side of the adjacent building, shielding the building from the afternoon sun. In the past, this tree was over-pruned, and each of the lateral branches was tipped, reducing the production of the plant hormone auxin. This hormone imbalance resulted in the aggressive growth of adventitious shoots up and down the trunk. These shoots should be retained temporarily but removed within the next 1 to 2 years before they compete with the crown and develop into an undesirable scaffold. This tree has a problematic co-dominant trunk form beginning at 20 feet up the main stem. Three trunks emerged from a single point and are weakly attached together. To mitigate this problem, a safety line should be installed in the tree to reduce the likelihood of damage if one of the stems were to fail. This tree should be allowed to regain its former density, and little pruning should be done at this time. The tree should be inspected for defects and only defects should be removed by a climber at this time. Maintenance: 3 hours with climber Next Service: winter Priority: high

	Site 46 *Pinus canariensis* - Canary Island Pine This is a good choice of species for this site because it is tall and located on the western side of the adjacent building, shielding the building from the afternoon sun. In the past, this tree was over-pruned, and each of the lateral branches was tipped, reducing the production of the plant hormone auxin. This hormone imbalance resulted in the aggressive growth of adventitious shoots up and down the trunk. These shoots should be retained temporarily but removed within the next 1 to 2 years before they compete with the crown and develop into an undesirable scaffold. This tree has a single leading form and should be maintained in its current form. The foliage is not quite dense enough to be ideal, and the tree should be allowed to return to its former density to dampen the force of the wind on the trunk. It should be inspected by a climber for defects. Maintenance: 40 min. with climber Next Service: winter Priority: medium
	Site 47 *Pinus canariensis* - Canary Island Pine This is a good choice of species for this site because it is tall and located on the western side of the adjacent building, shielding the building from the afternoon sun. In the past, this tree was over-pruned, and each of the lateral branches was tipped, reducing the production of the plant hormone auxin. This hormone imbalance resulted in the aggressive growth of adventitious shoots up and down the trunk. These shoots should be retained temporarily but removed within the next 1 to 2 years before they compete with the crown and develop into an undesirable scaffold. This tree has a single leading form and should be maintained in this current form. The foliage is not quite dense enough to be ideal, and the tree should be allowed to return to its former density to dampen the force of the wind on the trunk. It should be inspected by a climber for defects. Maintenance: 40 min. with climber Next Service: winter Priority: medium

	Site 48 *Pinus canariensis* - Canary Island Pine This is a good choice of species for this site because it is tall and located on the western side of the adjacent building, shielding the building from the afternoon sun. In the past, this tree was over-pruned, and each of the lateral branches was tipped, reducing the production of the plant hormone auxin. This hormone imbalance resulted in the aggressive growth of adventitious shoots up and down the trunk. These shoots should be retained temporarily but removed within the next 1 to 2 years before they compete with the crown and develop into an undesirable scaffold. This tree has a single leading form and should be maintained in this current form. The foliage is not quite dense enough to be ideal, and the tree should be allowed to return to its former density to dampen the force of the wind on the trunk. It should be inspected by a climber for defects. Maintenance: 40 min. with climber Next Service: winter Priority: medium
	Site 49 *Ulmus parvifolia* - Chinese Elm This tree has good form and does not have any signs of anthracnose canker. There is some deadwood in the canopy that should be removed, and the fringe should be raised and cleared from the adjacent building. Aside from this, little will need to be done to the tree at this time. Maintenance: 45 min. Next Service: winter Priority: medium

	Site 50 *Ulmus parvifolia* - Chinese Elm This tree is looking considerably sparser than its neighbor. It is affected by the Chinese Elm anthracnose canker on several of its main scaffold branches. It is not as severe as some of the other trees in this mutual, and the tree is not a hazard at this time. It should be inspected annually for the development of bark loss. For now, the deadwood should be removed and the fringe should be raised for clearance. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 51 *Lophostemon confertus* - Brisbane Box This tree needs to be re-staked immediately. The nursery stakes are aggressively tied to the trunk of the tree, leaving abrasion marks and constricting the flow of water and nutrients to the rest of tree. The new stakes should be driven into the ground outside the root ball of the tree to avoid any root damage. Maintenance: 10 min. Next Service: now Priority: high
	Site 52 *Pinus canariensis* - Canary Island Pine The single leading form of this tree is ideal. The canopy density is acceptable at this time. In the past, this tree was aggressively pruned, and the tip of each of the branches was removed, resulting in an imbalance of hormones in the tree and causing the dormant notes to explode in new growth. The new shoots should be retained for a few years and then removed so they do not develop into an undesirable scaffold structure. The tree should be inspected by a climber for defects. Maintenance: 30 min. with climber Next Service: winter Priority: medium



Site 53
Ulmus parvifolia - Chinese Elm

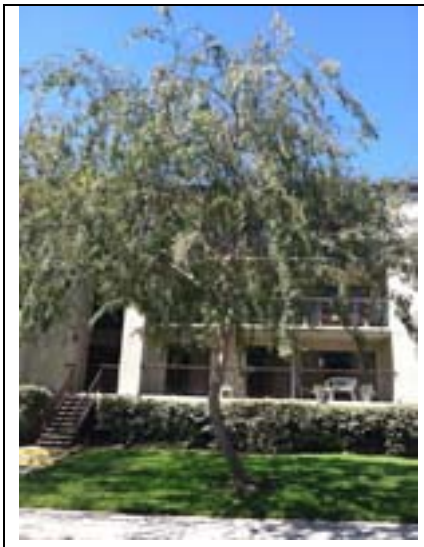
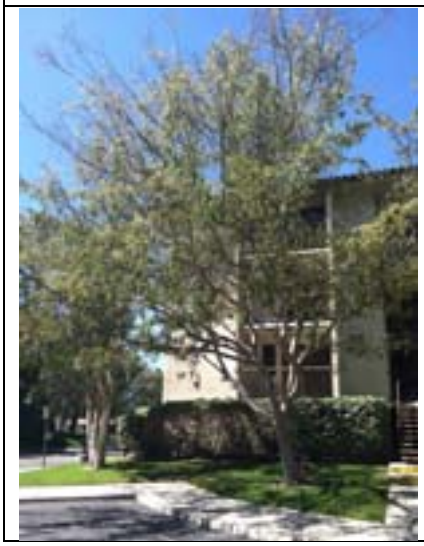
This Chinese Elm has Chinese Elm anthracnose canker. There is a branch union about 10 feet up the southern scaffold branch that has a large canker covering the western half of the branch union. This is likely a weak spot that is susceptible to branch breakage. The branches that emanate from this union have dense concentrations of foliage at the tips and are in high cantilever. The foliage on these tips should be reduced and thinned to reduce the weight load on this structure. If the structure fails, then it should be cut back to the next main stem. Failure of this trunk would not hit a car or the building; therefore it can be retained at this time. There is some minor deadwood scattered throughout the canopy that should be removed. The branches over the street should be pruned for clearance.

There are a few dead stumps that remain on the tree from the previous time it was pruned. These stumps should be removed so that the tree can begin to heal those wounds. There is also some foliage on the eastern side of the tree that is in heavy cantilever over the parking area. These branches should be thinned to reduce the likelihood of branch tearout and failure onto a car.

Maintenance: 45 min.
Next Service: winter
Priority: high

	Site 54 *Ulmus parvifolia* - Chinese Elm This tree has a relatively sparse interior. It is likely that many of these interior branches were removed on the previous pruning episodes this tree. Interior canopy density is important for a tree like this because it helps to distribute the force of the wind throughout the entire scaffold of the tree. With the foliage concentrated at the tips, the tree will be more susceptible to wind throw. This tree's canopy should be raised for clearance. Its canopy should be allowed to intermingle with the canopy of tree at Site 58 to create an attractive natural ceiling. Maintenance: 30 min. Next Service: winter Priority: medium
	Site 55 *Ulmus parvifolia* - Chinese Elm The stakes on this tree are not functioning and should be removed immediately. Currently, this tree does not need to be pruned except to remove minor deadwood in the canopy. In future years, the tree should be trained to an ideal structural form. Maintenance: 15 min. Priority: high Next Service: now

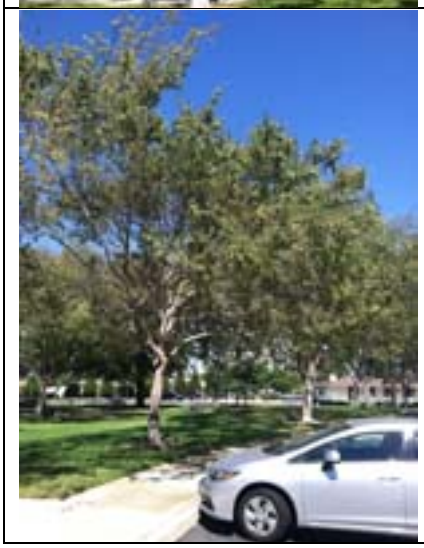
	Site 56 *Pinus canariensis* - Canary Island Pine Although this is an ideal choice of species for the location, this tree was cared for incorrectly. An excessive amount of foliage was removed from the tree at the last pruning and each of the lateral branches was tipped aggressively. The tree is now currently in a stressed condition and should be monitored. It is possible that the tree may begin its decline spiral and slowly fade. There is no sign that the tree is an imminent failure hazard so it can be retained the landscape for now; however, it should not be arbitrarily pruned. Rather, it should be inspected for defects and only the defects should be removed. Maintenance: 30 min. with climber Next Service: now Priority: medium
	Site 57 *Ficus benjamina* - Weeping Fig This tree appears to be a former indoor potted plant that was installed outside. It is not a good choice of species for this location because *Ficus* trees are root-aggressive. If this tree manages to establish itself in the landscape, it will cause damage to the foundation of the building, the adjacent street, and the sidewalk. A decision should be made on whether to keep this tree temporarily or to remove it immediately and replant with a more desirable species. No pruning should be done until a decision is made. If the tree is to be retained, it can be lightly hedged by the landscapers to save on cost of care. Maintenance: zero Next Service: now Priority: low Consider Removal

	Site 58 *Ulmus parvifolia* - Chinese Elm This tree has some minor cantilever to the southwest over the driveway. It is not so much cantilever that the tree and should be rated as a hazard. There is some minor deadwood that should be removed from the tree before it self-prunes. The foliage is green and healthy, and aside from the deadwooding, this tree needs no pruning at this time. This tree will need to be pruned for clearance over the sidewalk and parking area. It should be allowed to intermingle with the canopy of the tree at Site 59. There is also some minor deadwood that will need to be removed. Maintenance: 30 min. Next Service: winter Priority: medium
	Site 59 *Ulmus parvifolia* - Chinese Elm This tree is looking sparse in its upper canopy and should be monitored in the spring for new growth. The deadwood should be removed, and the existing anthracnose cankers should be monitored and recommended for pruning when they become hazard features. Maintenance: 30 min. Next Service: winter Priority: medium

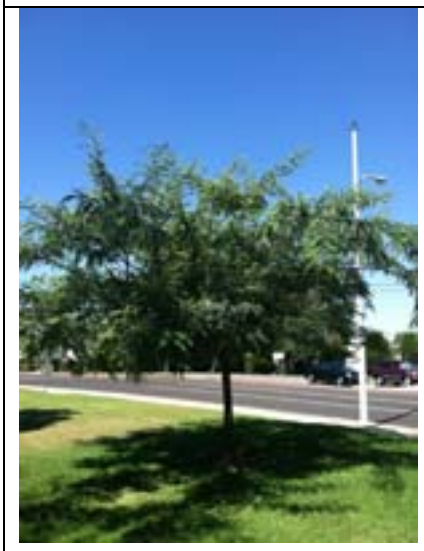
	Site 60 *Melaleuca quinquenervia* - Paperbark Tree This is a good choice of species for the location, and it does not need any pruning at this time. In the past, the tree was topped on all of its leaders, and it is currently recovering from this aggressive pruning. The shoots that emerged from the topping wounds are going to be weakly attached to the parent stem. Eventually, they should be thinned to the strongest leaders. However, they should not be removed now because the tree is in a stressed form and needs to have as much live foliage retained as possible. Maintenance: 30 min. Next Service: 2016 Priority: medium
	Site 61 *Melaleuca quinquenervia* - Paperbark Tree This is a good choice of species for the location, and it does not need any pruning at this time. In the past, the tree was topped on all of its leaders, and it is currently recovering from this aggressive pruning. The shoots that emerged from the topping wounds are going to be weakly attached to the parent stem. Eventually, they should be thinned to the strongest leaders. However, they should not be removed now because the tree is in a stressed form and needs to have as much live foliage retained as possible. This tree has some minor staining on the south side of its trunk near the root crown. It is possible that this staining could be due to a minor bark fungus that is colonizing where the tree is getting sprayed by irrigation. Further research should be done to see if any irrigation sprinkler heads are hitting the trunk of the tree in this place. If so, the sprinkler head should be redirected so it doesn't hit the trunk of the tree. If it is a bark fungus, it does not appear to be serious at this time. It may also be the outline of a naturally shed piece of bark. Either way, it is not a problem at this time. Maintenance: 30 min. Next Service: 2016 Priority: medium

	Site 62 *Pinus canariensis* - Canary Island Pine This tree has a double leading form. One of two mitigations is possible for this tree: either one of the co-dominant stems can be removed, or a safety line can be installed between two to mitigate any damage from tearout. Removal of one of the co-dominant stems would create a disfigured aesthetic appearance on the tree, but it would improve the safety of tree. An installation of a safety line would preserve the aesthetic appearance of the tree, but eventually one of the stems would tear out and need to be removed. This safety line would simply reduce the likelihood of that tearout causing damage. The tree was aggressively pruned in the past and all of the lateral branches have had their tips removed. The tree should be allowed to return to its original canopy density. It should be inspected by a climber for defects. Maintenance: 60 min. with climber Next Service: winter Priority: medium
	Site 63 *Pinus canariensis* - Canary Island Pine Although this tree has multiple leads, they have sufficiently large angles of attachment that they can all be retained without safety concerns in the next several years. The tree should be maintained for building clearance. It should be inspected by a climber annually for defects. Maintenance: 30 min. with climber Next Service: winter Priority: medium

	Site 64 *Ulmus parvifolia* - Chinese Elm This tree has Chinese Elm anthracnose canker. The cankers on the trunk are concentrated around several branch unions and should be monitored for the possibility of a branch failure. Currently, this tree is not a hazard to the landscape and can be retained. The tree has a sparse canopy, so no live foliage should be removed at this time. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 65 *Ulmus parvifolia* - Chinese Elm This tree has Chinese Elm anthracnose canker. The deadwood could be manicured out of the tree, but there is not much that should be removed at this time. Maintenance: 20 min. Next Service: winter Priority: low
	Site 66 *Schinus terebinthifolius* – Brazilian Pepper Tree This tree is planted across the property line between Mutual 17 and Golden Rain Foundation. This makes both Mutual 17 and the Golden Rain Foundation tenants-in-common for this tree. This tree is a fast-growing species that will need to be maintained for clearance every 6 to 12 months. This tree is growing vigorously and some of the interior shoots should be thinned out before they begin to compete with the outer canopy. Maintenance: 45 min. Next Service: spring Priority: high

	Site 67 *Ulmus parvifolia* - Chinese Elm This tree has Chinese Elm anthracnose canker. The deadwood could be manicured out of the tree, but there is not much that should be removed at this time. Maintenance: 20 min. Next Service: winter Priority: low
	Site 68 *Ulmus parvifolia* - Chinese Elm This tree has Chinese Elm anthracnose canker. There is some deadwood in the canopy of this tree that should be removed before it self-prunes. Maintenance: 30 min. Next Service: winter Priority: medium
	Site 69 *Ulmus parvifolia* - Chinese Elm This tree has Chinese Elm anthracnose canker. There is some deadwood in the canopy of this tree that should be removed before it self-prunes. Maintenance: 30 min. Next Service: winter Priority: medium

	Site 70 *Ulmus parvifolia* - Chinese Elm This tree has good structural form. There are some sites with bark loss in the scaffold structure, but the tree is actively healing these sites. The tree should be inspected annually to ensure that these wounds are healing properly. There is a broken branch on the north side of the canopy that should be removed immediately before it self-prunes. The canopy of the tree is looking a bit sparse. The interior shoots should be thinned to the strongest leaders and allowed to grow as temporary structures until the tree returns to an ideal canopy density. It will need to have its fringe raised annually for clearance. There is a wound at the base of this tree on the south side that is actively healing. No action needs to be taken at this time. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 71 *Ulmus parvifolia* - Chinese Elm This tree is looking much sparser than its neighbor. All of the foliage is concentrated at the tips of the branches and deadwood is scattered throughout the canopy. No live wood should be removed from the tree at this time because it is severely stressed. Maintenance: 20 min. Next Service: winter Priority: medium

	Site 72 *Tipuana tipu* – Tipu Tree This tipu tree is a good choice of species. It is an attractive decurrent tree with a weeping form. It was chosen to screen Mutual 17 from a possible parking lot installation project on the adjacent Golden Rain Foundation property. Because of its intended screening purpose, the low branches should be retained as much as possible. There are some interior crossing branches that should be removed before they become defects that restrict the tree's growth on the more desirable scaffold structure. There are about five anomalous branches with little lateral branching and foliage at their tips. These anomalous branches should be cut back to the parent stem to create a more compact, dense canopy. There is one low branch on the south side of the tree that should be removed to raise the fringe for lawnmower clearance. Maintenance: 20 min. Next Service: winter Priority: medium
	Site 73 *Tipuana tipu* – Tipu Tree This tipu tree is a good choice of species. It is an attractive decurrent tree with a weeping form. It was chosen to screen Mutual 17 from a possible parking lot installation project on the adjacent Golden Rain Foundation property. Because of its intended screening purpose, the low branches should be retained as much as possible. There are some interior crossing branches that should be removed before they become defects that restrict the tree's growth on the more desirable scaffold structure. There are a few crossing branches in this canopy that should be corrected and removed to train the tree to ideal structure. The fringe of this tree does not need to be raised at this time, but it will need to be raised annually beginning in 2016. Maintenance: 10 min. Next Service: 2016 Priority: high

	Site 74 *Ulmus parvifolia* - Chinese Elm This tree has deadwood scattered throughout the canopy that should be removed. Its fringe should be raised over the parking area. The interior scaffold has a fairly good structure. No live wood should be removed from the tree at this time because the tree is currently stressed. Aside from pruning for clearance, no live wood should be removed from the tree at this time. Maintenance: 15 min. Next Service: winter Priority: medium
	Site 75 *Ulmus parvifolia* - Chinese Elm This tree has good structural form. There are some sites with bark loss in the scaffold structure, but the tree is actively healing these sites. The tree should be inspected annually to ensure that these wounds are healing properly. The canopy of the tree is looking a bit sparse. The interior shoots should be thinned to the strongest leaders and allowed to grow as temporary structures until the tree returns to an ideal canopy density. It will need to have its fringe raised annually for clearance. The turfgrass is growing all the way to the trunk of this tree. In the course of maintaining the turfgrass, a weed whacker was used to shorten the grass around the trunk of the tree. The weed whacker has damaged the outer bark of the tree around the root crown and has likely stressed the tree. It is very possible that these wounds inflicted by a string trimmer will ultimately cause the death of the tree. They should continue to be monitored. When significant decay enters through this section of the tree, it may need to be marked as structurally deficient and replaced. Until then, deadwood should be removed and live wood should be retained. Maintenance: 30 min. Next Service: winter Priority: medium

	Site 76 *Ulmus parvifolia* - Chinese Elm This tree has good structural form. There are some sites with bark loss in the scaffold structure, but the tree is actively healing these sites. The tree should be inspected annually to ensure that these wounds are healing properly. The canopy of the tree is looking a bit sparse. The interior shoots should be thinned to the strongest leaders and allowed to grow as temporary structures until the tree returns to an ideal canopy density. It will need to have its fringe raised annually for clearance. The turfgrass is growing all the way to the trunk of this tree. In the course of maintaining the turfgrass, a weed whacker was used to shorten the grass around the trunk of the tree. The weed whacker has damaged the outer bark of the tree around the root crown and has likely stressed the tree. Deadwood should be removed and live wood should be retained. Maintenance: 30 min. Next Service: winter Priority: medium
	Site 77 *Ulmus parvifolia* - Chinese Elm There is deadwood scattered throughout the canopy that should be removed. The tree has Chinese Elm anthracnose canker, but it is not severe at this time. There is a nursery tie around the trunk of the tree that should be removed before it begins to constrict the vascular system of the tree. The fringe should be raised and lightened over the parking area. Aside from this fringe raising, no live wood should be removed from the tree at this time. Maintenance: 30 min. Next Service: winter Priority: medium

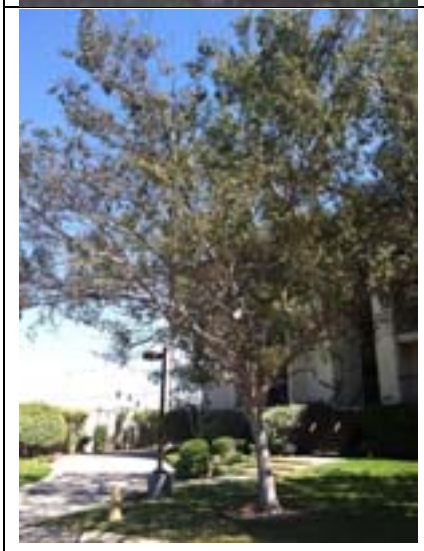
Site 78
Pinus canariensis - Canary Island Pine

This Canary Island Pine was over-pruned in the past. Many of the lateral branches were cut back to stumps, reducing the production of a plant hormone called auxin. Auxin controls the dormancy of adventitious shoots, and so its absence has resulted in prolific sprouting up and down the trunk of the tree. These shoots should be allowed to grow at this time but they will need to be removed after one to two years before they create an undesirable scaffold structure.

The tree has a co-dominant trunk form. The northern trunk of this tree should be removed before it becomes a falling hazard to the north over St. Andrews drive. The tree will have an unappealing aesthetic appearance following the removal of this trunk, but it will have less of a safety liability. It is possible that the previous mispruning on this tree will eventually result in its decline and death, but until it is assessed to be a hazard, it can be retained the landscape.

Maintenance: two hours with climber
Next Service: winter
Priority: medium

	Site 79 *Pinus canariensis* - Canary Island Pine This Canary Island Pine was over-pruned in the past. Many of the lateral branches were cut back to stumps, reducing the production of a plant hormone called auxin. Auxin controls the dormancy of adventitious shoots, and so its absence has resulted in prolific sprouting up and down the trunk of the tree. These shoots should be allowed to grow at this time but they will need to be removed after one to two years before they create an undesirable scaffold structure. This tree has four co-dominant trunks. The two northern trunks have the greatest likelihood of failing to the north onto St. Andrews drive. Those trunks should be removed and then a safety line should be installed between the remaining two major trunks to the south. A safety line will not prevent the failure of one of these trunks, but it will only mitigate the damage if it were to fail. Maintenance: 2.5 hours with climber Next Service: spring Priority: high
	Site 80 *Pinus canariensis* - Canary Island Pine This tree has a desirable canopy density to dampen the force of the wind on the main trunk. Unfortunately, the tree also has a co-dominant leading structure and a safety line should be installed to mitigate any damage that a failing trunk could have. While the safety line is installed, a climber should inspect the branch attach points for defects defect should be corrected. Maintenance: two hours with climber Next Service: spring Priority: high

	Site 81 *Melaleuca quinquenervia* – Paperbark Tree This recent transplant is located on a good site that is protected from the morning sun. Light, selective pruning cuts should be made to keep the tree clear from the building, but these pruning cuts will not be necessary for a while. For now, the tree does not need to be pruned. The only major maintenance issue is keeping the root ball clear of debris and soil that may erode around it. Maintenance: zero Next Service: 2016 Priority: low
	Site 82 *Ulmus parvifolia* - Chinese Elm This tree has good structural form. There are some sites with bark loss in the scaffold structure, but the tree is actively healing these sites. The tree should be inspected annually to ensure that these wounds are healing properly. There is some minor anthracnose canker on this tree that should be monitored. At this time, no action needs to be taken. The canopy of the tree is looking a bit sparse. The interior shoots should be thinned to the strongest leaders and allowed to grow as temporary structures until the tree returns to an ideal canopy density. It will need to have its fringe raised annually for clearance. Maintenance: 30 min. Next Service: winter Priority: medium

	Site 83 *Ulmus parvifolia* - Chinese Elm This tree is looking denser than its neighbor, possibly because it receives more protection to the south by its neighboring pine. There are many interior shoots, and the canopy is dense and complex. The tree should be allowed to grow in this form, only thinning the weaker shoots and the dead tissue. The tree will need to be pruned for clearance annually. Maintenance: 20 min. Next Service: fall Priority: medium
	Site 84 *Pinus canariensis* - Canary Island Pine This pine tree is a valuable asset to the mutual; it protects the adjacent building from the afternoon sun. It has grown accustomed to its placement next to the tree at site 85. This tree was aggressively pruned in the past when the tips were removed, and as a result many of the dormant nodes have sprouted. These dormant nodes should be allowed to grow for a year or two and then removed so they do not develop into an undesirable scaffold. Maintenance: 30 min. with climber Next Service: winter Priority: medium

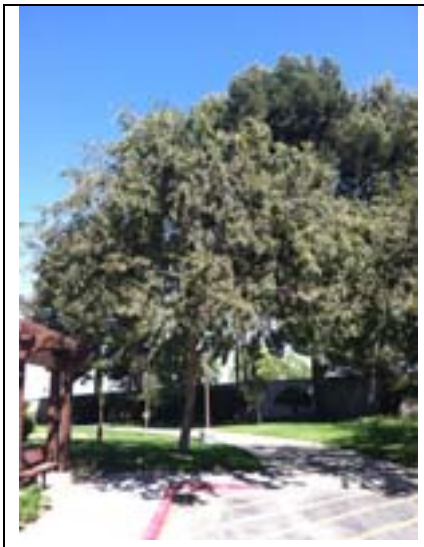
	Site 85 *Pinus canariensis* – Canary Island Pine This pine tree is a valuable asset to the mutual; it protects the adjacent building from the afternoon sun. It has grown accustomed to its placement next to the tree at site 85. This tree was aggressively pruned in the past when the tips were removed, and as a result many of the dormant nodes have sprouted. These dormant nodes should be allowed to grow for a year or two and then removed so they do not develop into an undesirable scaffold. There is some ivy around the base this tree that should be removed from the trunk. Care should be taken to not damage to the tree when the ivy is removed. The tree should be inspected annually for defects. Maintenance: 30 min. with climber Next Service: winter Priority: medium
	Site 86 *Pinus canariensis* - Canary Island Pine This pine tree is a valuable asset to the mutual; it protects the adjacent building from the afternoon sun. It has grown accustomed to its placement next to the tree at site 85. This tree was aggressively pruned in the past when the tips were removed, and as a result many of the dormant nodes have sprouted. These dormant nodes should be allowed to grow for a year or two and then removed so they do not develop into an undesirable scaffold. Maintenance: 30 min. with climber Next Service: winter Priority: medium

	Site 87 *Tipuana tipu* – Tipu Tree This tipu tree is a prime asset for the landscape. It shades a broad swath of green space and protects the adjacent building from the afternoon sun. There are several crossing branch structures in the canopy that should be corrected to bring the canopy form to a more stable scaffold. Also, the tips are beginning to get fairly heavy and should be lightened around the entire low fringe of the tree. The down-pointing branches can be removed, and 15% to 20% of the redundant parallel branches at the tips can be thinned out. The area that requires a special concentration of pruning efforts is the area of the fringe over the parking spaces. There are several shoots with excessive elongation that should be pruned back to live laterals that are capable of re-assuming apical dominance. There is also some minor deadwood in the tree from natural shade out dieback as the outer fringe shades out the inner foliage of the tree areas The tree should also be pruned for building clearance. Maintenance: 6 hours with climber Next Service: winter Priority: high
	Site 88 *Cupaniopsis anacardioides* – Carrotwood This carrotwood tree looks dense and healthy. At this time, it only needs to be maintained for crown height and does not need to be pruned until spring. The interior shoots should be thinned to the strongest ones so that they do not compete with the outer canopy. Maintenance: 20 min. Next Service: spring Priority: medium

	Site 89 *Corymbia citriodora* – Lemon Scented Gum There is some minor deadwood that should be removed from the tree before it self-prunes. The foliage is green and healthy, and aside from the deadwooding, this tree needs no pruning at this time. In the recent past, the tree was treated for lerp psyllid by trunk injection. These injection sites are still present low on the root crown. They should be inspected annually for the advance of any decay that may compromise the structure of the tree. Currently, it is not a concern. There is some minor deadwood in the canopy that can be pruned out, but no live foliage needs to be removed at this time. Maintenance: 30 min. with climber Next Service: spring Priority: medium
	Site 90 *Pinus canariensis* - Canary Island Pine This tree is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. The trees in this grove are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. This tree is also growing epicormic shoots that are sprouting along the trunk. These shoots can be retained for now, but will need to be removed eventually before they develop into an undesirable scaffold. This tree should have the southern co-dominant stem removed. It will not drastically affect the aesthetic appearance of the tree because the southern portion of the tree is growing in a grove with a tree to the immediate south. Removal of this co-dominant stem will train the tree to a long-term scaffold. Maintenance: four hours with climber Next Service: winter Priority: medium

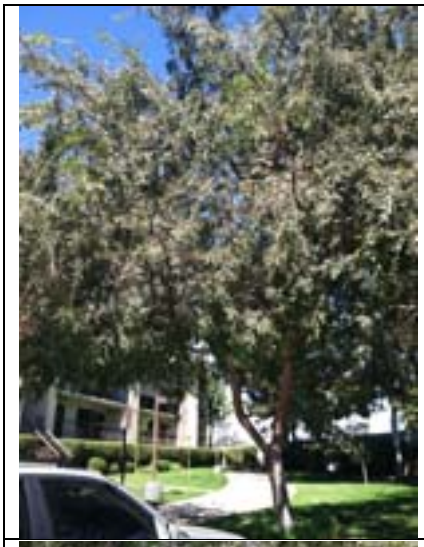
	Site 91 *Pinus canariensis* - Canary Island Pine This tree is an excellent choice of species for the location because it grows tall but does not have particularly invasive roots. The trees in this grove are an asset to the building by reducing cooling costs and improving the aesthetic appearance of the building façade. This tree is also growing epicormic shoots that are sprouting along the trunk. These shoots can be retained for now, but will need to be removed eventually for aesthetic purposes. This tree has co-dominant stems, but the removal of one of the stems would severely disfigure the tree. Rather, a safety line should be installed to mitigate possible damage. The tree should be inspected annually by a climber. Maintenance: one hour with climber Next Service: winter Priority: medium
	Site 92 *Pinus canariensis* - Canary Island Pine This tree has a smaller co-dominant stem to the east that can be gradually reduced from the top down. It is not a concern for hazard, but it could turn into one in the next five years if not de-stimulated. While climber is in the tree de-stimulating the co-dominant stem, he should also inspect the tree for any possible defects. Maintenance: 3 hours with climber Next Service: winter Priority: medium

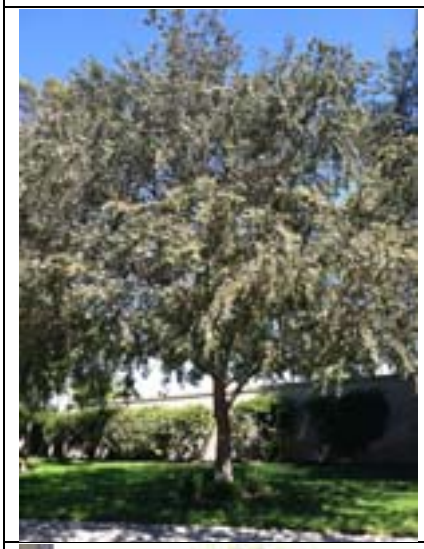
	Site 93 *Lophostemon confertus* - Brisbane Box This tree was a good choice of nursery stock because it has low branching all the way down to the ground. The low branches should be retained on the tree for long as possible to help the tree develop trunk taper and stability in the wind. It is not ready to have its stakes removed so the stakes should remain for one year. In 2016, an arborist should inspect the tree to determine whether it is able to stand on its own and if so, remove the stakes. Maintenance: 10 min. Next Service: 2016 Priority: medium
	Site 94 *Melaleuca quinquenervia* – Paperbark Tree This tree has a mechanical injury wound at its base on the southern side. It likely occurred due to impact with mowing equipment, and the bark is actively retreating from the site. It should be monitored for the advance of decay. At this point, no action needs to be taken, but this could become a wound site on the tree that will determine its lifespan. The tree's lateral branches should be allowed to grow outward, but the growing tips do not need to be de-stimulated at this time. No pruning needs to take place on this tree at this time. Maintenance: zero Next Service: 2016 Priority: low

	Site 95 *Ulmus parvifolia* - Chinese Elm This tree has a bit of a lopsided canopy to the south and should have its branches thinned over the street. The fringe should be raised over the walkways. Deadwood should be removed from the tree and new growth should be allowed on the north side to correct the tree's lean. At this time, the lean is not hazardous, but if the tree continues to grow in this fashion it will become a problem in the future. Maintenance: 45 min. Next Service: winter Priority: medium
	Site 96 *Ulmus parvifolia* - Chinese Elm This was a poor choice of nursery stock. It has a small, thin trunk with a small sprig of foliage at the top. The trunk is not capable of supporting the tree's own weight and it therefore needs to be tied to a stake. The ideal form for this tree from nursery stock would have low branching all the way down the trunk to allow for the development of trunk taper. For now, there are two options: remove the tree or retain the tree. If the tree is removed, it can be replaced with a better choice of nursery stock. If the tree is retained, it should be re-staked so that it is properly supported but allowed to move freely in the wind. No pruning should be done at this time because the tree needs every leaf to create photosynthates and deposit new growth tissue. Maintenance: 10 min. Next Service: now Priority: high

	Site 97 *Ulmus parvifolia* - Chinese Elm This was a poor choice of nursery stock. It has a small, thin trunk with a small sprig of foliage at the top. The trunk is not capable of supporting the tree's own weight and it therefore needs to be tied to a stake. The ideal form for this tree from nursery stock would have low branching all the way down the trunk to allow for the development of trunk taper. For now, there are two options: remove the tree or retain the tree. If the tree is removed, it can be replaced with a better choice of nursery stock. If the tree is retained, it should be re-staked so that it is properly supported but allowed to move freely in the wind. No pruning should be done at this time because the tree needs every leaf to create photosynthates and deposit new growth tissue. Maintenance: 10 min. Next Service: now Priority: high
	Site 98 Vacant Planting Site This would be an excellent planting site for a tree that can shade the building to the west. A tree should be chosen that does not have an aggressive root system. Canary Island Pine would do well here. This tree should also be considered to be a succession tree for when the trees along the east wall eventually need to be removed.

	Site 99 *Jacaranda mimosifolia* - Jacaranda This mimosa tree appears to have good form and does not need any pruning at this time. The canopy will need to be maintained for clearance, and defects should be removed annually. There is some minor root damage from a lawnmower driving over the root zone. Care should be taken to avoid this. One precaution could be to spread a small layer of mulch 2 to 4 inches thick around the root crown of the tree to protect it from machinery. Maintenance: 10 min. Next Service: spring Priority: high
	Site 100 *Callistemon citrinus* – Lemon Bottlebrush This recent installation of bottlebrush was harmed by the recent construction activity on the east wall. Some piece of machinery impacted the tree and caused it to partially break near the root crown. As a follow-up treatment, the tree was tightly wrapped with tape to support the split the trunk. This treatment will not cause the tree to heal this wound site. Rather, it will create a site that will actually promote decay entering the tree. It is likely that this tree will die in the next 1 to 2 years from its injuries. However, if it is able to survive and deposit sufficient reaction tissue, it will still have this structural weakness for the rest of its life. If the tree grows to be a substantial size, then it will be in danger of falling to the west, splitting at this old wound site. I recommend its removal and replacement. The tree can be retained in the landscape for several more years before it becomes a problem. Maintenance: zero Next Service: 2016 Priority: low Removal recommended

	Site 101 *Ulmus parvifolia* - Chinese Elm This elm tree has a dense and complex canopy. It has some minor anthracnose canker on some of the structural branches. The fringe over the parking area should be lightened, and deadwood should be removed from the tree. Maintenance: one hour Next Service: winter Priority: high
	Site 102 *Ulmus parvifolia* - Chinese Elm This Chinese Elm is looking a little sparse compared to its neighbor. The deadwood should be removed, and the low fringe should be raised. No other live wood should be removed from the tree at this time. The canopy can be allowed to intermingle with its neighbor. The tree has a prevailing lean to the south, but it is not significant enough to become a hazard. The tree can be allowed to grow with the lean. Maintenance: 40 min. Next Service: winter Priority: medium
	Site 103 *Ulmus parvifolia* - Chinese Elm This elm tree has a dense and complex canopy. It has some minor anthracnose canker on some of the structural branches. The fringe over the parking area should be lightened, and deadwood should be removed from the tree. Maintenance: 45 min. Next Service: winter Priority: high

	Site 104 *Jacaranda mimosifolia* – Mimosa Tree This jacaranda does not have much lateral branching. It just has three co-dominant stems emanating from a single point on the trunk 8 feet up. This form can still be managed, but the tree will be susceptible to tearout injury in the wind. The tree should be lightly pruned away from its neighbor Chinese Elm. In the fall, the fringe should be raised, and the tips of each of the shoots should be reduced back to compounds that are capable of assuming apical dominance. The fringe should be lightened to reduce the likelihood of branch tearout. Maintenance: 15 min. Next Service: fall Priority: high
	Site 105 *Ulmus parvifolia* - Chinese Elm This elm tree has a dense and complex canopy. It has some minor anthracnose canker on some of the structural branches. The fringe over the parking area should be lightened, and deadwood should be removed from the tree. Maintenance: 60 min. Next Service: winter Priority: medium
	Site 106 *Liquidambar styraciflua* – American Sweet Gum This Sweet Gum tree had too many of its low limbs removed. This is resulted in a low live crown ratio, predisposing the tree to wind throw to the west. Grass has been allowed to grow up to the trunk of the tree, and management of this turfgrass has resulted in injuries to the root crown and buttress roots. A good way to mitigate this damage would be to spread a layer of mulch around the root crown of the tree. Maintenance: 20 min. Next Service: fall Priority: medium

	Site 107 *Magnolia grandiflora* – Southern Magnolia This tree is a sparse-looking specimen. It likely had these problems originally when it was selected in the nursery. A specimen should have been selected that had a denser crown. Subsequently when the tree was planted, it was tied tightly to the nursery planting pole that should have been removed at planting. If this tree is to be retained, this nursery planting pole should be removed, and the ties should be reinstalled so that they loosely support the tree and allow it to move in the wind. The low branches should be preserved on this tree as long as possible so that it can develop trunk taper. It is likely that this tree will fade and die over the next year. If so, it can be replaced with a better chosen specimen. Maintenance: 10 min. Next Service: spring Priority: medium
	Site 108 *Liquidambar styraciflua* – American Sweet Gum This tree has good form and doesn't need much pruning at this time. It should be maintained for sidewalk clearance. Maintenance: 15 min. Next Service: fall Priority: medium

	Site 109 *Melaleuca quinquenervia* - Paperbark Tree This small tree is struggling on site. It has relatively low lateral branching coming out from its nearly straight trunk. The low lateral branches should be allowed to grow as much possible and fill in the canopy aesthetically. This will also help the tree develop trunk taper, making it able to stand on its own. For now, the stakes need to be retained and should be inspected by an arborist in one year. Maintenance: 10 min. Next Service: fall Priority: low

Site 110
Corymbia citriodora - Lemon Scented Gum

This tree is located near a recent wall installation. The trunk of this tree is approximately 6 feet from the wall. In the course of the wall installation, a trench was dug approximately 36 inches deep 24 inches deep. Most roots are found in the upper 12 to 36 inches of soil, and any trenching near the tree likely severed all of the roots passing through that line. As a result, this tree is structurally compromised and has a predisposition to failing to the south. The canopy is well-balanced and healthy, but the root system defect is the major concern in this tree. There are some minor dead branches that can be removed before they self-prune and fall.

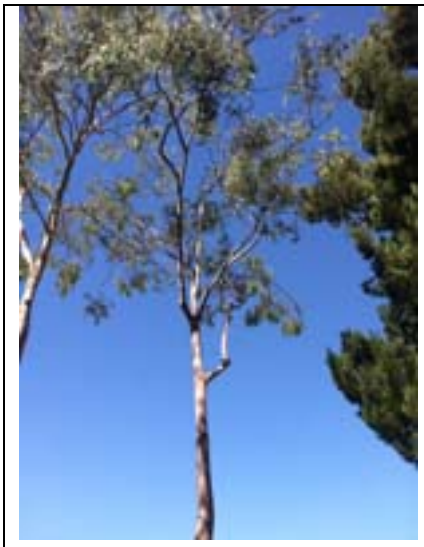
The root zone of this tree consists of a small planting bed to the west and east along a wide access driveway. It is possible that the roots of this tree have reached the planter on the south side of the driveway. If this is the case, then they have been receiving nutrients and water from the irrigation system and are providing support for the tree.

No root cutting should be done along the driveway without consulting an arborist. If roots growing under the driveway are severed, the tree will have less anchorage, making it more of a hazard. An important mitigation for the safety of this tree is to inspect it annually for any new signs of weakness or decay that may appear. If any signs of decay appear in the lower root crown of this tree, it should be removed for safety.

At the time of my site visit, I observed no signs of decay or weakness in the aboveground portion of the tree, and the root damage is sufficiently far from the trunk of the tree that I do not believe it will fail in the next year, given average weather conditions.

If maintenance is conducted on this tree, one lane of traffic will need to be blocked on the north side of the wall for safety.

Maintenance: 90 min. with climber
Next Service: winter
Priority: low

	Site 111 *Corymbia citriodora* - Lemon Scented Gum This tree has the same defects as described for the tree at Site 110. This tree is located approximately 10 feet from the newly installed wall. It is close enough that it likely sustained significant injury. However, it is far enough that sufficient support roots remain intact, and the tree can be retained in the landscape. There is some minor deadwood in the canopy the can be removed before it self-prunes. If this is done, one lane of the street to the north will need to be blocked off so the tree crew may have access. Maintenance: 90 min. with climber Next Service: winter Priority: low
	Site 112 *Pinus halepensis* – Aleppo Pine This pine is an asset to the Leisure World because it is a large, stately form at the entrance to the community. It also aesthetically screens the apartment building to the south and serves as a privacy screen for shareholders with units on the end of the building. The tree is located approximately 15 feet from the newly installed wall. Aboveground, the tree appears healthy and does not appear to be in decline as a result of the adjacent wall's installation. I did not observe any signs of decay in the root crown area at the time of my inspection. The interior of this tree appears to be clean and does not need any pruning at this time. There are no limbs that are in severe cantilever, and the foliage distribution is acceptable. This tree should simply be monitored for any signs that the newly installed wall caused severe damage to its root system. Maintenance: 30 minutes with climber inspection Next Service: winter Priority: high

Site 113
Pinus halepensis – Aleppo Pine

This pine is an asset to the Leisure World because it is a large, stately form at the entrance to the community. It also aesthetically screens the apartment building to the south. It also serves as a privacy screen for shareholders on the end of the building.

The tree is located approximately 15 feet from the newly installed wall. Aboveground, the tree appears healthy and does not appear to be in decline as a result of the adjacent wall's installation. I did not observe any signs of decay in the root crown area at the time of my inspection.

The interior of this tree appears to be clean and does not need any pruning at this time. There are no limbs that are in severe cantilever, and the foliage distribution is acceptable. This tree should simply be monitored for any signs that the newly installed wall caused severe damage to its root system.

Although this pine tree has a co-dominant trunk form, the angle of attachment is sufficiently large that the weakest point on the tree is not the co-dominant union. Therefore, no action needs to be taken to correct the trunk union at this time.

Maintenance: 30 minutes with climber inspection
Next Service: winter
Priority: high

	Site 114 *Lophostemon confertus* - Brisbane Box This young tree was a well-chosen specimen, but it was not a well-chosen planting site. This planting site will limit the lifespan of this tree because of the limited root space. If this tree is allowed to grow into its natural form, it will push up against the newly installed wall to the east. It will also grow far taller than its neighboring hedges, creating an anomaly in the aesthetic appearance of the wall's landscaping. While it is in its youth, this tree should be transplanted somewhere it will create more value for the mutual. Once it is planted in its final spot, the nursery stake and ties should be removed. If the tree is not able to stand on its own, the tree should be staked by two planting poles inserted in the ground outside the root ball. The tree should be allowed to sway in the wind so that it can develop trunk taper. Maintenance: 10 min. once it is planted Next Service: winter Priority: high
	Site 115 *Lophostemon confertus* - Brisbane Box This young tree was a well-chosen specimen, but it was not a well-chosen planting site. This planting site will limit the lifespan of this tree because of the limited root space. If this tree is allowed to grow into its natural form, it will push up against the newly installed wall to the east. It will also grow far taller than its neighboring hedges, creating an anomaly in the aesthetic appearance of the wall. While it is in its youth, this tree should be transplanted somewhere it will create more value for the mutual. Once it is planted in its final spot, the nursery stake and ties should be removed. If the tree is not able to stand on its own, the tree should be staked by two planting poles inserted in the ground outside the root ball. The tree should be allowed to sway in the wind so that it can develop trunk taper. Maintenance: 10 min. once it is planted Next Service: winter Priority: high

Site 116
Pinus halepensis - Aleppo Pine

This Aleppo pine is located 2 feet from the newly installed wall and has a height of about 60 feet. This tree certainly relied on anchorage roots that grew under the previous wall. The trench that was dug likely severed those roots, leaving the tree with half of a root system.

The tree has a prevailing lean to the north, and most of its foliage is concentrated on the north side of the trunk, putting it into cantilever away from the tree at Site 117. The canopy is fairly dense and complex, and the center of gravity is significantly shifted to the north of the trunk.

The tree is also in contact with the telephone and cable lines. If it is retained, it will need to be pruned for line clearance. The pruning of this tree will require blocking the sidewalk and possibly a lane of traffic on Seal Beach Boulevard, making this a costly pruning job.

Due to its proximity to the recently installed wall and its size, this tree should be considered for removal. However, if this tree is removed, its neighbor at site 117 may also need to be considered for removal. Removing this tree will increase the wind load exposure on the tree at Site 117 due to the forest edge effect, making it more hazardous.

If the tree is to be removed, then no money should be spent on maintenance pruning at this time. If the tree is to be retained, it should be pruned for line clearance, and the fringe to the north should be lightened significantly. No more than 10% to 15% of the live foliage should be removed in any given year. The tree should be inspected annually for any signs of root system weakness that that may appear.

If retained:

Maintenance: four hours with climber
Next Service: winter
Priority: high

Removal Recommended

Site 117
Pinus halepensis - Aleppo Pine

This tree is located approximately 10 feet from the newly installed wall. It is growing in a grove with the trees at sites 116 and 118. Growing with its two neighboring trees, it may be allowed to stand temporarily because they help to shield it from wind loads. The tree is sufficiently far from the wall that at least 60 to 70% of its root system remains intact. Care should be taken to not cut any roots under the adjacent walkway.

If its neighbors are removed, this tree may need to be considered for removal as well. It would be a solitary tree exposed to the full force of the wind loads rolling off the top of the adjacent building. These wind loads will be a higher speed near the top of the tree, creating excessive cantilever force.

If the tree is retained, it will need to be pruned for line clearance. There are several dead limbs of the tree that should be removed as well.

If retained:

Maintenance: six hours with climber
Next Service: winter
Priority: high

Consider Removal

Site 118
Pinus halepensis - Aleppo Pine

This tree's trunk is located approximately 3 feet from the wall. The tree has a prevailing lean to the west which could predispose it to falling to the west because of the removal of the tensile buttress roots. If its neighbors at Site 116 and Site 117 are removed, this tree may need to be considered for removal as well. It would be a solitary tree exposed to the full force of the wind loads rolling off the top of the adjacent building. These wind loads will be a higher speed near the top of the tree, creating excessive cantilever force.

This tree has several co-dominant stems, but they have sufficiently large angles of attachment that they are not the weakest points in the tree. Currently, the weakest point in the tree is the root system that has recently been severed by the proximity to the newly constructed wall.

There is significant deadwood in the tree, and the low fringe will need to be pruned for line clearance.

If the tree is retained:

Maintenance: 4 hours with climber
Next Service: winter
Priority: high

Consider Removal

Site 119
Corymbia citriodora - Lemon Scented Gum

This tree is located approximately 7 feet from the newly installed wall. It is also immediately adjacent to one of the primary access ways for machinery to get to the wall construction site. This means that the soil near the root crown of the tree on the southern side was compacted by the passing machinery. Because of the soil compaction damage, the tree may have lost a significant portion of its root system due to construction. The roots on the south side of the tree will be inhibited due to the reduction of soil pore space from soil compaction, and the roots to the east were lost because they were severed when the trench was dug.

If the tree were to fail to the west, it would not hit the building or cause significant damage. It would only fail across the walkway and possibly damage one of the smaller understory trees. For that reason, the tree may be considered for being retained in the landscape for several years or until external signs of defects appear. If any root crown defect appears, then the tree will need to be recommended for removal.

This tree has a small load of dead branches that should be pruned out.

The tree is growing into conflict with the neighboring pine at Site 120. A decision should be made on whether the tree at Site 120 will be retained or removed. If it is removed, then the Lemon Scented Gum should be allowed to grow to the south. If it is to be retained, then the Lemon Scented Gum should be pruned back to make space for the pine.

I observed no signs that the tree is an imminent failure hazard. If the tree is to be retained, it should be inspected annually by an arborist.

If the tree is to be retained:

Maintenance: two hours with climber
Next Service: winter
Priority: high

Consider Removal

Site 120
Pinus halepensis - Aleppo Pine

This tree's trunk is located approximately 6 feet from the newly installed wall.

The canopy of the northern trunk is relatively balanced. The canopy of the southern trunk has a westerly lean, but not so much that the lean of the tree poses a hazard to the south. The northern trunk serves to counterbalance the lean of the southern trunk. The key failure region for this tree would be the root zone where the newly installed wall is.

This tree is the tallest of the grove and is subject to the most wind loads. Furthermore, the greatest density of foliage is concentrated near the top of the crown. It is not evenly distributed throughout the crown as would have been ideal. This tree has a co-dominant stem feature, but the angle of attachment is sufficiently large that the branch union between these two trunks is not the weakest point on the tree.

If the tree were to fail, it would not hit the adjacent building or cause significant damage. The only target for this tree on the western side is the adjacent walkway. It is less likely that the tree would fail to the east due to the root cutting from the installation of the wall because the strongest buttress roots are the tensile buttress roots on the windward side. If the tree were to fail to the east, it would due to be due to a combination of other factors such as soil compaction.

Although it is not currently in contact with the lines, this tree will eventually need to be pruned for line clearance if it is to be retained. There is ivy growing around the trunk of the tree. If it is to be retained, then the ivy should be removed carefully to avoid damaging bark.

If the trees to be retained:

Maintenance: eight hours with climber
Next Service: winter
Priority: high

	Site 121 *Pinus halepensis* – Aleppo Pine This tree's trunk is located approximately 4 feet from the adjacent wall. Its lowest branches have been cut to stumps on the side of the power lines for line clearance. These branches will eventually die back to the main stem and need to be removed, leaving an imbalance in the tree's canopy to the west. Because of the westerly imbalance in the tree's canopy and absence of eastern tensile buttress roots, this tree is a falling hazard. However, if it were to fall to the west, it has no target except adjacent trees and a walkway. For this reason, it may be considered to be retained for some time the landscape until defects appear. If retained in the landscape: Maintenance: four hours with climber Next Service: winter Priority: high

Site 122
Pinus halepensis – Aleppo Pine

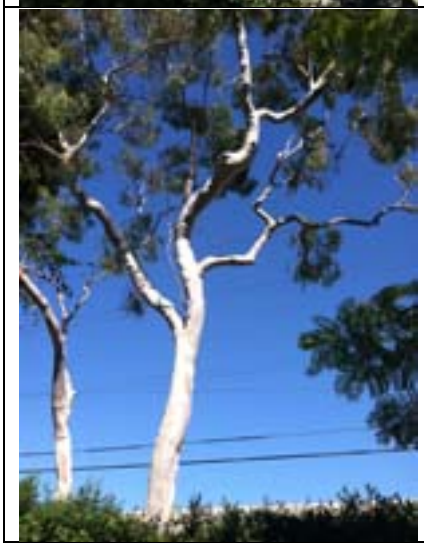
This young Aleppo Pine is sufficiently far from the newly installed wall that it did not suffer significant root damage. There is a protective layer of ivy growing around the root zone of this tree, and there is no indication of soil compaction in the recent past. Therefore, this tree can be retained in the landscape. The ivy growing up the trunk of this tree should be removed before it colonizes the tree. Care should be taken to not damage the bark when the ivy is removed.

The tree can begin the early stages of structural pruning to encourage a single leading trunk form. There appears to be a rat nest in the canopy of this tree that should be knocked down with a pole saw.

There is a buildup of dead needles in the canopy that can be sprayed out with a high-pressure hose. This will have the short term effect of making the tree look more attractive and the long term effects of allowing more light through the foliage and increasing photosynthesis in the tree.

Care should be taken to protect this tree as a succession specimen if either of the adjacent trees is removed.

Maintenance: 2 hours with climber
Next Service: winter
Priority: medium

	Site 123 *Corymbia citriodora* – Lemon Scented Gum This tree is about 5 feet from the newly constructed wall. Like its neighbors, it is predisposed to failing to the west due to root cutting. It has some minor deadwood that can be removed for aesthetic purposes. This tree does not have a target to the west, so it can be retained until it fails. Maintenance: 30 min. with climber Next Service: winter Priority: low
	Site 124 *Corymbia citriodora* – Lemon Scented Gum This tree is about 5 feet from the newly constructed wall. Like its neighbors, it is predisposed to failing to the west due to root cutting. It has some minor deadwood that can be removed for aesthetic purposes. This tree does not have a target to the west, so it can be retained until it fails. Maintenance: one hour with climber Next Service: spring Priority: medium

	Site 125 *Pinus halepensis* – Aleppo Pine This tree has a prevailing lean to the north away from the tree at Site 126 that dominates this grove. Its trunk is located approximately 9 feet from the newly installed wall. In the past, this tree's lateral branches have all been reduced. The reduction cuts on this tree have stunted its growth and will likely contribute to future decline. This tree is small enough and far enough from the wall that its root system is still structurally functional. The roots that bear the most stress on this tree are growing to the southwest and have not been severed. The roots of this tree are likely intertwined with the roots of the tree to the south at Site 126, so if that tree is retained, this tree will have a measure of protection from root failure. Though it does not need it now, the tree will need to be addressed for line clearance in the future. Maintenance: two hours with climber Next Service: 2016 Priority: high

Site 126
Pinus halepensis – Aleppo Pine

This tree has a good structural form and a prevailing lean to the northeast. The anchorage roots that are under the most stress on the southwestern side of the root zone are still intact.

The tree has an impact wound from some mechanical equipment, approximately 6 feet up the eastern side of the trunk. There are several severed roots at the surface about 3 feet from the trunk of the tree. There are some significant sap exudation sites on the eastern side of the root crown. This is indicative of a structural weakness in the tree. The tree does not appear to be an immanent falling hazard, but consideration should be given for the Mutual's risk tolerance. If this tree were to fail to the west, it would impact several cars parked below it.

On this tree, some of the low branches have been cut to stumps. I was informed that prior to the construction of this wall, a landscape crew was instructed to cut clearance for the construction crew to work. It is likely that these cuts were made during this clearance pruning. If this tree is to be retained, the low branches should be cut back to the main trunk. The distribution of foliage in the canopy is good. The tree should be inspected annually for any additional signs of defects.

Maintenance: two hours with climber
Next Service: winter
Priority: high

Consider Removal

Site 127
Pinus halepensis – Aleppo Pine

Like its neighbors, this tree has a prevailing lean to the north east. It is located 6 feet from the recently installed wall. At the time of observation of this tree, the root crown above ground appeared defect-free. I observed no decay in the root crown.

This tree has a co-dominant trunk form at approximately 12 feet off the ground. The co-dominant stem is not ideal for the tree for the long-term, but in the short term it is not the weakest point on the tree. If the tree is successfully retained the landscape for five years without failure, then this co-dominant stem form should be addressed. A safety line can be installed, or the smaller co-dominant stem to the north can be removed. Although the prevailing lean of the tree is to the north, the center of gravity is to the west. This shifting of the center of gravity to the west could possibly contribute to this tree's failure if the anchorage roots to the east are not sufficiently strong to hold.

There is some residue of mortar mix incorporated in the outer bark of the trunk on the eastern side. This is likely a remnant from the construction on the adjacent wall. Mortar was used to lay the cinderblocks, and some must have splashed onto the tree. This is generally just a topical issue, and the natural sloughing of bark will loosen the mortar. Eventually the tree will shed this buildup of mortar, and it does not appear to have a negative effect on the health of the tree.

If this tree is to be retained, it will need to be pruned for power line clearance.

If the tree is to be retained:

Maintenance: four hours with climber
Next Service: winter
Priority: high

Site 128
Corymbia citriodora – Lemon Scented Gum

This tree is located approximately 4 feet from the recently constructed wall. The center of gravity for this tree is to the west, away from the wall. Much of the pruning on this tree has trained it to grow to the west. This shifted center of gravity makes the tree more susceptible to fail to the west over the parking lot.

There is some minor deadwood in the tree that can be removed if it is to be retained. There are some minor mechanical injury wounds to the bark low on the trunk. These smaller wounds appear to already be healing over and not causing a long-term problem for the tree. The most pertinent issue with this tree is the severed root system.

If this tree is to be retained:

Maintenance: two hours with climber
Next Service: winter
Priority: high

Consider Removal

Site 129
Corymbia citriodora - Lemon Scented Gum

This tree is located approximately 4 feet from the recently constructed wall. The center of gravity for this tree is to the west, away from the wall. Much of the pruning on this tree has trained it to grow to the west. This shifted center of gravity makes the tree more susceptible to fail to the west over the parking lot.

There is a major mechanical injury wound low on the trunk of this tree on the eastern side. It is exuding sap. It appears that it was from impact with heavy machinery used in the construction of the adjacent wall. The region between Site 128 and Site 129 was used for access to the wall by the construction equipment. It is likely that while the equipment was being driven into and out of the construction zone, it impacted the root crown of this tree. There is extensive bark loss, and the bark is actively retreating around the root crown.

Currently, the heartwood that is exposed is sound and not rotted. However, this could rot and become structurally compromised over a period of several years. Therefore, this root crown injury coupled with the severing of the roots leads me to conclude that this tree should be removed.

Removal Recommended

Site 130
Ulmus parvifolia - Chinese Elm

This tree has a healthy, dense canopy. Its structure is nearly ideal. There is some minor Chinese Elm anthracnose canker on the upper side of a few scaffold branches. The cankers are not large enough to become significant problem at this time but they should be monitored. The tree will need to be pruned for clearance annually due to its weeping form. This tree's trunk is far enough from the recently constructed wall that the recent construction did not likely impact the health of the tree.

Maintenance: one hour
Next Service: winter
Priority: medium

Site 131
Corymbia citriodora - Lemon Scented Gum

This lemon scented gum is located approximately 4 feet from the recently installed wall. There are several surface buttress roots that terminate at the wall; they must have been severed when the wall was built. These surface buttress roots formerly carried much of the support weight of the tree from failing to the west. With these gone, the holding capacity of the remaining root system is significantly diminished.

Much of the canopy of this tree is concentrated on the western side. There are several dead branches hanging in the canopy that should be removed for safety regardless of whether this tree is retained or removed. If this tree were to fail to the west, its impact would be reduced by the adjacent Chinese Elm to the west. The structural branches of the Chinese Elm would not prevent the failing of the Lemon Scented Gum, but they would reduce the force of impact if it were to fail. If Mutual 17 is tolerant of this risk, then the Lemon Scented Gum can be retained in the landscape. Otherwise, it should be removed.

If the tree is retained:

Maintenance: three hours with climber
Next Service: winter
Priority: high

	Site 132 *Ulmus parvifolia* - Chinese Elm This tree is sufficiently far from the newly installed wall that its roots were not affected by the construction. There are some surface roots on the eastern side of the root zone that have been damaged by mowers. The damage is not significant enough to cause a structural hazard, but these mower damage sites should be monitored annually. If decay advances into the buttress roots, then the tree's structural stability may be compromised. The structure of the canopy is good. It is complex and dense. Some of the long interior shoots should be reduced to the stronger ones before they compete with the rest of the canopy. The canopy will need to be raised annually due to the natural low weeping form of the tree. There are several dead branches hanging in the canopy that should be removed. Maintenance: 60 min. Next Service: winter Priority: medium

Site 133
Pinus halepensis – Aleppo Pine

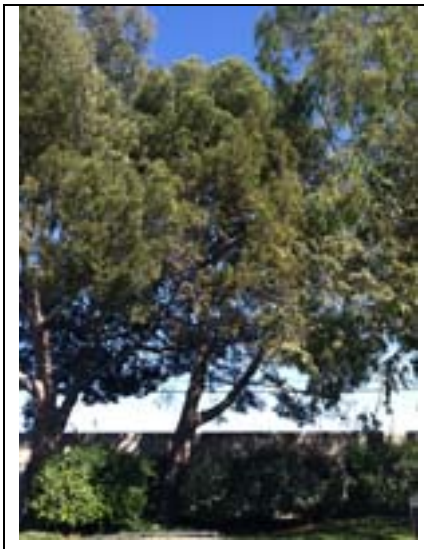
This pine tree has a prominent co-dominant stem structure. The angle of attachment is sufficiently large that it is not the weakest point in the tree. The trunk of this tree is located approximately 3 feet from the newly constructed wall. Due to the size of this tree, nearly 40% of the root system was compromised due to the installation of the adjacent wall.

Currently, the tree's canopy form is approximately balanced between the east and west. The trunk leaning out over the wall to the east counterbalances the trunk on the west side. If the eastern trunk were to be removed, the western trunk would likely become a falling hazard due to the absence of tensile buttress roots on the eastern side. If the tree is to be retained, both halves of the tree should be retained.

The eastern half of the tree needs to be pruned for power line clearance. As little live foliage as possible should be removed to preserve the counterbalance of that trunk. There are some dead branches that could be removed before they self-prune.

If the tree is retained:

Maintenance: 3 hours with climber
Next Service: winter
Priority: medium

	Site 134 *Pinus halepensis* – Aleppo Pine This pine tree has a prominent co-dominant stem structure. The angle of attachment is sufficiently large that it is not the weakest point in the tree. The trunk of this tree is located approximately 5 feet from the newly constructed wall. Due to the size of this tree, nearly 40% of the root system was compromised due to the installation of the adjacent wall. The tree's canopy form is biased to the south because the tree subordinates to its neighbor at Site 133. There is one large leader that arcs out to the southwest over the wall. Currently, this leader does not appear to need lightening, but it may need it in the future if the tree adds more canopy mass. There are some dead branches that could be removed before they self-prune. If retained: Maintenance: 2 hours with climber Next Service: winter Priority: medium Consider Removal
	Site 135 *Corymbia citriodora* - Lemon Scented Gum This tree is located approximately 12 feet from the newly installed wall. It is far enough from the wall that enough of its roots remain intact for the tree to not pose an imminent safety hazard. There is some minor deadwood that could be cleaned from the canopy before it self-prunes. At about 12 feet up the trunk, there is a co-dominant stem form. These two stems have an angle of attachment that may predispose one of the trunks to tear out in the future, but the angle of attachment is wide enough that the likelihood is low. The tree is growing in a bed of English Ivy. The Ivy should be maintained off the trunk. Care should be taken to not damage the trunk of the tree when the Ivy is removed. The foliage looks healthy. There are no above ground signs that there is any stress on this tree. Maintenance: 45 min. with climber Next Service: spring Priority: medium

	Site 136 *Pinus halepensis* - Aleppo Pine This tree is about 5 feet from the newly installed wall. There are some large above-ground roots that terminate at the wall, indicating that there was major root cutting on this tree. There are some chalk markings at the base of the tree, possibly indicating that this tree was already marked for removal. The size of these severed anchorage roots makes this tree a hazard in the landscape. I recommend its removal. Removal recommended.

Site 137
Pinus halepensis - Aleppo Pine

This pine tree is less than 3 feet from the newly installed wall. It most certainly has lost a large portion of its root system when the wall was installed. There are no above-ground signs of root cutting, but the proximity of the tree to the wall implies the inevitability of such root cutting.

There is a large limb about 18 inches in diameter that arcs out over the driveway to the west. Although the limb is in heavy cantilever, there is not sufficient weight on this limb for the branch union to be the weakest point on the tree.

Further up the main stem, there is a co-dominant form, with one of the trunks headed towards the power lines. In the past, this trunk was headed back, and all of its subordinate branches were headed back as well. This has left sparse foliage on the eastern side of the tree and shifted the center of gravity to the west. Pine trees do not handle tipping cuts well, and if left alone, this trunk will likely fade and die back to the main stem.

For now, a decision should be made regarding the risk tolerance of the mutual. If this tree were to fail, it would not cause significant damage to the adjacent building, but it would fall across the driveway and damage some of the nearby plant material. Because the potential targets are not particularly valuable, the tree may be retained in the landscape.

No pruning needs to be done this year, but if the tree is retained more than one year, it will need to be maintained for power line clearance, and the stumps by the power lines should be recut.

Maintenance: two hours with climber
Next Service: 2016
Priority: medium

	Site 138 *Corymbia citriodora* - Lemon Scented Gum This tree is about 6 feet from the adjacent wall, and enough of its roots remain intact so the tree can be retained in the landscape. It is about 3 inches from an electrical box, and it is likely that the roots have grown around and underneath the concrete slab for the electrical box. There is some minor deadwood that can be removed from the tree for safety and aesthetic purposes. Maintenance: one hour with climber Next Service: winter Priority: low
	Site 139 *Afrocarpus falcatus* - Yew Pine This was a poor choice of nursery stock because it was aggressively tied to its planting pole in the nursery. As a result, the tree has developed a lean away from the stake to the north. All of the low branches have been removed up to a height of 5 feet. The ties have been removed, but the planting pole has not. The planting pole should be carefully removed so that it does not damage the root system. If the tree still needs to be staked, new stakes should be inserted in the ground outside the root ball to avoid damaging the roots. The predominant lean of the tree will likely limit its lifespan in the landscape. For now, it can be retained, but the lean should be monitored. Maintenance: 10 min. Next Service: winter Priority: high

	Site 140 *Afrocarpus falcatus* - Yew Pine This was a poor choice of planting site for this species. It was planted too close to the newly installed wall, and its roots will eventually crack the adjacent wall. There is a co-dominant stem that originates low on the trunk that is currently cutting off the circulation of the next lowest branch. This low co-dominant stem should be removed back to the trunk. Consideration should be given for this tree's removal and replacement with a shrub instead of a tree. Maintenance: 10 min. Next Service: winter Priority: medium
	Site 141 *Lophostemon confertus* - Brisbane Box This young tree was a well-chosen specimen, but it was not a well-chosen planting site. This planting site will limit the lifespan of this tree because of the limited root space. If this tree is allowed to grow into its natural form, it will push up against the newly installed wall to the east. While it is in its youth, this tree should be transplanted somewhere it will create more value for the mutual. Once it is planted in its final spot, the nursery stake and ties should be removed. If the tree is not able to stand on its own, the tree should be staked by two planting poles inserted in the ground outside the root ball. The tree should be allowed to sway in the wind so that it can develop trunk taper. Maintenance: 10 min. once it is planted Next Service: winter Priority: high

	Site 142 *Lophostemon confertus* - Brisbane Box This young tree was a well-chosen specimen, but it was not a well-chosen planting site. This planting site will limit the lifespan of this tree because of the limited root space. If this tree is allowed to grow into its natural form, it will push up against the newly installed wall to the east. While it is in its youth, this tree should be transplanted somewhere it will create more value for the mutual. Once it is planted in its final spot, the nursery stake and ties should be removed. If the tree is not able to stand on its own, the tree should be staked by two planting poles inserted in the ground outside the root ball. The tree should be allowed to sway in the wind so that it can develop trunk taper. Maintenance: 10 min. once it is planted Next Service: winter Priority: high
	Site 143 *Corymbia citriodora* - Lemon Scented Gum This tree is located approximately 12 feet from the newly installed wall. It is sufficiently far from the wall that its structural roots were not severely compromised by the installation of the wall. Tree has a prevailing lean to the southwest. All of the foliage is growing to the southwest of the trunk and is arcing over the canopy of the adjacent Aleppo Pine at site 144. Although lopsided in canopy, this tree is not a hazard the landscape at this time. It can be retained in the landscape. There is some minor deadwood that could be removed from the tree. Maintenance: two hours with climber Next Service: winter Priority: low

	Site 144 *Pinus halepensis* – Aleppo Pine This tree is growing in a grove with its neighboring trees, thereby sharing the applied wind loads. The trunk of this tree is located approximately 6 feet from the newly installed wall. There is a bulge on the southern side of the trunk of the tree that predates the installation of the wall. Often a crown gall is an indicator of some sort of internal mechanical stress. It is impossible to determine the extent of the stress without specialized testing. The upper canopy of the tree looks good. The two major co-dominant stems have a large enough angle of attachment that their union is not the weakest point on the tree. The tree will eventually need to be pruned for line clearance. If this tree were to fail to the west, it would not hit a target. It would land in the unoccupied turfgrass of the adjacent greenbelt. Therefore, since this tree is not an imminent hazard, it can be retained in the landscape. Maintenance: three hours with climber Next Service: 2016 Priority: high
	Site 145 *Melaleuca quinquenervia* - Paperbark Tree This was a good choice of species for the site, and this tree appears to be growing well here. The ivy around the tree should be routinely cut back to stop it from colonizing the canopy. Care should be taken to not damage the outer layer of bark while the ivy is removed. The tree is far enough from the adjacent wall that its root system is not likely negatively impacted by the construction activity. No pruning needs to be done on this tree at this time. Maintenance: zero Next Service: 2016 Priority: medium

Site 146
Pinus halepensis – Aleppo Pine

This tree is located approximately 4 feet from the recently installed wall. There are several surface roots leading up to the wall that were severed during construction, and there is a patch of settled soil within 1 foot of the newly installed wall, indicating that the trench extended at least that far away from the wall. Much of this tree's root system was lost in the installation of the wall.

If the tree were to fail to the west, the only target is the magnolia at Site 10. Therefore, this tree can be retained in the landscape, provided the mutual is willing to accept the risk. The tree should be monitored annually for any signs of imminent failure and removed if it becomes an imminent hazard.

A previous pruning episode on this tree has left several stumps that should be recut back to the main trunk. Pine trees cannot have their growing tips removed because those branches eventually die back to the main stem. The tree does not need it now, but it will eventually need to be pruned for line clearance.

Maintenance: two hours with climber
Next Service: winter
Priority: medium

	Site 147 *Callistemon citrinus* – Lemon Bottlebrush This newly installed bottlebrush was not impacted by the installation of the eastern wall. Is tightly tied to its nursery stake, and these ties should be removed immediately. If the tree is not able to stand on its own, its stakes should be replaced outside the root zone. This tree was not an ideal choice of nursery stock because all of the low lateral limbs have been removed. Nearly all of the foliage emanates from a single point on the trunk about 5 ½ feet up. This is not the ideal form for the tree and this form will ultimately limit the tree's lifespan. However, it is not currently a problem and the tree can be retained in the landscape for at least another 10 years. Maintenance: 10 min. Next Service: now Priority: high

Mutual 17 Tree Inventory

Site	Latin Name	Species	Maintenance	Climber	Removal	Next Service	Priority	Notes
1	Ulmus parvifolia	Chinese Elm	0.75	No	No	now	high	lighten branches over parking, inspect cankers, crown raising
2	Ulmus parvifolia	Chinese Elm	0.50	No	No	spring	medium	remove lowest southern scaffold branch, crown raising
3	Liquidambar styraciflua	American Sweet Gum	0.25	No	No	winter	medium	deadwood
4	Liquidambar styraciflua	American Sweet Gum	0.17	No	No	winter	medium	clearance
5	Pinus canariensis	Canary Island Pine	0.00	No	No	fall	medium	no action
6	Pinus canariensis	Canary Island Pine	2.00	Yes	No	fall	medium	aerial inspection, remove defects/deadwood
7	Pinus canariensis	Canary Island Pine	2.00	No	No	fall	medium	aerial inspection, remove defects/deadwood
8	Pinus canariensis	Canary Island Pine	1.50	No	No	2016	medium	aerial inspection, remove defects/deadwood
9	Pinus canariensis	Canary Island Pine	4.00	Yes	No	2016	medium	aerial inspection, remove defects/deadwood, remove southern trunk
10	Magnolia grandiflora	Southern Magnolia	0.00	No	No	2016	low	no action
11	Lophostemon confertus	Brisbane Box	0.17	No	No	winter	high	remove stakes
12	Afrocarpus falcatus	Yew Pine	0.17	No	No	winter	High	remove stakes
13	Salix babylonica	Weeping Willow	1.00	No	No	winter	medium	begin scaffold pruning, deadwood removal
14	Liquidambar styraciflua	American Sweet Gum	0.33	No	No	winter	medium	remove one competing trunk, train to single trunk
15	Brachychiton sp.	Bottle Tree	0.08	No	No	2016	low	building clearance
16	Melaleuca quinquenervia	Paperbark Tree	0.17	No	No	2016	low	harmony trim of multi-trunk form
17	Cupaniopsis anacardioides	Carrotwood	0.25	No	No	2016	medium	inspect wound on north side of root crown; defect/deadwood removal
18	Salix babylonica	Weeping Willow	0.25	No	No	winter	medium	fringe raising
19	Corymbia citriodora	Lemon Scented Gum	0.50	No	No	winter	medium	deadwood removal
20	Lophostemon confertus	Brisbane Box	0.08	No	No	fall	low	no action
21	Lagerstroemia indica	Crape Myrtle	0.08	No	No	2016	low	inspect root crown injury
22	Lophostemon confertus	Brisbane Box	0.17	No	No	2016	high	no action
23	Lophostemon confertus	Brisbane Box	0.08	No	No	fall	low	no action
24	Corymbia citriodora	Lemon Scented Gum	0.50	No	No	winter	medium	remove deadwood
25	Corymbia citriodora	Lemon Scented Gum	0.50	No	No	winter	medium	remove deadwood
26	Lophostemon confertus	Brisbane Box	0.08	No	No	fall	low	no action
27	Pinus canariensis	Canary Island Pine	1.50	Yes	No	2016	medium	aerial inspection, remove defects/deadwood
28	Ulmus parvifolia	Chinese Elm	1.50	No	No	winter	medium	fringe raising
29	Ulmus parvifolia	Chinese Elm	1.50	No	No	winter	medium	deadwood, fringe raising
30	Ulmus parvifolia	Chinese Elm	1.50	No	No	winter	high	deadwood, lighten over parking area, fringe raising
31	Pinus canariensis	Canary Island Pine	0.50	Yes	No	2016	medium	inspect for defects
32	Brachychiton sp.	Bottle Tree	0.25	No	No	spring	low	building clearance
33	Pinus canariensis	Canary Island Pine	0.67	Yes	No	winter	medium	destimulate tip of co-dominant leader

Mutual 17 Tree Inventory

Site	Latin Name	Species	Maintenance	Climber	Removal	Next Service	Priority	Notes
34	Vacant Planting Site		0.00	No	No			full sun small tree
35	Ulmus parvifolia	Chinese Elm	1.50	No	No	winter	medium	deadwood, fringe raising
36	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	deadwood, fringe raising
37	Melaleuca quinquenervia	Paperbark Tree	0.17	No	No	2016	low	clear soil from root crown down to natural grade
38	Melaleuca quinquenervia	Paperbark Tree	0.17	No	No	now	high	remove stakes
39	Melaleuca quinquenervia	Paperbark Tree	0.00	No	No	2016	low	no action
40	Pinus canariensis	Canary Island Pine	1.00	Yes	No	winter	medium	aerial inspection, remove defects/deadwood
41	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	fringe raising
42	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	fringe raising
43	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
44	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	high	fringe raising
45	Pinus canariensis	Canary Island Pine	3.00	Yes	No	winter	high	install safety line, remove deadwood/defects
46	Pinus canariensis	Canary Island Pine	0.67	Yes	No	winter	medium	aerial inspection, remove deadwood/defects
47	Pinus canariensis	Canary Island Pine	0.67	Yes	No	winter	medium	aerial inspection, remove deadwood/defects
48	Pinus canariensis	Canary Island Pine	0.67	Yes	No	winter	medium	aerial inspection, remove deadwood/defects
49	Ulmus parvifolia	Chinese Elm	0.75	No	No	winter	medium	fringe raising
50	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	deadwood, fringe raising
51	Lophostemon confertus	Brisbane Box	0.17	No	No	now	high	re-stake correctly
52	Pinus canariensis	Canary Island Pine	0.50	Yes	No	winter	medium	aerial inspection
53	Ulmus parvifolia	Chinese Elm	0.75	No	No	winter	high	remove defects/deadwood, fringe raising
54	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
55	Ulmus parvifolia	Chinese Elm	0.25	No	No	high	now	remove stakes
56	Pinus canariensis	Canary Island Pine	0.50	Yes	No	now	medium	aerial inspection only
57	Ficus benjamina	Weeping Fig	0.00	No	Yes	now	low	consider removal; if retained, keep it small
58	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
59	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	remove deadwood
60	Melaleuca quinquenervia	Paperbark Tree	0.50	No	No	2016	medium	no action
61	Melaleuca quinquenervia	Paperbark Tree	0.50	No	No	2016	medium	no action
62	Pinus canariensis	Canary Island Pine	1.00	Yes	No	winter	medium	aerial inspection - remove defects
63	Pinus canariensis	Canary Island Pine	0.50	Yes	No	winter	medium	aerial inspection - remove defects
64	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	no action
65	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	low	deadwood removal
66	Schinus terebinthifolius	Brazilian Pepper Tree	0.75	No	No	spring	high	fringe raising

Mutual 17 Tree Inventory

Site	Latin Name	Species	Maintenance	Climber	Removal	Next Service	Priority	Notes
67	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	low	deadwood removal
68	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	deadwood removal
69	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	deadwood removal
70	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	remove broken branch, raise fringe, inspect wound on south side of trunk
71	Ulmus parvifolia	Chinese Elm	0.33	No	No	winter	medium	no action
72	Tipuana tipu	Tipu Tree	0.33	No	No	winter	medium	keep all low branches, reduce canopy height
73	Tipuana tipu	Tipu Tree	0.17	No	No	2016	high	keep all low branches, reduce canopy height
74	Ulmus parvifolia	Chinese Elm	0.25	No	No	winter	med	fringe raising
75	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
76	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
77	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	remove nursery ties, fringe raising
78	Pinus canariensis	Canary Island Pine	2.00	Yes	No	winter	medium	remove northern trunk - piece down and rig and lower
79	Pinus canariensis	Canary Island Pine	2.50	Yes	No	spring	high	remove two northern trunks, install safety line between remaining two
80	Pinus canariensis	Canary Island Pine	2.00	Yes	No	spring	high	aerial inspection, remove defects/deadwood
81	Melaleuca quinquenervia	Paperbark Tree	0.00	No	No	2016	low	no action
82	Ulmus parvifolia	Chinese Elm	0.50	No	No	winter	medium	fringe raising
83	Ulmus parvifolia	Chinese Elm	0.33	No	No	fall	medium	fringe raising
84	Pinus canariensis	Canary Island Pine	0.50	Yes	No	winter	medium	aerial inspection only
85	Pinus canariensis	Canary Island Pine	0.50	Yes	No	winter	medium	aerial inspection only
86	Pinus canariensis	Canary Island Pine	0.50	Yes	No	winter	medium	aerial inspection only
87	Tipuana tipu	Tipu Tree	6.00	Yes	No	winter	high	raise and lighten fringe, prune for building clearance
88	Cupaniopsis anacardioides	Carrotwood	0.33	No	No	spring	medium	scaffold pruning, defect removal
89	Corymbia citriodora	Lemon Scented Gum	0.50	Yes	No	Spring	medium	deadwood removal
90	Pinus canariensis	Canary Island Pine	4.00	Yes	No	winter	medium	remove southern co-dominant stem and other defects
91	Pinus canariensis	Canary Island Pine	1.00	Yes	No	winter	medium	install safety line, remove deadwood/defects
92	Pinus canariensis	Canary Island Pine	3.00	Yes	No	winter	medium	begin reducing eastern co-dominant stem, remove defects
93	Lophostemon confertus	Brisbane Box	0.17	No	No	2016	medium	check stakes
94	Melaleuca quinquenervia	Paperbark Tree	0.00	No	No	2016	low	no action
95	Ulmus parvifolia	Chinese Elm	0.75	No	No	winter	medium	canopy balancing, fringe raising
96	Ulmus parvifolia	Chinese Elm	0.17	No	No	now	high	check stakes
97	Ulmus parvifolia	Chinese Elm	0.17	No	No	now	high	check stakes
98	Vacant Planting Site		0.00	No	No			matching canary island pine
99	Jacaranda mimosifolia	Jacaranda	0.17	No	No	spring	high	clearance

Mutual 17 Tree Inventory

Site	Latin Name	Species	Maintenance	Climber	Removal	Next Service	Priority	Notes
100	Callistemon citrinus	Lemon Bottlebrush	0.00	No	Yes	2016	low	Removal/replacement recommended
101	Ulmus parvifolia	Chinese Elm	1.00	No	No	winter	high	remove deadwood, raise fringe
102	Ulmus parvifolia	Chinese Elm	0.67	No	No	winter	medium	remove deadwood, raise fringe
103	Ulmus parvifolia	Chinese Elm	0.75	No	No	winter	high	remove deadwood, raise fringe
104	Jacaranda mimosifolia	Mimosa Tree	0.25	No	No	fall	high	train to a more stable canopy form
105	Ulmus parvifolia	Chinese Elm	1.00	No	No	winter	medium	fringe raising
106	Liquidambar styraciflua	American Sweet Gum	0.33	No	No	fall	medium	add a layer of mulch around root crown
107	Magnolia grandiflora	Southern Magnolia	0.17	No	No	spring	medium	check stakes
108	Liquidambar styrciflua	American Sweet Gum	0.25	No	No	fall	medium	clearance
109	Melaleuca quinquenervia	Paperbark Tree	0.17	No	No	fall	low	check stakes
110	Corymbia citriodora	Lemon Scented Gum	1.50	Yes	No	winter	low	must block traffic to prune this tree; remove deadwood
111	Corymbia citriodora	Lemon Scented Gum	1.50	Yes	No	winter	low	must block traffic to prune this tree; remove deadwood
112	Pinus halepensis	Aleppo Pine	0.50	Yes	No	winter	high	inspection
113	Pinus halepensis	Aleppo Pine	0.50	Yes	No	winter	high	inspection
114	Lophostemon confertus	Brisbane Box	0.17	No	No	winter	high	transplant to a new site
115	Lophostemon confertus	Brisbane Box	0.17	No	No	winter	high	transplant to a new site
116	Pinus halepensis	Aleppo Pine	4.00	Yes	Yes	winter	high	Consider Removal; if retained, lighten fringe and prune for line clearance
117	Pinus halepensis	Aleppo Pine	6.00	Yes	Yes	winter	high	Consider Removal; if retained, lighten fringe and prune for line clearance
118	Pinus halepensis	Aleppo Pine	4.00	Yes	Yes	winter	high	Consider Removal; if retained, lighten fringe and prune for line clearance
119	Corymbia citriodora	Lemon Scented Gum	2.00	Yes	Yes	winter	high	Consider Removal; if retained, remove deadwood
120	Pinus halepensis	Aleppo Pine	8.00	Yes	No	winter	high	Consider Removal; if retained, lighten fringe and prune for line clearance
121	Pinus halepensis	Aleppo Pine	4.00	Yes	No	winter	high	Consider Removal; if retained, recut stumps and remove defects
122	Pinus halepensis	Aleppo Pine	2.00	Yes	No	winter	medium	remove rat nest, power wash low fringe
123	Corymbia citriodora	Lemon Scented Gum	0.50	Yes	No	winter	low	remove deadwood
124	Corymbia citriodora	Lemon Scented Gum	1.00	Yes	No	spring	medium	remove deadwood
125	Pinus halepensis	Aleppo Pine	2.00	Yes	No	2016	high	line clearance and defect removal
126	Pinus halepensis	Aleppo Pine	2.00	Yes	Yes	winter	high	Consider Removal; if retained, remove defects/deadwood
127	Pinus halepensis	Aleppo Pine	4.00	Yes	No	winter	high	Consider removal; if retained, power line clearance, defect removal
128	Corymbia citriodora	Lemon Scented Gum	2.00	Yes	No	winter	high	Consider Removal; if retained, remove deadwood
129	Corymbia citriodora	Lemon Scented Gum	0.00	No	No			Removal recommended
130	Ulmus parvifolia	Chinese Elm	1.00	No	No	winter	medium	need to access both sides of the wall to work; fringe raising
131	Corymbia citriodora	Lemon Scented Gum	3.00	Yes	No	winter	high	Consider Removal; if retained, remove deadwood
132	Ulmus parvifolia	Chinese Elm	1.00	No	No	winter	medium	crown raising

Mutual 17 Tree Inventory

Site	Latin Name	Species	Maintenance	Climber	Removal	Next Service	Priority	Notes
133	Pinus halepensis	Aleppo Pine	3.00	Yes	No	winter	medium	Consider removal; if retained, power line clearance, defect removal
134	Pinus halepensis	Aleppo Pine	2.00	Yes	No	winter	medium	Consider removal; if retained, deadwood/defect removal
135	Corymbia citriodora	Lemon Scented Gum	0.75	Yes	No	spring	medium	aerial inspection, remove deadwood/defects
136	Pinus halepensis	Aleppo Pine	0.00	No	No			Removal Recommended
137	Pinus halepensis	Aleppo Pine	2.00	Yes	No	2016	medium	Consider removal; if retained, power line clearance, defect removal
138	Corymbia citriodora	Lemon Scented Gum	1.00	Yes	No	winter	low	deadwood removal
139	Afrocarpus falcatus	Yew Pine	0.17	No	No	winter	high	check stakes
140	Afrocarpus falcatus	Yew Pine	0.17	No	No	winter	medium	remove 2" co-dominant stem
141	Lophostemon confertus	Brisbane Box	0.17	No	No	winter	high	transplant to a new site
142	Lophostemon confertus	Brisbane Box	0.17	No	No	winter	high	transplant to a new site
143	Corymbia citriodora	Lemon Scented Gum	2.00	Yes	No	winter	low	deadwood/defect removal
144	Pinus halepensis	Aleppo Pine	3.00	Yes	No	2016	high	aerial inspection, deadwood/defect removal
145	Melaleuca quinquenervia	Paperbark Tree	0.00	No	No	2016	medium	no action
146	Pinus halepensis	Aleppo Pine	2.00	Yes	No	winter	medium	aerial inspection; deadwood/defect removal
147	Callistemon citrinus	Lemon Bottlebrush	0.17	No	No	now	high	remove stakes