# Tree Resource Evaluation for 4540 North Bay Road, Miami Beach

Prepared for:

Raymond Jungles, Inc. 2964 Aviation Avenue Miami, FL 33133

Prepared by:

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### **Summary**

I performed a tree resource evaluation at 4540 North Bay Road, Miami Beach on June 18, 2021. The approximate locations of these trees and palms can be found on the schematic in Appendix B.

The evaluation in Appendix A includes measurements, condition rating and recommended radius of the tree protection zone (TPZ) for each tree and palm.

I rate trees and palms in accordance with ANSI A300 (Part 5) – 2005, Annex A, Management Report Information. Trees and palms are rated Good, Moderate or Poor, see Appendix C. I recommend the removal of trees or palms that I rate as Poor.

I also followed the Levels and Scope of Tree Risk Assessment from the ANSI A300 Part 9- 2017: Levels of tree risk assessment; Level 1 limited visual tree risk assessment, Level 2 basic tree risk assessment, and Level 3 advanced tree risk assessment. The scope of this report/evaluation was limited to a Level 2 Assessment for all trees onsite.

To perform all measurements, I used a forestry diameter measuring tape and a measuring wheel. I rounded-off to the nearest inch when measuring trunk diameter; heights and canopy diameters are approximate.

Appendix D contains the ANSI A300 definitions of Tree Protection Zone (TPZ) and Critical Root Zone (CRZ). The TPZs that I have assigned to the trees on this site are sufficient to maintain CRZs as well as the TPZs.

It is important to note that when structures are next to, or had previously been next to trees, there may be no roots, or no roots of significance, from that tree underneath the footprint of the structure and therefore the CRZ can change. This includes adjacent curbs, sidewalks, and asphalt pavement.

Appendix F contains information on Root Management, and the potential amount of roots that can be removed, from the special companion publication

to the ANSI A300 Part 8: Tree, Shrub, and Other Woody Plant Management-Standard Practices (Root Management).

Appendix G contains standards and other palm resources addressing damage to the trunks of palms.

Any arboricultural work done on trees that extend into the powerlines or are within 10 feet of an electrical conductor measured radially, the arborist performing the work must be an Incidental Line Clearance Arborist as identified by American National Standard ANSI Z133-2017.

Any trees left onsite should have their canopies cleared of dead wood and branches.

### **Photos below**

The color and brightness on some photos has been adjusted to provide contrast and clarity to the subject matter. This follows the Basic section on Enhancement Techniques found in Section 11, Best Practices for Documenting Image Enhancement in a document produced by SWGIT Scientific Working Group Imaging Technology, <u>www.SWGIT.org</u>.



Photo 1 above is palm 1.



Photo 2 above is white bird of paradise 2 & palm 2a.



Photo 3 above is palms 2a, 3 & 4.



Photo 4 above is palms 4, 5, 6 & 8.



Photo 5 above is palms 4 & 5.



Photo 6 above is palms 7 & 8. The circle indicates an infestation of royal palm bug on the newest fronds of palm 7. This infestation should naturally decline, and no pesticide use is recommended.



Photo 7 above is tree 9 showing signs of decline.



Photo 8 above is palm 10 & white bird of paradise 10a.



Photo 9 above is white bird of paradise 10a & 11.



Photo 10 above is tree 12 & white bird of paradise 13a.



Photo 11 above is palm 13 & tree 12.



Photo 12 above is white bird of paradise clumps 14, 14a & 14b.



Photo 13 above is single trunked palm 15 & multiple trunked palms 15a & 15b.



Photo 14 above is palm 16 & tree 18. I noted spike holes in the trunk palm 16.



Photo 15 above is a view of the trunk of tree 18 growing against the wall. See following photo. It is highly likely that the root plate/CRZ of this tree does not go beyond the wall.



Photo 16 above is a closer view of the trunk of tree 18 growing against and being supported structurally by the wall. I recommend the removal of this tree.



Photo 17 above is tree 18. It appears that the majority of the canopy is over the neighboring property. With the weight of the tree being supported by the wall seen in the previous photo, I recommend the removal of this tree.



Photo 18 above is palms 19 & 20. See following photo.



Photo 19 above is palms 19 & 20 with spike holes in their trunks. See Appendix G below. If palms have damage to their trunks or climbing spike holes in their trunks, I do not recommend the relocation of these palms. These palms should be removed.



Photo 20 above is white bird of paradise 21 & palm 21a.



Photo 21 above is palms 22, 23 & 24. See following photo.



Photo 22 above is palms 22, 23 & 24 with climbing spike holes in their trunks. See Appendix G below. If palms have damage or climbing spike holes in their trunks, I do not recommend the relocation of these palms. These palms should be removed.



Photo 23 above is palms 25a through 25p. Note the hole in the trunk of palm 25b. This palm should be removed.



Photo 24 above is palms 25b through 25q. Note the damage to the trunk of palm 25f. This palm should be removed.



Photo 25 above is palms 25e through 25h.



Photo 26 above is the trunk of palm 25k that is severely pinning. This palm should be removed.



Photo 27 above is palms 26, 26a, 26b & 27. Note that 26a & 26b are dead.



Photo 28 above is triple-trunked palm 28. The fronds are showing signs of a developing severe nutrient deficiency.



Photo 29 above is palms 29 & 30. The trunk of palm 29 is full of climbing spike holes and should be removed.



Photo 30 above is palms 29 through 32.



Photo 31 above is palms 32 & 33 with damage and climbing spike holes in their trunks. See Appendix G below. If palms have damage or climbing spike holes in their trunks, I do not recommend the relocation of these palms. These palms should be removed.



Photo 32 above is palms 34a, 34b, 34c & 36. All other palms in this photo have no trunk at 4.5 feet above grade.

Traveller's tree 35 has no trunks to measure on this side of the fence.



Photo 33 above is palm 36.



Photo 34 above is trees 37, 38, 39 & 40.



Photo 35 above is trees 38, 39 & 40 and dead palms 26a & 26b.

# Appendix – A – Measurements and condition rating

	Scientific name	Common name	DBH	H/Ct	Canopy	Condition	TPZ
1	Dypsis lutescens	Areca palm	42"	30'	20'	Moderate	4'
2	Strelitzia nicolai	White bird of paradise	15"	22'	16'	Moderate	4'
2a	Ptychosperma elegans x 2 tks	Solitare palm	8"	27'	16'	Good	4'
3	Phoenix reclinata	Senegal date palm	94"	30'	35'	Good	5'
4	Phoenix reclinata	Senegal date palm	98"	30'	30'	Good	5'
5	Phoenix reclinata	Senegal date palm	32"	22'	26'	Good	5'
6	Roystonea regia	Royal palm	18"	30'	20'	Good	5'
7	Roystonea regia	Royal palm	19"	38'	26'	Good	5'
8	Phoenix roebelenii	Pygmy date palm	5"	9'	7'	Good	3'
9	Persea americana	Avocado	6"	23'	18'	Moderate	6'
10	Carpentaria acuminata	Carpentaria palm	5"	24'	12'	Good	4'
10a	Strelitzia nicolai	White bird of paradise	7"	14'	16'	Moderate	4'
11	Strelitzia nicolai	White bird of paradise	16"	10'	9'	Poor	4'
12	Codiaeum variegatum	Croton	2"	17'	8'	Good	4'
13	Carpentaria acuminata	Carpentaria palm	6"	26'	14'	Good	4'
13a	Strelitzia nicolai	White bird of paradise	16"	22'	14'	Poor	4'
14	Strelitzia nicolai	White bird of paradise	15"	10'	24'	Poor	4'
14a	Strelitzia nicolai	White bird of paradise	26"	22'	26'	Moderate	4'
14b	Strelitzia nicolai	White bird of paradise	28"	18'	24'	Moderate	4'
15	Phoenix reclinata	Senegal date palm	5"	30'	12'	Moderate	5'
15a	Phoenix reclinata	Senegal date palm	50"	28'	26'	Moderate	5'
15b	Phoenix reclinata	Senegal date palm	48"	28'	24'	Good	5'
16	Syagrus romanzoffiana	Queen palm	10"	24'	18'	Moderate	4'
17	Ptychosperma elegans	Solitare palm	4"	13'	14'	Good	4'
18	Delonix regia	Royal poinciana	21"	55'	55'	Moderate	18'
19	Syagrus romanzoffiana	Queen palm	7"	28'	24'	Moderate	4'
20	Syagrus romanzoffiana	Queen palm	8"	22'	26'	Moderate	4'
21	Ravenala madagascariensis	Traveller's tree	82"	27'	28'	Good	5'
21a	Roystonea regia	Royal palm	14"	40'	32'	Good	5'
22	Syagrus romanzoffiana	Queen palm	10"	20'	30'	Moderate	4'
23	Syagrus romanzoffiana	Queen palm	10"	23'	20'	Moderate	4'
24	Syagrus romanzoffiana	Queen palm	10"	26'	28'	Moderate	4'
25a	Ptychosperma elegans	Solitare palm	4"	30'	12'	Good	4'
25b	Syagrus romanzoffiana	Queen palm	10"	30'	28'	Poor	4'
25c	Roystonea regia	Royal palm	14"	35'	32'	Good	5'
25d	Roystonea regia	Royal palm	9"	30'	26'	Moderate	5'
25e	Roystonea regia	Royal palm	10"	20'	26'	Good	5'
25f	Syagrus romanzoffiana	Queen palm	11"	28'	24'	Poor	4'
25g	Roystonea regia	Royal palm	11"	30'	30'	Good	5'

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25h	Roystonea regia	Royal palm	8"	15'	20'	Good	5'
25i	Ptychosperma elegans	Solitare palm	4"	35'	14'	Good	4'
25j	Ptychosperma elegans	Solitare palm	3"	30'	14'	Good	4'
25k	Syagrus romanzoffiana	Queen palm	10"	22'	15'	Poor	4'
251	Ptychosperma elegans x 2 tks	Solitare palm	7"	30'	24'	Good	4'
25m	Ptychosperma elegans	Solitare palm	4"	30'	14'	Good	4'
25n	Roystonea regia	Royal palm	10"	12'	30'	Good	5'
250	Ptychosperma elegans	Solitare palm	4"	30'	14'	Good	4'
25p	Ptychosperma elegans	Solitare palm	4"	30'	14'	Good	4'
25q	Phoenix roebelenii	Pygmy date palm	4"	11'	8'	Good	3'
26	Roystonea regia	Royal palm	19"	30'	28'	Good	5'
26a	Roystonea regia	Royal palm	18"	35'	0	Dead	
26b	Roystonea regia	Royal palm	20"	35'	0	Dead	
27	Roystonea regia	Royal palm	22"	30'	28'	Good	5'
28	Roystonea regia x 3 tks	Royal palm	42"	35'	25'	Moderate	5'
29	Syagrus romanzoffiana	Queen palm	10"	25'	18'	Poor	4'
30	Roystonea regia	Royal palm	20"	38'	30'	Moderate	5'
31	Roystonea regia	Royal palm	19"	35'	32'	Good	5'
32	Syagrus romanzoffiana	Queen palm	7"	28'	18'	Moderate	4'
33	Syagrus romanzoffiana	Queen palm	8"	20'	18'	Poor	4'
34a	Phoenix roebelenii	Pygmy date palm	3"	8'	6'	Moderate	3'
34b	Phoenix roebelenii	Pygmy date palm	3"	8'	6'	Moderate	3'
34c	Phoenix roebelenii	Pygmy date palm	3"	10'	8'	Moderate	3'
35	Ravenala madagascariensis	Traveller's tree	0	28'	28'	Good	5'
36	Ptychosperma elegans	Solitare palm	3"	28'	9'	Good	4'
37	Cordia sebestena	Orange geiger	3"	14'	12'	Good	4'
38	Handroanthus chrysanthus	Yellow tabebuia	7"	22'	20'	Good	6'
39	Handroanthus chrysanthus	Yellow tabebuia	10"	25'	23'	Good	10'
40	Cordia sebestena	Orange geiger	5"	18'	18'	Good	5'

- TPZ is the radius of the tree protection. The measurement is from the outside of the trunk. The TPZ is equal to the CRZ.
- Canopy diameter is approximate and measured in one direction.
- H/Ct is overall height of trees & clear trunk of palms and other monocots.
- DBH (measured 4.5 feet above grade) is rounded-off to the nearest inch.
- I recommend the removal of trees or palms in Poor condition.
- Trees/palms with letters or numbers with added letters are trees/palms that I have added to the survey.



Appendix – B – Approximate tree and palm locations

# Appendix – C - ANSI A300 (Part 5) - 2005, Annex A

**Management report information** 

**Examples of suitability ratings** 

<u>Good</u>: These are trees with good health and structural stability that have the potential for longevity at the site.

<u>Moderate</u>: Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring and may have shorter life-spans than those in the "good" category.

<u>Poor</u>: Trees in this category are in poor health or have significant defect s in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas.

### <u>Appendix – D – Critical Root Zone and Tree Protection Zone</u>

ANSI A 300 (Part 5) – 2012 Management of Trees and Shrubs during Site Planning, Site Development and Construction

Critical Root Zone (CRZ): The minimum volume of roots necessary to have for tree health and stability.

Tree Protection Zone (TPZ): The area surrounding a tree defined by a specified distance, in which excavation and other construction – related activities should be avoided. The TPZ is variable depending on species, factors, age and health of the plant, soil conditions, and proposed construction. The zone may be accomplished by physical barriers or soil protection layers or treatments.

ANSI A300 (Part 5) – 2012 54.7

A tree protection zone (TPZ) shall be delineated around all trees to be protected during a project.

• 54.7.1 The area and dimensions of the TPZ should be calculated on the basis of species tolerance, age, and health, root structure, rooting depth, and soil conditions.

#### **Appendix** – E – Schematic for tree protection during construction



TREE PROTECTION AND SUPPORT

TREE PROTECTION AND SUPPORT



# <u>Appendix – F – Root Management – Special companion publication to</u> <u>the ANSI A300 Part 8: Tree, Shrub, and Other Woody Plant</u> <u>Management-Standard Practices (Root Management)</u>

### Consequences of Root Pruning on Tree Stability

Root loss can affect tree health and stability. Cutting roots at a distance greater than six times the trunk diameter (dbh) minimizes the likelihood of affecting both health and stability. At this distance, approximately 25% of the root system would be lost. Cutting root any closer to the tree is more likely to compromise stability.

Linear cuts on one side of a tree can reduce stability when the cut is made at a distance from the trunk that is less than three times the trunk diameter. Severe loss of stability is common when cuts are made at a distance that is less than 1 to 1.5 times the trunk diameter. If a linear cut is made at the trunk, nearly all species will have a reduction in stability.

# <u>Appendix – G – Standards and other palm resources</u> <u>addressing damage to the trunks of palms.</u>

<u>ANSI 300 (Part 1)- 2017 Pruning Tree, Shrub, and Other Woody Plant</u> <u>Management – Standard Practices (Pruning)</u>

- 9 Pruning palms and similar plants
- 9.2 Healthy fronds should not be removed other than to provide clearance.
- 9.8.1 Climbing spurs should not be used to climb live palms.

# Pruning Third Edition, Best Management Practices Companion publication to the ANSI A300 Part1: Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning

Palms: Climbing spikes should not be used to ascend palms for pruning.

# <u>Ornamental Palm Horticulture, The University of Florida Press Second</u> Edition 2017 Timothy K. Broschat, Alan W. Meerow, and Monica L. Elliott

### Pruning Palms

Any trunk wounds caused by careless pruning, climbing spikes, or pulling off old leaves before they completely abscise or rot off can result in unsightly scars and provide entry sites for thielaviopsis trunk rot.

### **Diseases of Field-Grown Palms**

*Thielaviopsis* trunk or bud rot is increasing in frequency on palms in Florida. This soil-borne fungus generally enters the palm through wounds and causes the disintegration of the trunk. This disease can be largely prevented by using care when removing leaves or handling dug palms. When removing leaves, always keep the pruning tool oriented parallel to the trunk and not perpendicular to it, and do not attempt to pull off leaves that are rigidly attached. Wounds caused by these practices are readily colonized by *Thielaviopsis paradoxa*.

### Climbing Palms for Maintenance Work

When climbing palms for canopy maintenance, the use of climbing spikes is not recommended. "Spiking" is a prescription for future problems. The holes left by these devices will never heal and *Thielaviopsis paradoxa* has been known to colonize such wounds. Only lift vehicles, ladders, or pulley/sling systems should be used with palms.

#### **Appendix – H - Assumptions and Limiting Conditions**

Tropical Designs of Florida, Inc. Arboricultural and Horticultural Consulting Qualifications, Assumptions, and Limiting Conditions

Any legal description provided to the consultant is assumed to be correct. Any titles or ownership of properties are assumed to be good and marketable. All property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

All property is presumed to be in conformance with applicable codes, ordinances, statutes, or other regulations.

Care has been taken to obtain information from reliable sources. However, the consultant cannot be responsible for the accuracy of information provided by others.

The consultant shall not be required to give testimony or to attend meetings, hearings, conferences, mediations, arbitrations, or trials by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

This report and any appraisal value expressed herein represent the opinion of the consultant, and the consultant's fee is not contingent upon the reporting of a specified appraisal value, a stipulated result, or the occurrence of a subsequent event.

Sketches, drawings, and photographs in this report are intended for use as visual aids, are not necessarily to scale, and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is only for coordination and ease of reference. Inclusion of said information with any drawings or other documents does not constitute a representation Tropical Designs of Florida, Inc. as to the sufficiency or accuracy of said information.

Unless otherwise expressed: a) this report covers only the examined items and their condition at the time of inspection: and b) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that structural problems or deficiencies of plants or property may not arise in the future.

### Appendix – I - Certification of Performance

Tropical Designs of Florida, Inc. Arboricultural and Horticultural Consulting

I, Jeff Shimonski, certify:

- That I have personally inspected the trees and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation is stated in the attached report;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions, and conclusions stated herein are my own;
- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I further certify that I am a member of the American Society of Consulting Arborists and acknowledge, accept, and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Certified Municipal Arborist FL-1052AM, am ISA Tree Risk Assessment Qualified and have been involved in the practice of arboriculture and the study of trees for over forty-eight years.

Jeff Shimonski Signed:

ISA Certification number: FL 1052AM

Dated: <u>June 28, 2021</u>



