

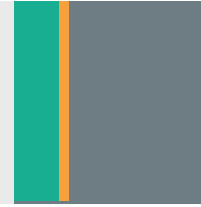
Erin Santiago

Arborist FL-5705A | LIAF Inspector #2018-0214

The Santiago Group LLC

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June 21, 2022

ISA Certified Arborist Report

The following is an arborist report for 4230 North Bay Road in Miami Beach, Florida. The purpose of this report is to evaluate the condition of the trees on site. This report is not a risk assessment on a Level 2 or 3 as described by the Levels and Scope of Tree Risk Assessment from the ANSI A300 Part 9: Tree, shrub, and Other Woody Plant Management – Standard Practices. The Santiago Group LLC cannot be held liable for damage to the tree or damage caused by the trees.

Methods:

An on-site visual inspection at ground level was made on June 16th, 2022 to observe the trees. The size of each tree was measured as diameter at breast height (DBH), breast height being 4.5 feet above ground utilizing diameter measure tape. Canopy spread diameters were determined utilizing a distance measuring wheel where possible and estimated otherwise. Tree heights were estimated in feet. Some DBH measurements were estimated when access to the tree or tree parts could not be obtained. This report describes the trees on site and includes pictures. Refer to the plans for proposed actions. The condition rating of each tree is described as Good, Moderate, or Poor. Please refer to ANSI A300 (Part 5)-2012: Management - Annex A-2 for an explanation of non-numeric condition ratings used herein. Please refer to ANSI A300 (Part 5)-2012: Management 54.7.1.1 for an explanation of the formula used to determine Tree Protection Zone (TPZ) for broadleaf trees. TPZ for palms was assigned at the arborist's discretion.

Appendixes:

Please see Appendix A for Locations, Appendix B for the Tree Inventory and Condition List, Appendix C for Photographs, and Appendix D for Tree Protection Specifications.

Respectfully submitted,

Erin Santiago, ISA Certified Arborist FL-5705A | LIAF Inspector #2018-0214

Appendix B: Inventory and Condition

Tree #	Common Name	Botanical Name	DBH (inches)	Height (feet)*	Diameter Canopy (feet)	ANSI TPZ Factor (6 to 18)**	TPZ Radius (feet)	Condition	Notes
1	Chinese Fan Palm	<i>Livistona chinensis</i>	n/a	12	12	n/a	5	Good	Juvenile
2	Chinese Fan Palm	<i>Livistona chinensis</i>	n/a	11	12	n/a	5	Good	Juvenile
3	Coconut Palm	<i>Cocos nucifera</i>	13	6CT 26OA	24	n/a	5	Moderate	Nutrient deficient
4	Coconut Palm	<i>Cocos nucifera</i>	12	3CT 21OA	24	n/a	5	Moderate	Nutrient deficient
5	Mahogany	<i>Swietenia mahagoni</i>	31	38	35	10	26	Poor	Concrete touching base of trunk will likely cause root dieback. Ficus roots are using stem as scaffolding. Major stem dieback. Canopy distributed off center.
6	Weeping Fig	<i>Ficus benjamina</i>	10	33	10	6	5	Poor	Overgrown hedgerow
7	Weeping Fig	<i>Ficus benjamina</i>	12	33	20	6	6	Poor	Overgrown hedgerow
7A	Weeping Fig	<i>Ficus benjamina</i>	14	20	10	6	7	Poor	Overgrown hedgerow
8	Royal Palm	<i>Roystonea regia</i>	20	35CT 46OA	25	n/a	5	Good	
9	Royal Palm	<i>Roystonea regia</i>	10	16CT 23OA	15	n/a	5	Moderate	
10	Royal Palm	<i>Roystonea regia</i>	16	32CT 42OA	23	n/a	5	Good	
11	Melaleuca	<i>Melaleuca quinquenervia</i>	42	40	35	6	21	Poor	Invasive***
11A	Melaleuca	<i>Melaleuca quinquenervia</i>	5	17	10	6	3	Poor	Likely a volunteer. Structure impacted by competition. Invasive***.
12	Royal Palm	<i>Roystonea regia</i>	14	32CT 42OA	24	n/a	5	Moderate	Vines

Tree #	Common Name	Botanical Name	DBH (inches)	Height (feet)*	Diameter Canopy (feet)	ANSI TPZ Factor (6 to 18)**	TPZ Radius (feet)	Condition	Notes
13	Seagrape	<i>Coccoloba uvifera</i>	120	25	25	6	60	Moderate	Multistem shrub form. Decay on midsized branches with poor wound response. Typical of species.
14	Royal Palm	<i>Roystonea regia</i>	15	43CT 55OA	26	n/a	5	Moderate	Root zone shared by Ficus
15	Banyan	<i>Ficus benghalensis</i>	50	50	45	10	42	Moderate	Distinct structure is still forming around its dead tree scaffold.
16	Strangler Fig	<i>Ficus aurea</i>	18	27	30	10	15	Moderate	Codominance in the lower half
17	Monkeypod	<i>Pithecellobium dulce</i>	24	40	45	10	20	Poor	Cavity at codominant stem connection. Midsized branch damage. Prune to clean up damage and monitor cavity.
18	Australian Pine	<i>Casuarina equisetifolia</i>	39	55	70	10	33	Moderate	Midsized branch damage. Codominant stem. Invasive***.
19	Washingtonia Palm	<i>Washingtonia spp.</i>	12	60CT 63OA	6	n/a	5	dead	
20	Washingtonia Palm	<i>Washingtonia spp.</i>	12	55CT 60OA	10	n/a	5	Moderate	Advanced age
21	Washingtonia Palm	<i>Washingtonia spp.</i>	12	57CT 62OA	10	n/a	5	Moderate	Advanced age
22	Mahogany	<i>Swietenia mahagoni</i>	18	24	25	10	15	Moderate	Crossover roots with girdling on approx 20% of root flare. Partially correctible. Utility trimmed creating canopy void.
23	Mahogany	<i>Swietenia mahagoni</i>	19	24	20	10	16	Poor	Significant trunk wound approx 24"x 10". Poor structure due to utility trimming. Codominant stems with weak connection.

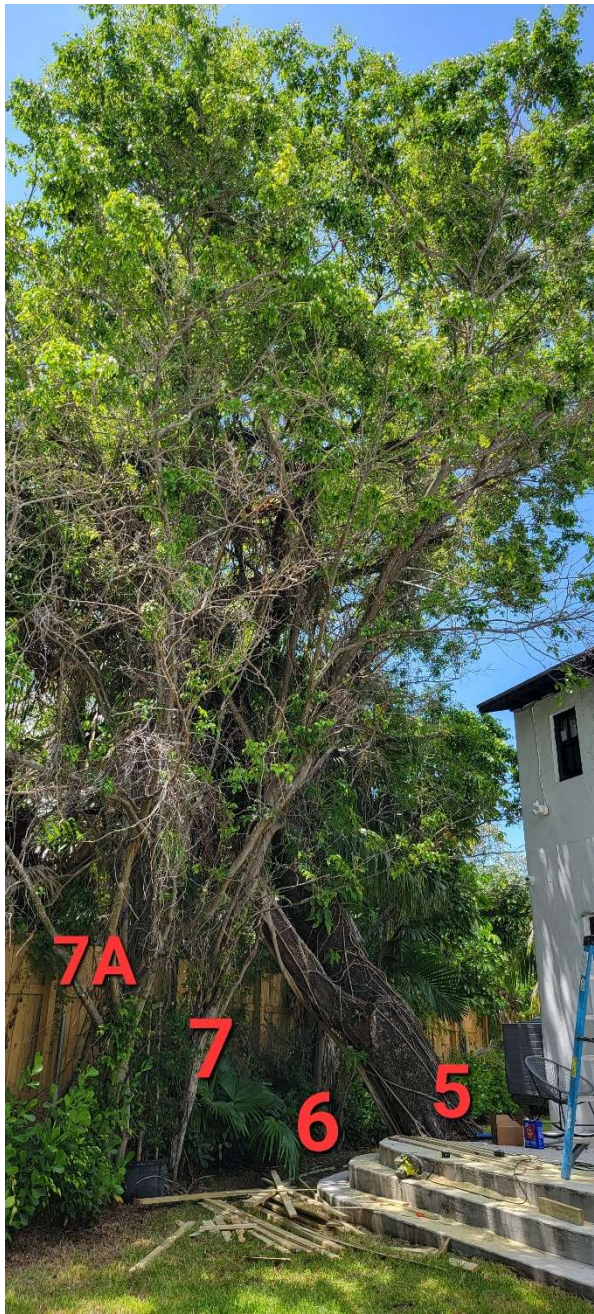
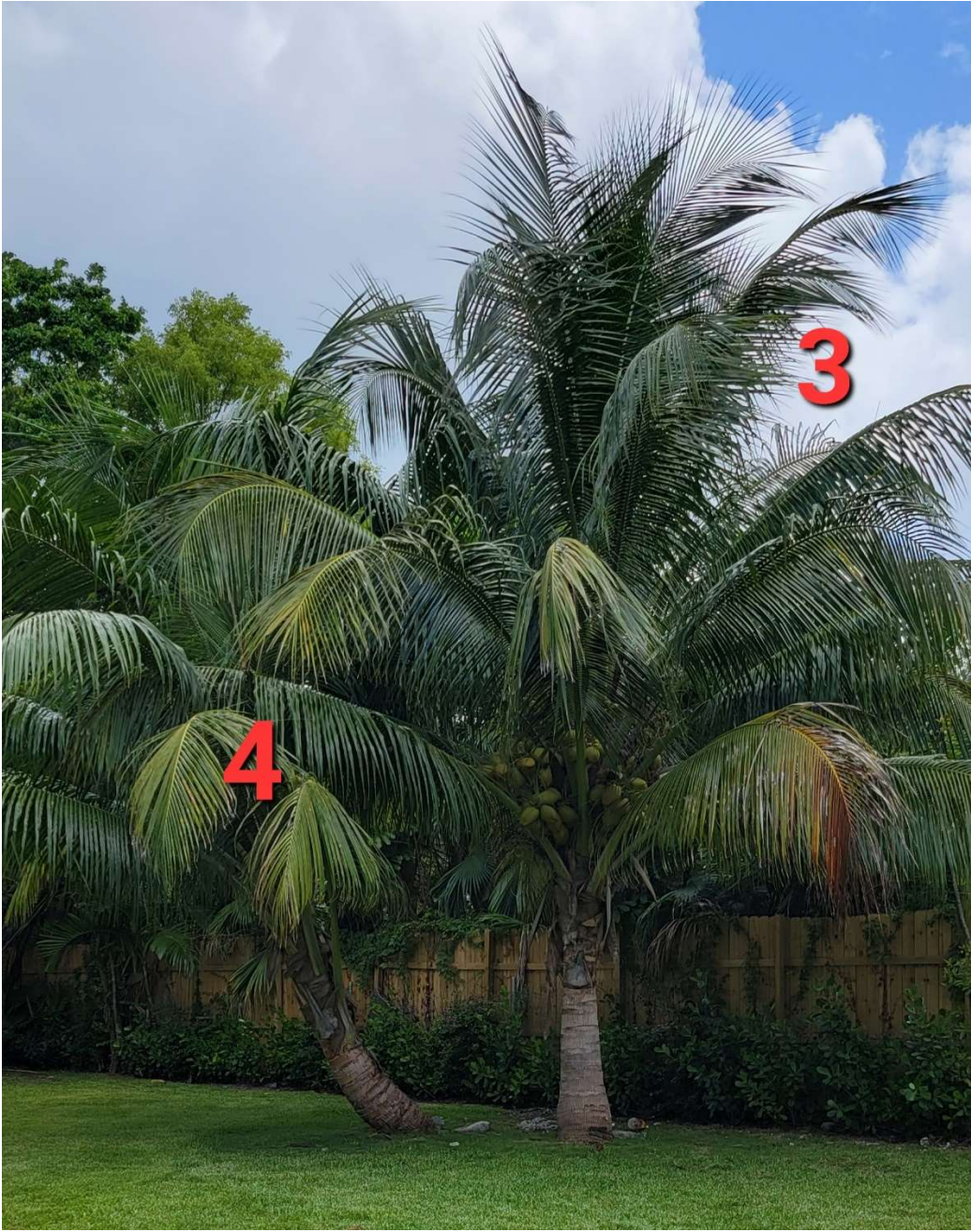
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24	Mahogany	<i>Swietenia mahagoni</i>	26	33	50	10	22	Moderate	Significant canopy void due to utility trimming. Lower utility wires are presently in conflict with branches.
25	Mahogany	<i>Swietenia mahagoni</i>	31	33	40	10	26	Moderate	Codominance. Major scaffolds have weak connections. Utility trimmed.
25A	Pitch Apple	<i>Clusia rosea</i>	4	17	15	6	2	Good	
25B	Pitch Apple	<i>Clusia rosea</i>	4	15	12	6	2	Good	
26	Melaleuca	<i>Melaleuca quinquenervia</i>	30	30	22	6	15	Poor	Codominance with major stem loss. Recommend removal. Invasive***.
27	part of 26								

*Note: Palm heights are estimated as both CT (clear trunk) and OA (overall) heights. Broadleaf tree heights are OA heights by default in this matrix.

** TPZ factor of 6 or 10 was used for broadleaf trees in the ANSI formula. TPZ for all palms were determined by Arborist, not the ANSI formula.

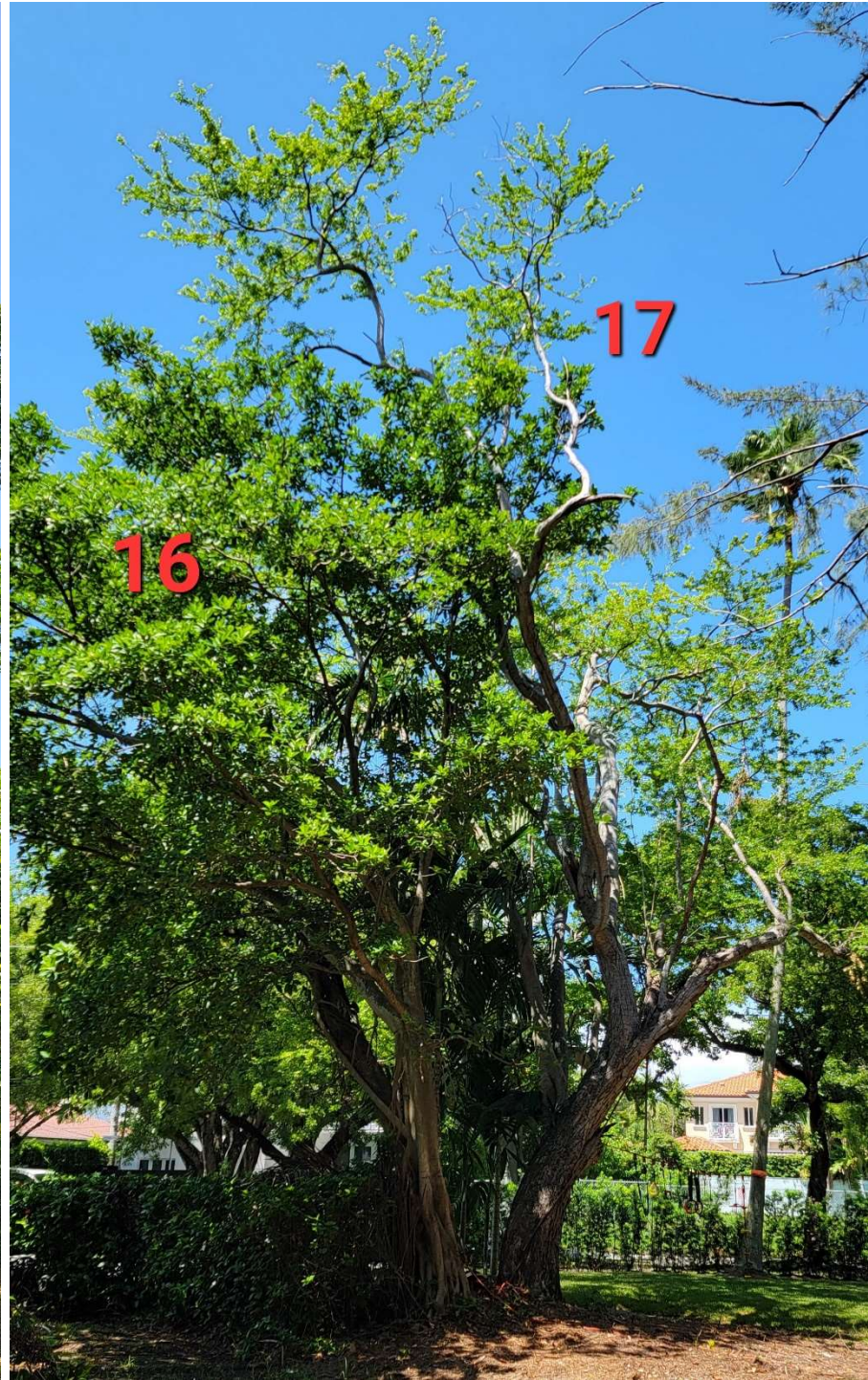
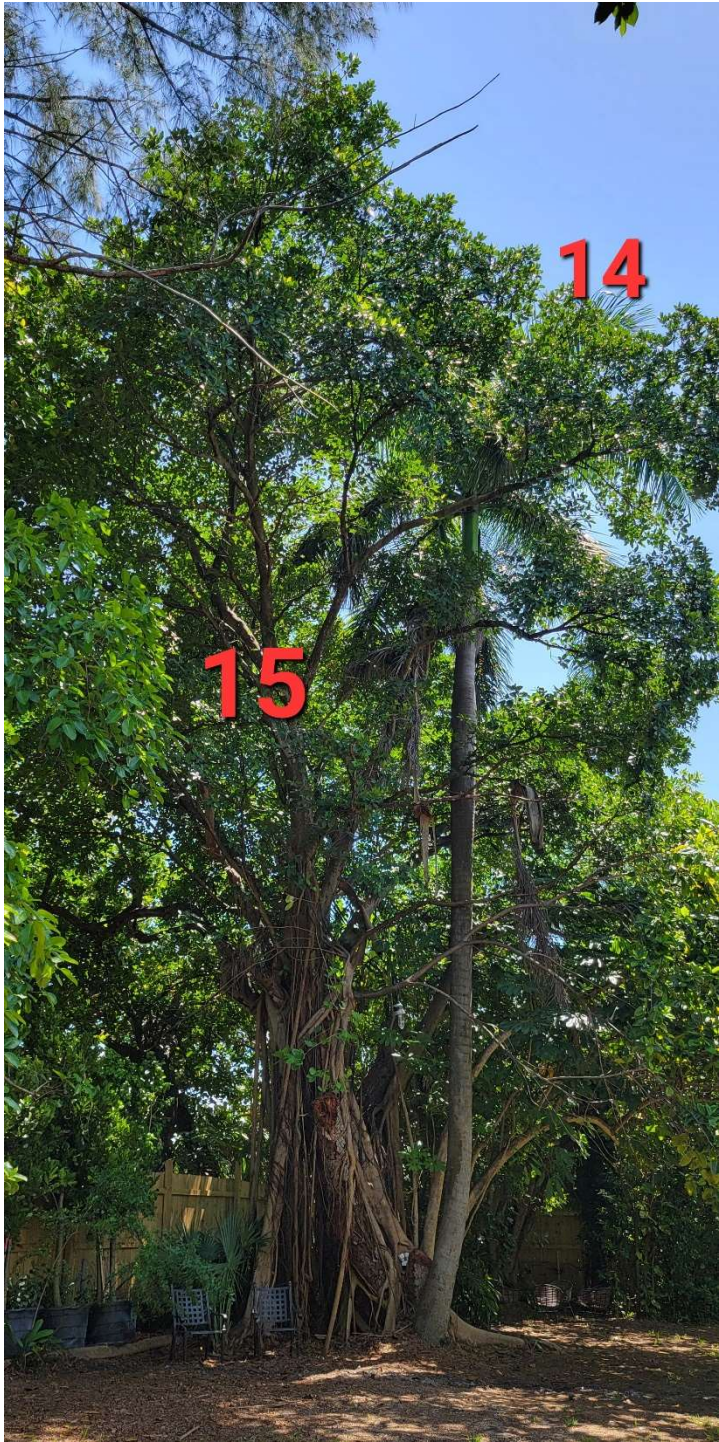
*** Invasive according to Florida Exotic Pest Plant Council's 2019 List of Invasive Plant Species <https://floridainvasivespecies.org/>

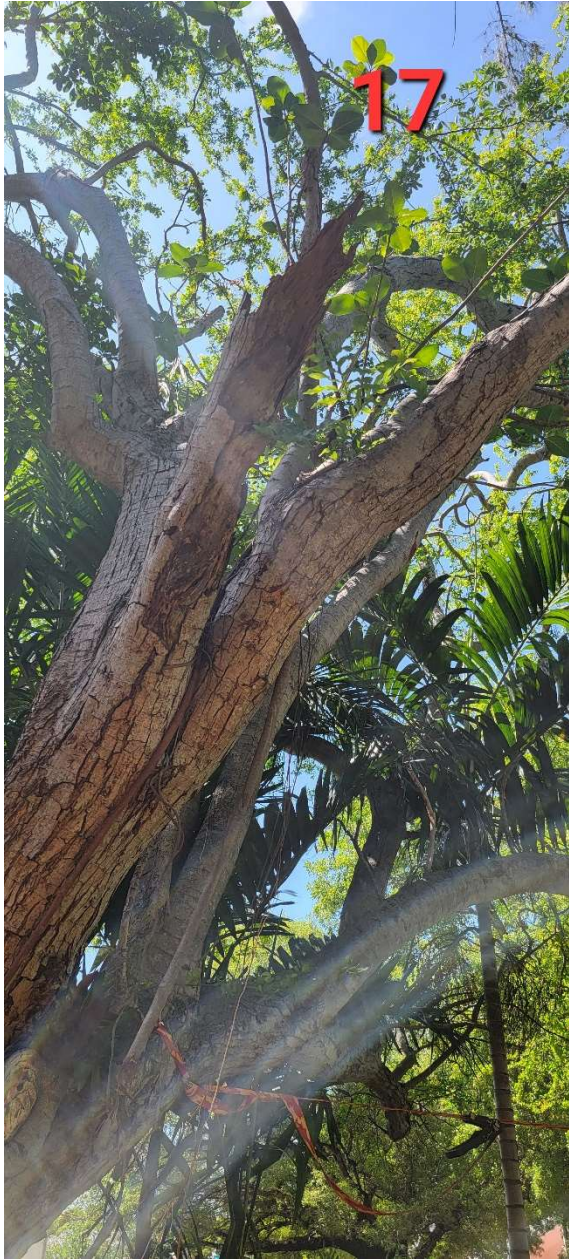
Appendix C: Photographs

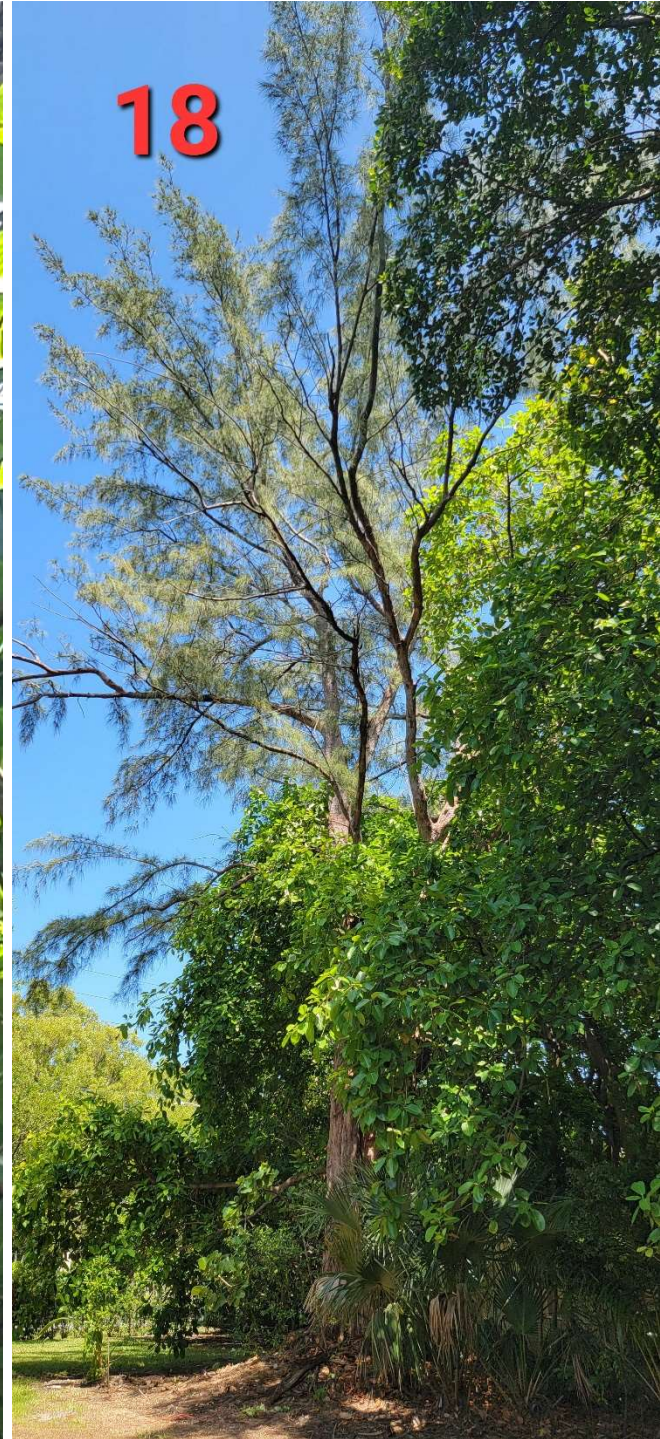


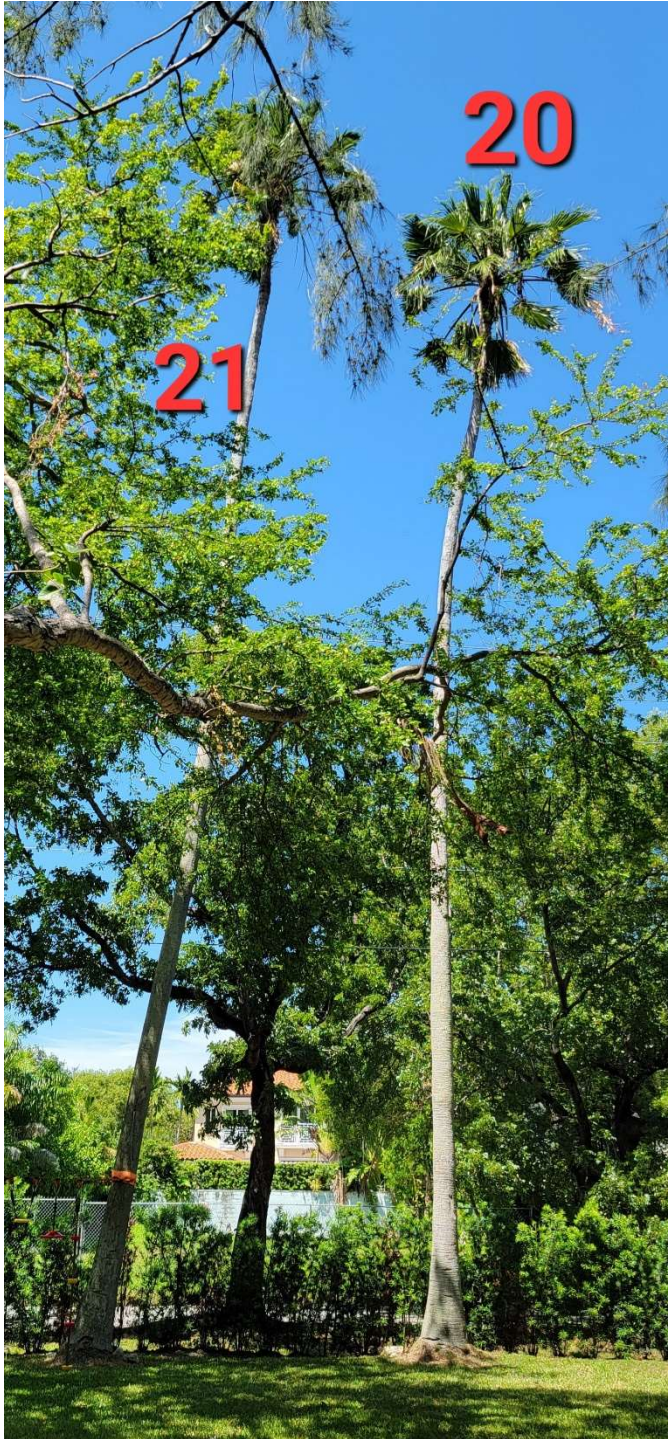




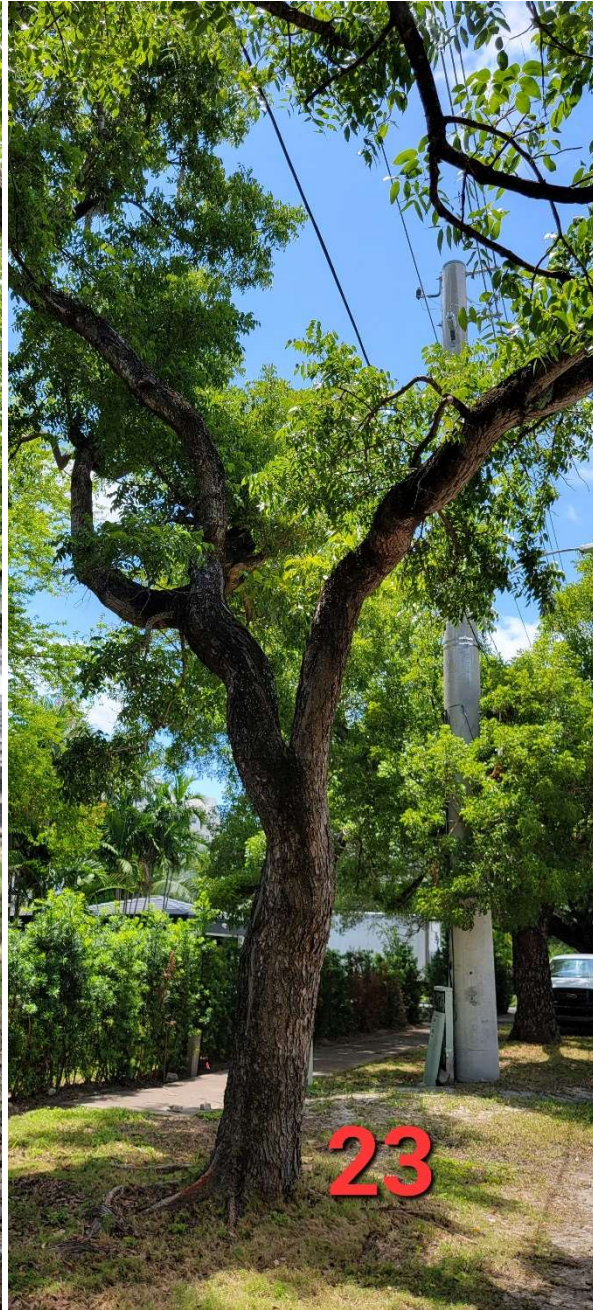
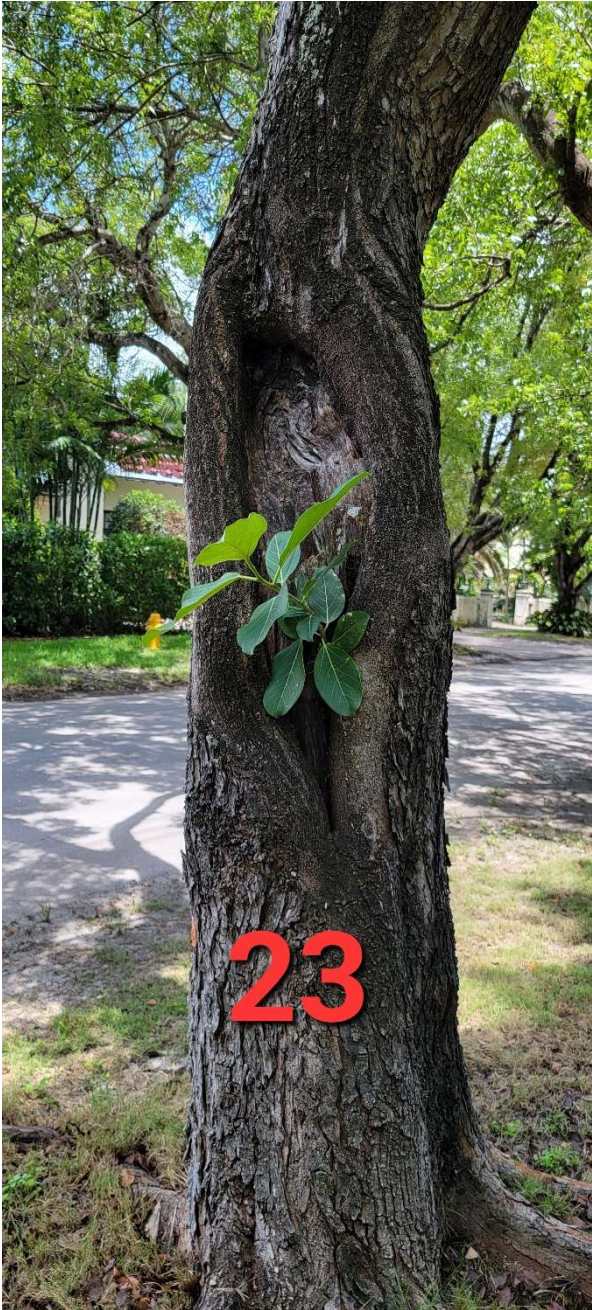






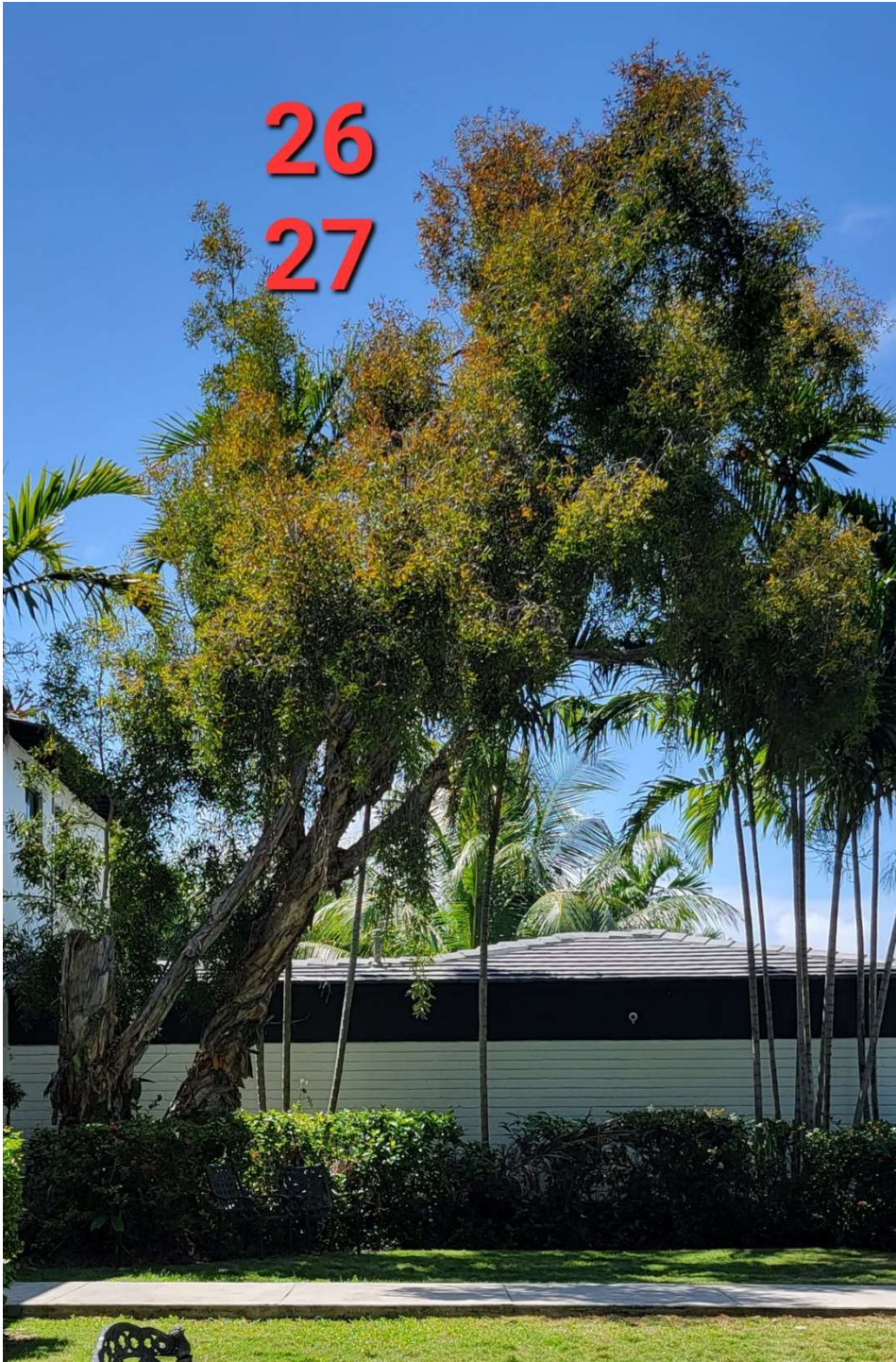
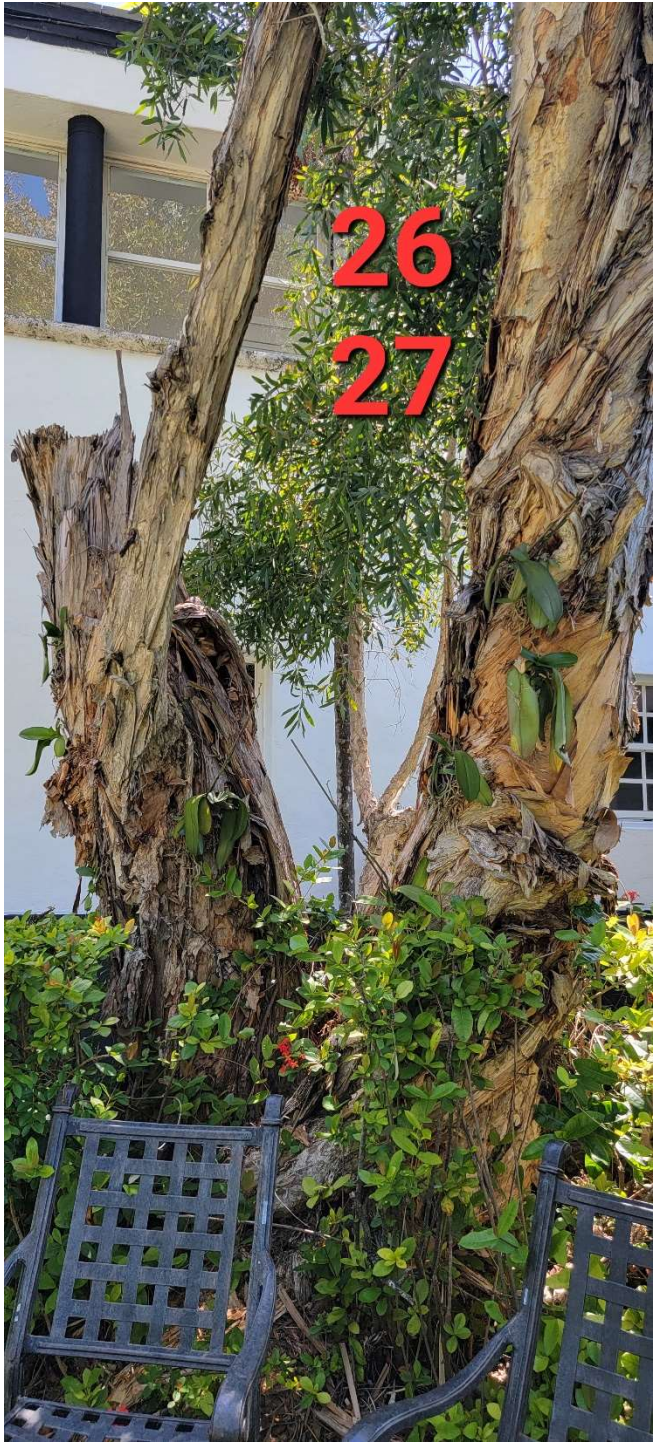










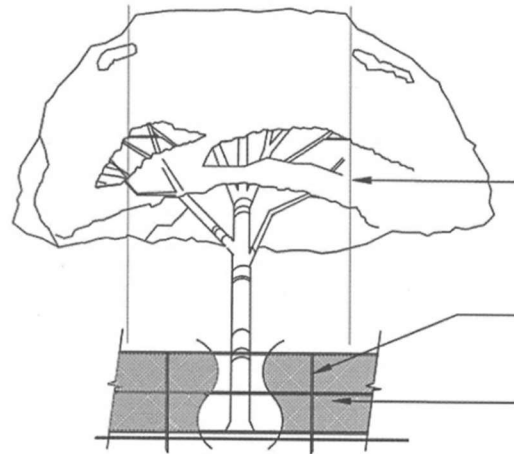


Appendix D: Tree Protection Specifications

- A. In instances where the recommended Tree Protection Zone extends over existing hardscape such as sidewalk or driveway, it may not be possible to fence the extent of the TPZ and an arborist's opinion of the extent of fencing should be sought.
- B. There may be instances where site features are proposed to be installed within the TPZ. In instances where work must be performed within the TPZ, work shall be performed under supervision of the arborist or a landscape architect and determined to be safe for the tree due to position of structural roots and ensuring likelihood of proper availability of water and gas exchange. These features will be field located at time of installation to accommodate structural roots.
- C. Recommended footage from base of trunk mentioned in matrices is an estimate only. Arborist should be consulted for direction on root pruning or protection zone changes if excavation reveals significant roots during the course of the project.

TREE / PALM PROTECTION FENCES SHALL BE CONSTRUCTED PRIOR TO ANY CONSTRUCTION ACTIVITY INCLUDING GRUBBING FOR ALL TREES / PALMS THAT ARE 'TO REMAIN, BE PROTECTED, or BE RELOCATED'

NO ACTIVITY OR DISTURBANCE SHOULD OCCUR WITHIN THE FENCED AREAS, INCLUDING VEHICLE USE, STORAGE OF MATERIALS, DUMPING OF LIQUIDS OR MATERIALS, GRADE CHANGES, GRUBBING, AND MECHANICAL TRENCHING FOR IRRIGATION, ELECTRICAL, LIGHTING, ETC.



In no case shall the fence be installed less than ten feet from the trunk

Tree + Palm protection barriers to extend beyond the 'dripline' or to the 'critical root zone area' of all trees/palms to be protected. Extend where necessary to protect tree canopy roots

Barriers shall be a minimum of four feet high, and shall be constructed of continuous chain link fence with metal posts at eight-foot spacing, or of two-by-four-inch posts with three equally spaced two-by-four-inch rails. Posts may be shifted to avoid roots.

PROTECTION DETAIL NOTE

CONTRACTOR TO INSTALL 'TREE / PALM PROTECTION FENCE BARRIERS' AROUND ALL EXISTING TREES OR PALMS AT THE START OF THE PROJECT. BARRIERS TO REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT AND SHOULD NOT BE REMOVED OR DROPPED FOR ANY REASON WITHOUT AUTHORIZATION FROM THE CITY OF MIAMI BEACH URBAN FORESTER + PLANNING + ZONING DEPARTMENT

C.M.B. TREE / PALM PROTEC. DETAIL