

Imua Landscaping Co. Inc.

96-1272 Waihona St. #12

Pearl City, HI 96782

Ph. (808) 456-1930



Lic.# C-1283

Kukaniloko

The following Arborist Report was requested by The Office of Hawaiian Affairs regarding the structural integrity and health of specified trees and to make recommendations for pruning instructions and pruning schedules of said trees. All of the trees were visually inspected from the ground both from a distance and near the base of the trees. At the time of inspection, all of the trees appear to be healthy and growing vigorously.

Pruning Recommendations

20 Eucalyptus: I recommend removing all dead branches and inspecting the canopies for damaged or weak branches. If a defect is found that may result in branch or trunk failure, then the branch should be removed back to another limb that is at least 1/3 the diameter of the limb that is to be removed (drop-crotched) or back to the branch collar near the main trunk. If a limb is too long, it should be drop-crotched to reduce end-weight. Remove interior water sprouts that are within 4 feet of the main trunk.

11 Coconut Palms: Remove fruit, flowers, and low-hanging fronds.

Pruning Schedules

The Coconut palms should be pruned every 6 months if you want to ensure that fruit doesn't develop to the size that they could fall and hurt someone who may be standing under the palm. The Eucalyptus trees should be inspected and pruned once per year given the number and frequency of visitors to the site.

Definitions

Directional pruning: a method of pruning trees that involves removing branches back to a crotch or the main trunk on one side of the tree in order to direct the growth in a desired direction; usually away from obstacles such as power lines or structures and toward open areas.

End-weight reduction or drop-crotch: a method of mitigating the likely-hood of branch failure by removing weight from the ends of one or more branches; it is achieved by shortening branches by pruning off the end back to a lateral branch which is at least 1/3 of the diameter of the removed branch.

Water Sprout: shoots that arise from the trunk of a tree or from branches that are several years old, from latent buds. The latent buds might be visible on the bark of the tree, or submerged under the bark as epicormic buds. They are sometimes called **suckers**, although that term is more correctly applied to shoots that arise from below ground, from the roots, and a distance from the trunk.

Tools and Methods

Climbing Spikes shall not be used to prune any tree at this site. Spikes may only be used if the tree is to be removed entirely. Spiking Coconut palms **is not** permitted.

Vehicles and heavy equipment (boom trucks, chippers, etc.) will be permitted on the property.

Large limbs must be lowered to the ground using a rigging line and block (pulley) to avoid damaging other trees, limbs, or stones.

Assessment Limitations and Further Information

This report, its findings and recommendations are submitted with the following understanding:

- Arborists are specialists in tree management and care who use their education, knowledge, training and experience to inspect and assess tree health and condition, and identify measures that reduce risk of personal injury or property damage from trees exhibiting defects.
- This assessment is based upon the information provided by the Client, and my education, knowledge, training, experience and diligent field investigation. Arborists cannot detect every condition that could possibly lead to the structural failure or decline in the health of a tree. Trees are living organisms that fail in ways we do not fully understand and cannot always predict. 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.
- This assessment is based on predictions of tree behavior during normal weather conditions and the condition of the tree at the time of the field inspection. Normal weather conditions are defined as wind less than 46 mph (40kts) in speed and rainfall that does not saturate the soil and destabilize the tree root system. Changes to tree or site conditions after completion of the field inspection that are caused by severe weather,

construction, accidents, insects, disease or other agents may change the structural integrity of a tree or tree part and increase risk. These types of future changes in condition and their impact on the tree cannot be reasonably predicted during a risk assessment.

- This assessment is restricted to the designated tree(s) and did not assess any other nearby trees that may present potential hazards to people or property.
- Recommendations for risk reduction treatments may involve considerations beyond the scope of the arborist's services such as cost, public sensitivity, property management considerations, and other issues. This assessment did not consider these factors, but focused on the structural integrity of this tree and its relative risk to the public at the time of this inspection and during normal weather conditions.
- Trees can be managed, but they cannot be controlled. To live, work and play near trees is to accept some degree of risk. The only way to eliminate risk from trees is to remove trees, but this is not recommended unless recommended by a Qualified Arborist because it also eliminates the multitude of benefits provided by trees.
- Clients may choose to accept or disregard the recommendation of the arborist, or to seek additional advice.

Please contact Lake Gibby, at telephone (808) 426-6881 or email lakeg.imualand@gmail.com, for any questions or to obtain further information regarding this assessment or report.



PN-5933A

Certified Arborist
Certified Tree Risk Assessor

signature Lake L. Gibby
date- 7/19/16

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Lic.# C-1283

Pahua Heiau

The following Arborist Report was requested by The Office of Hawaiian Affairs regarding the structural integrity and health of specified trees and to make recommendations for pruning instructions and pruning schedules of said trees. All of the trees were visually inspected from the ground both from a distance and near the base of the trees. At the time of inspection, all of the trees appear to be healthy and growing vigorously except for a couple which are noted below. The following list of trees was provided to me by OHA and I was taken on a site visit to locate each tree and to discuss objectives and goals for the site. This list starts on the left side of the property at the bottom of the hill and proceeds clock-wise around the property.

Pruning Recommendations

1 Kukui: Raise canopy over the sidewalk to 8 feet. Remove dead branches, stubs, and interior water-sprouts. This tree is moderately healthy but is experiencing decline in the top of the tree which may indicate root problems or a soil quality issue.

1 (small) Plumeria: I don't recommend any pruning for now.

1 Kukui: Remove dead branches and interior water-sprouts.

4 Coconut palms: Remove fruit, flowers, and low-hanging fronds.

1 Autograph tree: Side trim to the property line and remove dead branches.

1 Kiawe: This tree is leaning toward the neighbors' house; I recommend directional pruning away from the property line to reduce weight on that side of the tree and to help to balance the canopy. Remove dead branches on the side of the tree that faces the house.

1 Milo: Raise the canopy to 8 feet and remove dead branches and interior water-sprouts.

1 Kiawe: Reduce end-weight on the back side of the tree in order to mitigate risk of branch failure. Remove dead branches and stubs left by broken branches.

1 Milo: Remove dead branches.

All Climbing Cactus, Kiawe, and Haole Koa on the hill side in Section 1: Cut to ground level.

1 Iliahi: Remove interior water-sprouts, remove the climbing cactus from the canopy, remove dead branches, clear all vegetation within a 5 foot radius of the trunk in order to minimize root space competition and to prevent more vines from climbing into the canopy.

1 Guava: remove dead branches and crossing branches. Reduce end-weight and shape the tree to grow more upright.

1 (dead) Iliahi: Cut to ground level.

Pruning Schedules

The Coconut palms should be pruned every 6 months if you want to ensure that fruit doesn't develop to the size that they could fall and hurt someone who may be standing under the palm. The Kukui trees are probably the fastest growing tree at this site but they shouldn't be pruned more than once per year. The Milo trees can also be pruned once per year. The Kiawe trees should be pruned once every 3 years. The climbing cactus and Haole Koa should be removed at least once every year. The Guava and Iliahi trees should be pruned once per year in order to be shaped into beautiful mature trees.

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Tools and Methods

Climbing Spikes shall not be used to prune any tree at this site. Spikes may only be used if the tree is to be removed entirely. Spiking Coconut palms is permitted.

No vehicles or heavy equipment will be permitted on the property. Chip trucks must stay on the street. Large limbs must be lowered to the ground using a rigging line and block (pulley) to avoid damaging other trees, limbs, property line/fence, or neighbors' property.

Assessment Limitations and Further Information

This report, its findings and recommendations are submitted with the following understanding:

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- Recommendations for risk reduction treatments may involve considerations beyond the scope of the arborist's services such as cost, public sensitivity, property management considerations, and other issues. This assessment did not consider these factors, but focused on the structural integrity of this tree and its relative risk to the public at the time of this inspection and during normal weather conditions.
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Waialua Courthouse

The following Arborist Report was requested by The Office of Hawaiian Affairs regarding the structural integrity and health of specified trees and to make recommendations for pruning instructions and pruning schedules of said trees. All of the trees were visually inspected from the ground both from a distance and near the base of the trees. At the time of inspection, most of the trees appear to be healthy and growing vigorously except for a few which are noted below. The following list of trees was provided to me by OHA and I was taken on a site visit to locate each tree and to discuss objectives and goals for the site. This list starts on the left side of the property near the street and proceeds clock-wise around the property.

Pruning Recommendations

1 Plumeria: Remove dead branches, stubs, crossing branches, and interior water-sprouts.

1 Royal Poinciana: Prune away from plumeria (get 2 feet of clearance), Remove dead branches, stubs, crossing branches, and interior water-sprouts. Drop-crotch to shape the canopy.

4 Kukui: Remove dead branches, stubs, crossing branches, and interior water-sprouts. Raise canopy/prune away from Crown flower and Plumeria. Maintain canopy height of 10 ft. above the parking lot.

1 Plumeria: Remove dead branches, stubs, crossing branches, and interior water-sprouts.

1 Royal Poinciana (near building): Remove dead branches, stubs, crossing branches, interior water-sprouts, and epiphytes. Prune away from the building to get at least 3 feet of clearance.

1 Royal Poinciana (near Coconut Palms): Remove dead branches, stubs, crossing branches, and interior water-sprouts.

1 Royal Poinciana (near Kukui with Noni): Cut to ground level.

2 Royal Poinciana (in Parking Lot): Remove dead branches, stubs, crossing branches, and interior water-sprouts. Raise canopy to 10 ft.

1 Royal Poinciana (right of back-right corner of parking lot): Remove dead branches, stubs, crossing branches, interior water-sprouts, and epiphytes. End-weight reduction on the limb that is growing

toward the Kukui trees. Maintain 4 feet of clearance from the Kukui trees. Remove the Opiuma tree at the base of the tree.

2 Royal Poinciana (behind Parking Lot): Remove dead branches. These two trees are in declining health. The one that is the farthest from the parking lot is completely hollow at the base and will need to be removed in a few years.

9 Date Palms: Remove fruit, flowers, and low-hanging fronds. Remove epiphytic banyans at the base and any other epiphytes in or on these palms. Remove all short palms (trunk height less than 6 feet) that are growing around the base.

3 Coconut Palms: Remove fruit, flowers, and low-hanging fronds.

All Java Plums on the property: Cut to ground level and use herbicide to kill the stump.

1 Mango: Remove dead branches, stubs, crossing branches, and interior water-sprouts. Raise canopy to 6 ft.

3 Kukui: Remove dead branches, stubs, crossing branches, and interior water-sprouts.

3 Plumeria: Remove dead branches, stubs, crossing branches, and interior water-sprouts.

1 Royal Poinciana: Remove dead branches, stubs, crossing branches, and interior water-sprouts. Directional prune away from utility wires and maintain 4 feet of clearance from the roof.

1 Loulu Palm: Remove fruit, flowers, and low-hanging fronds.

1 Royal Poinciana (front): Directional prune away from the wires. Remove dead branches, stubs, crossing branches, epiphytes, and interior water-sprouts. Raise canopy to 8 ft.

1 (dead) Royal Poinciana (front): Cut to ground level.

Pruning Schedules

The Coconut palms should be pruned every 6 months if you want to ensure that fruit doesn't develop to the size that they could fall and hurt someone who may be standing under the palm. The rest of the trees at this site should be pruned once per year.

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Tools and Methods

Climbing Spikes shall not be used to prune any tree or palm at this site. Spikes may only be used if the tree is to be removed entirely.

Work must be done during dry weather as the lawn area behind the parking lot is a low lying area and vehicles may become stuck if the ground is soft.

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