

	SCIENTIFIC NAME	COMMON NAME	DBH	HEIGHT	CANOPY	CONDITION	TPZ	REMARKS		SCIENTIFIC NAME	COMMON NAME	DBH	HEIGHT	CANOPY	CONDITION	TPZ	REMARKS
1	Bucida buceras	Black olive	26'	35'	53'	Moderate	12'	Remain	17	Delonix regia	Royal poinciana	18'	40'	48'	Poor		Removal
2	Roystonea regia	Royal palm	17'	50' CT	24'	Good	8'	Remain	17a	Delonix regia	Royal poinciana	9.	6'	Cut	Poor		Removal
3	Delonix regia	Royal poinciana	21'	30'	42'	Good	8'	Remain	18	Delonix regia	Royal poinciana	16'	50'	44'	Poor		Removal
4	Delonix regia	Royal poinciana	23'	30'	45'	Moderate		Removal	19	Delonix regia	Royal poinciana	8'	35'	28'	Poor		Removal
5	Swietenia mahagoni	Mahogany	24'	40'	52'	Good	6'	Remain	19a	Cupaniopsis anacardioides	Carrotwood	2'	13'	6'	Invasive		Removal
6	Delonix regia	Royal poinciana	14'	25'	23'	Poor		Removal	20	Delonix regia	Royal poinciana	19'	45'	25'	Poor		Removal
7	Swietenia mahagoni	Mahogany	31'	50'	55'	Good	8'	Remain	21	Delonix regia	Royal poinciana	13'	15'	30'	Poor		Removal
8	Delonix regia	Royal poinciana	31'	30'	72'	Good	6'	Relocate	22	Delonix regia	Royal poinciana	6'	25'	10'	Poor		Removal
9	Unidentified		9'	13'		Dead		Removal	23	Delonix regia	Royal poinciana	28'	40'	30'	Poor		Removal
10	Delonix regia	Royal poinciana	10'	30'	53'	Poor		Removal	24	Delonix regia	Royal poinciana	10'	40'	26'	Poor		Removal
11	Delonix regia	Royal poinciana	17'	35'	54'	Good	6'	Relocate	25	Delonix regia	Royal poinciana	10'	45'	45'	Poor		Removal
12	Qercus virginiana	Live oak	30'	45'	51'	Good	8'	Remain	26	Delonix regia	Royal poinciana	10'	35'	38'	Poor		Removal
13	Swietenia mahagoni	Mahogany	10'	25'	22'	Good	6'	Remain	27	Roystonea regia	Royal palm	9'	9' CT	18'	Moderate		Remain
14	Delonix regia	Royal poinciana	7'	45'	28'	Moderate	8'	Remain	28	Albizia lebbeck	Womans tongue	28'	35'	34'	Invasive		Removal
15	Delonix regia	Royal poinciana	10'	35'	16'	Poor		Removal									
16	Delonix regia	Royal poinciana	13'	50'	46'	Poor		Removal									

TREE TO REMAIN		SCIENTIFIC NAME	COMMON NAME	DBH	
THEE TO HEMAIN	1	Bucida buceras	Black olive	26'	
	2	Roystonea regia	Royal palm	17'	
	3	Delonix regia	Royal poinciana	21'	
TREE TO BE REMOVED	5	Swietenia mahagoni	Mahogany	24'	
	7	Swietenia mahagoni	Mahogany	31'	
	8	Delonix regia	Royal poinciana	31'	
AREA FOR EXISTING TREE TO	11	Delonix regia	Royal poinciana	17'	
BE RELOCATED	12	Qercus virginiana	Live oak	30'	
	13	Swietenia mahagoni	Mahogany	10'	
	14	Delonix regia	Royal poinciana	7'	
RELOCATED TREE	27	Roystonea regia	Royal palm	9'	
EGEND		Remaining Tree Plant	ing Legend		
1'-0"	\bigcirc	3/8" = 1'-0"	ing Logona		

R

#R

REL

3 TREE LEGEND 1/16" = 1'-0"

Existing Tree Planting Legend 3/8" = 1'-0"





Tree Resource Evaluation for 3115 Pine Tree Drive, Miami Beach

Prepared for:

Dan Robertson James M. Hollingsworth, Architect 2208 NE 26 Street Ft. Lauderdale, Fl 33305-1538

Prepared by:

Jeff Shimonski President, Tropical Designs of Florida Member, American Society of Consulting Arborists ISA Certified Arborist Municipal Specialist FL-1052AM ISA Tree Risk Assessment Qualification LIAF Florida Certified Landscape Inspector 2016-0175 305-773-9406 Jeff@TropicalArboriculture.com

December 6, 2016

Summary

I performed a tree resource evaluation at the southern-most section of property at 3115 Pine Tree Drive, Miami Beach December 5th 2016. The approximate locations of these trees and palms can be found on the schematic in Appendix B.

The evaluation in Appendix A includes tree measurements, condition rating and recommended radius of the tree protection zone (TPZ) for each tree and palm. I followed the numbering on the two site plans in Appendix B.

I rated the trees in accordance with ANSI A300 (Part 5) – 2005, Annex A, Management Report Information. The trees 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: Tree, Shrub, and Other Woody Plant Management – Standard Practices. Level 1 limited visual, Level 2 basic and Level 3 Advanced Tree Risk Assessments. 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 for these trees and palms as well as the TPZs.

Trees to remain onsite should have any dead and decayed branches removed from their canopies by a certified arborist.

Most of the royal poinciana trees growing on this property are very tall with poor trunk taper. Many have weakly attached codominant branch connections that will create hazardous conditions in wind events. I have rated as poor the trees that I recommend for removal. See photos below.

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 tree 1, a black olive outside the northwest corner of the section. I added this tree because it is cracking the sidewalk and adjacent wall. See following photo for close-up view of trunk location indicated by red arrow.

Royal palm 2 is on the right-of-way along Pine Tree Drive.



Photo 2 above is a decayed section of the trunk on tree 1. The orange knife is 7 inches in length. This tree would not be a good candidate for relocation.

Note the red arrows indicating a crack on the sidewalk due to roots from this tree.



Photo 3 above is trees 3, 4, 8 & 10 viewed from the east. See following photo for closer view of the codominant trunks on tree 4.



Photo 4 above is the trunk of tree 4 with a steel spike inserted about 12 inches into a cavity between the two codominant trunks. This tree is small now but as it grows larger this section of the trunk will present a critical hazard that will be vulnerable in wind events. I recommend the removal of this tree.



Photo 5 above is trees 5, 6, 8 & 10 viewed from the east. See following photo for close-up of red circled area on the trunk of tree 10.



Photo 6 above is a closer view of a cavity at the base of the trunk on tree 10. I recommend the removal of this tree. The steel spike is inserted about 12 inches.



Photo 7 above is trees 6 & 7 near the southeast corner of the property. See following photo for a close-up of the trunk on tree 6>

Photo 8 above is a view of the trunk and main branches on tree 6 viewed from the south. The red circles indicate decay and weak branch connections. This tree is leaning over the sidewalk. I recommend the removal of this tree.

Photo 9 above is trees 11, 12 & 13 viewed from the west.

Photo 10 above is trees 13, 14, 15, 16 & 17 viewed from the north. All of the royal poinciana trees growing in this section of the property are very tall with poor trunk taper. Many have weakly attached codominant branch connections that will create hazardous conditions in wind events.

Photo 11 above is a cluster of royal poincianas near the southeast corner of the property. All of the royal poinciana trees growing in this section of the property are very tall with poor trunk taper. Many have weakly attached codominant branch connections that will create hazardous conditions in wind events. The red circle on tree 20 indicates where a strong lean of the main branch coincides with a section of decay.

Photo 12 above is tree 23 near the southeast corner of the property and along the south edge of property line. This tree had 3 trunks, but 2 were cut at 6 feet above grade apparently to accommodate the structure on the adjacent property. I added the DBH inches of the three trunks but only one trunk can be seen in this photo.

Photo 13 above is near the east property line and directly beneath the powerlines. The "hedge" underneath the power lines here is a mass of overgrown *Ficus benjamina* hedge plants and *Schinus terebinthifolius* an invasive species. Royal palm 27 should be removed.

Photo 14 above is a large cluster of *Albezia lebbeck*, an invasive species viewed from the west.

<u> Appendix – A</u>

	Scientific Name	Common name	DBH	Height	Canopy	Condition	TPZ
1	Bucida buceras	Black olive	26"	35'	53'	Moderate	12'
2	Roystonea regia	Royal palm	17"	50' CT	24'	Good	8'
3	Delonix regia	Royal poinciana	21"	30'	42'	Good	8'
4	Delonix regia	Royal poinciana	23"	30'	45'	Moderate	8'
5	Swietenia mahagoni	Mahogany	24"	40'	52'	Good	6'
6	Delonix regia	Royal poinciana	14"	25'	23'	Poor	
7	Swietenia mahagoni	Mahogany	31"	50'	55'	Good	8'
8	Delonix regia	Royal poinciana	31"	30'	72'	Good	6'
9	Unidentified		9"	13'		Dead	
10	Delonix regia	Royal poinciana	10"	30'	53'	Poor	
11	Delonix regia	Royal poinciana	17"	35'	54'	Good	6'
12	Quercus virginiana	Live oak	30"	45'	51'	Good	8'
13	Swietenia mahagoni	Mahogany	10"	25'	22'	Good	6'
14	Delonix regia	Royal poinciana	7"	45'	28'	Moderate	8'
15	Delonix regia	Royal poinciana	10"	35'	16'	Poor	
16	Delonix regia	Royal poinciana	13"	50'	46'	Poor	
17	Delonix regia	Royal poinciana	18"	40'	48'	Poor	
17a	Delonix regia	Royal poinciana	9"	6'	cut	Poor	
18	Delonix regia	Royal poinciana	16"	50'	44'	Poor	
19	Delonix regia	Royal poinciana	8"	35'	28'	Poor	
19a	Cupaniopsis anacardioides	Carrotwood	2"	13'	6'	Invasive	
20	Delonix regia	Royal poinciana	19"	45'	25'	Poor	
21	Delonix regia	Royal poinciana	13"	50'	30'	Poor	
22	Delonix regia	Royal poinciana	6"	25'	10'	Poor	
23	Delonix regia	Royal poinciana	28"	40'	30'	Poor	
24	Delonix regia	Royal poinciana	10"	40'	26'	Poor	
25	Delonix regia	Royal poinciana	10"	45'	45'	Poor	
26	Delonix regia	Royal poinciana	10"	35'	38'	Poor	
27	Roystonea regia	Royal palm	9"	9'CT	18'	Moderate	
28	Albizia lebbeck	Woman's tongue	28"	35'	34'	Invasive	

TPZ is the radius of the tree protection. The measurement is from the outside of the trunk.

• The TPZs that I have assigned to the trees and palms on this site are sufficient to maintain CRZs for these trees and palms as well as the TPZs.

- The TPZ measurement can also be utilized for the root pruning radius if any trees in good or moderate condition on this site are scheduled to be relocated.
- In the DBH column "CT" denotes the amount of gray wood or clear trunk in palms.

Appendix – B - Approximate locations of trees and palms onsite

<u>Appendix – C</u>

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.

Appendix – D – Critical Root Zone and Tree Protection Zone

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

The dimensions for the tree protection zones for all trees to remain onsite are shown in Appendix A. This area shall be encircled with a 4 foot high sturdy fence supported by steel rods or pipes to support the fence every 6 feet. There shall be signage on the fence in English and Spanish not allowing storage of any materials, change of grade or movement of equipment. This fence shall be inspected regularly by the contractor to ensure compliance.

Appendix – F - 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 – G - 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 years.

J Shenonski Sianed:

Dated: December 6, 2016