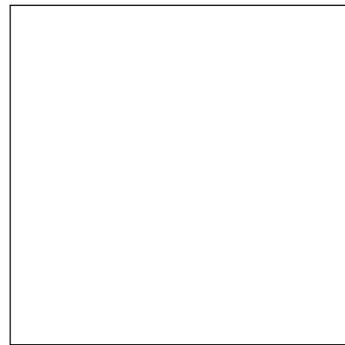
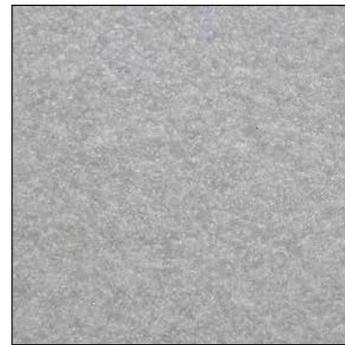


1



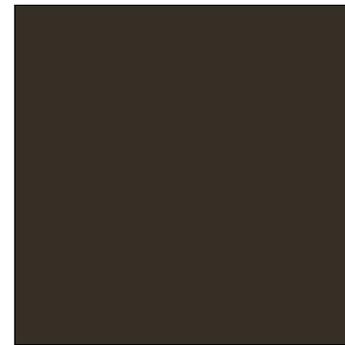
2



3



4



5

	DESCRIPTION	SPECIFICATION
1	Exterior Paint	White Dove
2	Glazing	Clear Low-E Glass
3	Decking	Limestone Decking
4	Stone Finish	Vena Grigio Stone
5	Mullion Coating	Statuary Bronze



**NEW RESIDENCE | 421 EAST SAN MARINO | MIAMI BEACH, FLORIDA**

**CLIENT / PROPERTY INFORMATION**

**PROPERTY ADDRESS**  
421 EAST SAN MARINO  
MIAMI BEACH, FL 33140

**EXISTING VEGETATION SUMMARY**

The existing vegetation located on the southern property is composed primarily of giant fishtail palms, mixed with specimen royal palms and other smaller palms. The Landscape Architect intends to keep all vegetation along the southern property line. There are (2) large ficus tree #26 and #10 that are in poor condition, and in conflict with the proposed residence, please see arborist report on sheet L-201. There are some nice specimen palms and (1) mango trees that are being relocated to the southern property line. (2) Bismarck Palms are being relocated in the front property.

**SCOPE OF WORK**

- Preservation of existing vegetation along southern property line
- Specimen Palm and Tree Relocation
- New landscape design to complement New Contemporary Residence

**INDEX OF SHEETS**

- L-000** Landscape Cover Page + Sheet Index
- L-100** Landscape Plan
- L-101** Landscape Legend + Plant List + Landscape Notes + Details
- L-200** Existing Tree Survey
- L-201** Disposition Chart + Arborist Report

seal

comm no.  
**1660**

date:  
05/23/17

revised:

DRB SECOND SUBMITTAL 07.06.17

sheet no.

EXISTING COCONUT PALM #9 TO REMAIN PRESERVE AND PROTECT

NATIVE CLUSIA ROSEA TREE COUNTS TOWARD REAR YARD REQUIREMENT

NATIVE GRABWOOD SHRUBS 150 GYL

MIXTURE OF TROPICAL GROUNDCOVERS 100 GC

LARGE BAMBOO / SPECIES TO BE DETERMINED 1 BS

16' HEIGHT NATIVE CLUSIA ROSEA TREES PROVIDES LUSH PROPERTY LINE SCREENING 11 CR

TROPICAL 'MAYPAN' COCONUT PALMS PROVIDES LUSH PROPERTY LINE SCREENING 7 CN

EXISTING ROYAL PALM #50 TO REMAIN. PRESERVE AND PROTECT

NATIVE GUMBO LIMBO TREES LARGE CANOPY SHADE TREES 1 BS

SCREEN WALL ON ADJACENT PROPERTY

NATIVE SILVER BUTTWOOD TREES COUNT TOWARD REAR YARD REQUIREMENT 2 CS

ARTIFICIAL LAWN or ZOYSIA EMPIRE LAWN OWNER REQUEST THE ABILITY TO UTILIZE ARTIFICIAL LAWN C

NEW LOCATION OF RELOCATED BISMARCK PALMS #52 AND #53

SILVER BUTTWOOD STREET TREES or SPECIES TO BE DETERMINED 5 CS

NATIVE ALLSPICE TREES PROVIDE SCREENING ALONG PROPERTY LINE 15 PD

CONCRETE or UNIT PAVER AUTOCOURT IN CONTEMPORARY PATTERN, NO LAWN OR GRAVEL JOINTS A

FRONT PRIVACY WALL AND SLIDING GATE LOCATED AT PROPERTY LINE, DESIGN TO BE DETERMINED D

NATIVE GUMBO LIMBO TREES LARGE CANOPY SHADE TREES 2 PD

NATIVE ALLSPICE TREES PROVIDE SCREENING BEHIND FRONT PRIVACY WALL 3 PD

EXISTING CANARY ISLAND DATE PALM #40, ROYAL PALMS #41, #42, and #43 TO REMAIN. PRESERVE AND PROTECT DURING CONSTRUCTION

NEW LOCATION OF RELOCATED MANGO TREE #17

NEW LOCATION OF RELOCATED SPECIMEN CABADA PALM #14, #15 + #16

SCREEN WALL ON ADJACENT PROPERTY

MIXTURE OF NATIVE TREES TO PROVIDE ADDITIONAL SCREENING AT THE BASE OF THE GIANT FISHTAIL PALMS 10 CC 12 MF

EXISTING VEGETATION ALONG PROPERTY LINE COMPOSED OF 30' HEIGHT FISHTAIL PALMS AND MISCELLANEOUS TREES + PALMS TO REMAIN AND BE PROTECTED. SEE SHEETS L-200 AND L-201 FOR MORE INFORMATION

LICUALA PALMS AND TROPICAL GROUNDCOVERS and GRAVEL ACCESS PATH 3 LG 60 GC 100 PSY

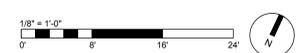
VEGETATIVE EQUIPMENT SCREENING 2 DC 15 EUF

NEW LOCATION OF RELOCATED RECLINATA DATE PALM #3

NATIVE SILVER BUTTWOOD TREE COUNTS TOWARD REAR YARD REQUIREMENT 1 CS

- LANDSCAPE PLAN LEGEND**
- A CONCRETE / UNIT PAVER AUTOCOURT WITH CONTEMPORARY PATTERN
  - B CAST IN PLACE CONCRETE PAVERS
  - C ARTIFICIAL LAWN or ZOYSIA EMPIRE LAWN
  - D FRONT SCREEN WALL AND SLIDING GATE SEE ARCH PLANS

LANDSCAPE PLAN



MIAMI BEACH DRB LANDSCAPE SUBMITTAL 06.06.17

**CHOFF LEVY FISCHMAN**  
ARCHITECTURE + DESIGN  
1005 45th Street  
Miami, Florida 33136  
www.chofflevy.com

**CHRISTOPHER CAWLEY LLC**  
LANDSCAPE ARCHITECTURE LLC  
Florida Landscape Architecture Business License LC 26000460  
7601 NE 6th St, Suite 201, Sunrise, FL 33376  
T 305.978.1585 | www.christophercawley.com

**NEW RESIDENCE**  
421 E. SAN MARINO  
MIAMI BEACH, FLORIDA

seal

CHRISTOPHER CAWLEY, RLA  
Florida License LA 198076

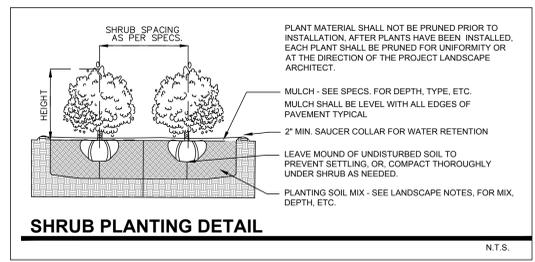
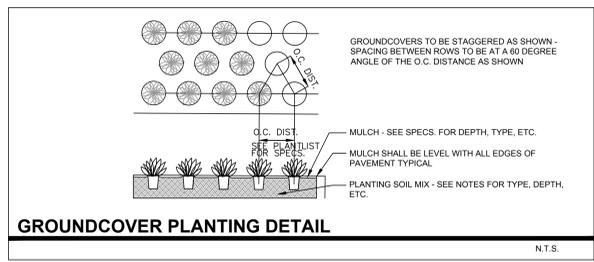
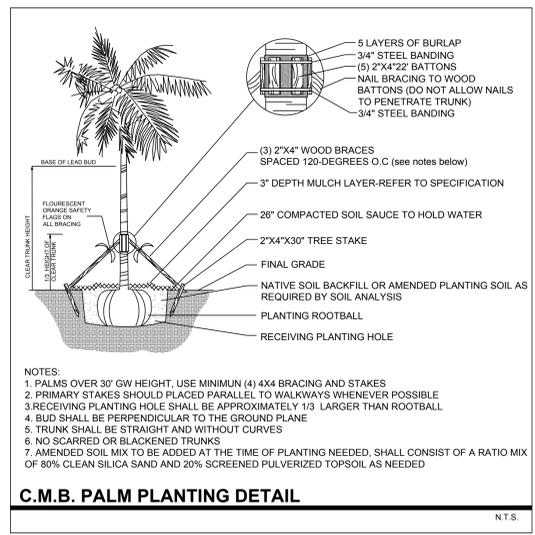
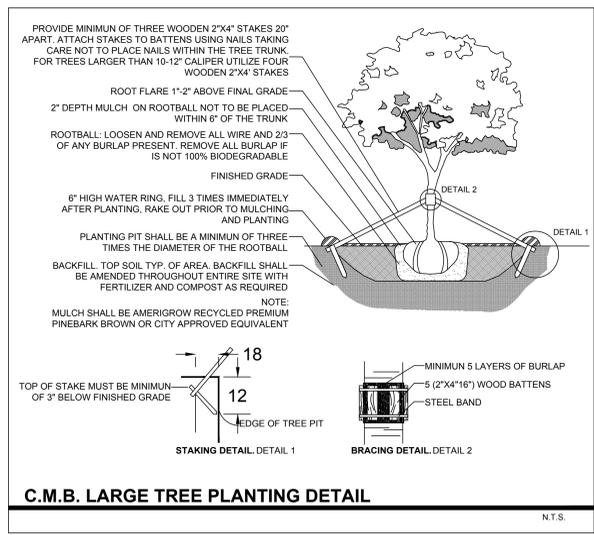
comm no. 1660

date: 05/23/17

revised: DRB SECOND SUBMITTAL 07.06.17

sheet no.

L-100



**LANDSCAPE NOTES**

1. ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER.
  2. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF, AVOID, AND PROTECT ALL UTILITY LINES, BURIED CABLES, AND OTHER UTILITIES.
  3. TREE, PALM, ACCENT AND BED LINES ARE TO BE LOCATED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ANY CHANGES TO R.O.W. (RIGHT OF WAY) MATERIAL IN REGARDS TO PLACEMENT OF SPECIES SHALL REQUIRE THE APPROVAL AND CONSULTATION OF THE CITY URBAN FORESTER AND OR CITY STAFF.**
4. ALL PLANTING SOIL SHALL BE 50:50 TOPSOIL-SAND MIX. FREE OF CLAY, STONES, ROCKS, OR OTHER FOREIGN MATTER. THIS SPECIFICATION INCLUDES ALL BACKFILL FOR BERMS AND OTHER LANDSCAPE AREAS.
- CARE SHALL BE TAKEN TO AVOID PLACEMENT OF CONSTRUCTION FILL, GRAVEL, AND OR DEBRIS OVER THE ROOTBALLS OF INSTALLED OR EXISTING TREES AND OR PALMS ON SITE.**
- SOODED-LAWN AREAS**  
2" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.
- GROUNDCOVER PLANTING BEDS**  
6" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.
- SHRUB AND HEDGE PLANTING AREAS**  
12" DEPTH PLANTING SOIL SPREAD IN PLACE- THROUGHOUT.
- TREES, PALMS, SPECIMEN PLANT MATERIAL LOCATIONS:**  
**REMOVE ALL LIMEROCK PRESENT TO A DEPTH OF AT LEAST 30" BEFORE PLACING NEW PLANTING SOIL.** APPLY NEW CLEAN PLANTING SOIL IN PLANTING AREA AS REQUIRED
5. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING ALL GRADES TO WITHIN 2" OF FINAL GRADES. THIS SHALL INCLUDE A 2" APPLICATION OF 50:50 TOPSOIL-SAND MIX FOR ALL LANDSCAPE AND AREAS TO BE SOODED.
  6. THE LANDSCAPE CONTRACTOR SHALL CALCULATE AND SUBMIT AN ITEMIZED PRICE FOR THE 2" APPLICATION OF 50:50 MIX FOR ALL SOD AREAS AS A REFERENCE IN THE CASE THAT THERE WOULD BE A DISCREPANCY BETWEEN SITE AND LANDSCAPE CONTRACTORS AND NOTIFY THE SITE CONTRACTOR OR PROJECT SUPERINTENDENT AS TO THIS DISCREPANCY. IT WILL THEN BE DETERMINED WHICH PARTY WILL PROVIDE THIS 2" TOPSOIL-SAND APPLICATION AND SUBSEQUENT PAYMENT OTHER PLANTING SOIL MIXES TO BE ADDED, I.E. FOR TREES, PALMS, SPECIMEN PLANTS, SHRUBS AND GROUNDCOVERS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR AND BE INCLUSIVE WITH THE LANDSCAPE BID.
  7. ALL EXISTING TREE + PALM INFORMATION THAT HAS BEEN PROVIDED ON THIS PLAN FOLLOWS THE MIAMI DADE COUNTY ERM TREE PERMITTING GUIDELINES. ANY TREES OR PALMS CONSIDERED INVASIVE OR THAT FALLS UNDER THE TREE PERMIT EXEMPTION / PROHIBITED SPECIES LIST 24-94 (4) MAY NOT BE SHOWN FOR CLARITY PURPOSES. ANY DISCREPANCIES IF NOTED UPON FURTHER FIELD INSPECTION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.
  8. IRRIGATION SHALL PROVIDE FOR A 100% COVERAGE WITH 50% OVERLAP MINIMUM AND BE PROVIDED BY A FULLY AUTOMATIC IRRIGATION SYSTEM W/ RAIN MOISTURE SENSOR ATTACHED TO CONTROLLER. ALL FLORIDA BUILDING CODE APPENDIX "F" IRRIGATION REQUIREMENTS SHALL BE STRICTLY ADHERED TO FOR INSTALLATION AND PREVAILING WATER MANAGEMENT DISTRICT RESTRICTIONS AND REGULATIONS SHALL BE IN COMPLIANCE FOR POST-INSTALLATION WATERING SCHEDULES CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AND LEAVE PROVISIONS FOR ALL SLEEVING AND PIPE ROUTING. ALL UNDERGROUND UTILITIES TO BE LOCATED BY DIALING 811 AS REQUIRED BY LAW.
9. ALL PLANTING BEDS SHALL BE MULCHED TO A DEPTH OF 2" WITH A SMALL GRAY GRANITE AGGREGATE OR APPROVED ORGANIC MULCH FREE FROM WEEDS AND PESTS. NO CYPRRESS MULCH OR RED DYED MULCH TO BE ACCEPTED. KEEP MULCH 6" AWAY FROM TREE OR PALM TRUNKS AS PER INDUSTRY RECOMMENDATIONS.
  10. SOD SHALL BE "EMPIRE TURF" ZOYSIA GRASS IN ALL LAWN AREAS AS SHOWN ON THE PLANS. SOD SHALL BE STRONGLY ROOTED, FREE FROM WEED, FUNGUS, INSECTS AND DISEASE. CONTRACTOR SHALL SOD ALL AREAS AS INDICATED ON THE PLANS OR AS DIRECTED. PAYMENT SHALL BE DETERMINED BY THE TOTAL MEASURED SOODED AREAS X THE UNIT PRICE SUBMITTED AND FIELD VERIFIED. SOD SHALL CARRY A 5-MONTH WARRANTY.
  11. ALL TREES, PALMS, SHRUBS AND GROUNDCOVERS, AND SOD / LAWN SHALL CARRY A ONE-YEAR WARRANTY FROM THE DATE OF FINAL ACCEPTANCE.
  12. **TREES AND PALMS SHALL BE STAKED PER ACCEPTED STANDARDS BY THE FLORIDA NURSERYMEN & GROWERS LANDSCAPE ASSOCIATION (FNGLA) AND ANSI A-300 (PART 6)-2012 TREE, SHRUB, AND OTHER WOODY PLANT MANAGEMENT STANDARD PRACTICES (PLANTING AND TRANSPLANTING). CONTRACTOR SHALL ENSURE THAT THE PLANS, DETAILS, SPECIFICATIONS AND NOTES HAVE BEEN ADHERED TO AND THAT THE LANDSCAPE AND IRRIGATION INSTALLATION IS COMPLIANT TO ALL ITEMS AS DIRECTED ON THE PLANS PRIOR TO SCHEDULING OF THE FINAL INSPECTION.**  
**CONTRACTOR SHALL REMOVE ALL STAKES, POLES, WELLINGTON TAPE AND OR BRACING MATERIALS FROM ALL PALMS, TREES AND SHRUBS WITHIN 1 YEAR OF INSTALLATION.**
  13. THE PLANT LIST IS INTENDED ONLY AS AN AID TO BIDDING. ANY DISCREPANCIES FOUND BETWEEN THE QUANTITIES ON THE PLAN AND PLANT LIST, THE QUANTITIES ON THE PLAN SHALL BE HELD VALID.
  14. IF NECESSARY, CONTRACTOR SHALL PROVIDE A WATER TRUCK DURING PLANTING TO ENSURE PROPER WATERING-IN DURING INSTALLATION AND CONTRACTOR WILL BE RESPONSIBLE FOR CONTINUAL WATERING UNTIL FINAL ACCEPTANCE BY THE OWNER.  
**A MINIMUM OF 6 MONTHS OF SUPPLEMENTAL HAND OR AUTOMATIC IRRIGATION SYSTEM WATERING SHALL BE REQUIRED TO AID IN NEW TREE OR PALM ESTABLISHMENT.**
  15. FERTILIZATION ONE COMPLETE APPLICATION OF GRANULAR FERTILIZER SHALL BE APPLIED PRIOR TO FINAL ACCEPTANCE AND APPROVAL BY THE LANDSCAPE ARCHITECT. FERTILIZER SHALL BE OSMACOTEC OR APPROVAL EQUIAL.
  16. **SHOULD ANY TREES OR PALMS BE DAMAGED THEY SHALL BE EVALUATED BY THE CITY URBAN FORESTER TO DETERMINE CORRECTIVE ACTIONS THAT MAY INCLUDE REMOVAL, CORRECTIVE PRUNING AND OR REPLACEMENT. ANY CORRECTIVE ACTION REQUIRED SHALL BE PERFORMED IN ACCORDANCE WITH A MIAMI DADE COUNTY CODE, ANSIA 300 PRUNING STANDARDS AND OR AN ISSUED ERM TREE PERMIT OR ENVIRONMENTAL PERMIT. ANY CORRECTIVE PRUNING REQUIRED SHALL BE PERFORMED BY AN ISA CERTIFIED ARBORIST OR ASCA CONSULTING ARBORIST AND THE CITY URBAN FORESTER SHALL BE CONSULTED.**
  17. **ALL TREES + PALMS TO REMAIN OR BE RELOCATED ON SITE IN THE VICINITY OF CONSTRUCTION ACTIVITIES, SHALL BE PROTECTED THROUGH THE USE OF TREE PROTECTION BARRICADES INSTALLED AT THE TREE OR PALM DRIP LINE. A TREE PROTECTION FENCE SHALL BE CONSTRUCTED PRIOR TO ANY CONSTRUCTION ACTIVITY INCLUDING GRUBBING AND SHALL REMAIN IN PLACE UNTIL ON SITE CONSTRUCTION HAS BEEN COMPLETED.**
  18. CITY OF URBAN FORESTER AND OR PLANNING DEPARTMENT STAFF TO APPROVE ROW TREES BEFORE THEY ARE PLANTED.
  20. **MULCH SHALL NOT BE APPLIED WITHIN 6" OF ANY TREE OR PALM TRUNK THAT IS INSTALLED OR INCORPORATED INTO THE PROJECT. FOR ROW TREES + PALMS, ALL MULCH SHALL BE AMERIGROW PREMIUM PINEBARK BROWN SHREDDED MULCH OR A CITY APPROVED ALTERNATIVE.**

**LANDSCAPE LEGEND**

**MIAMI BEACH LANDSCAPE ORDINANCE CHAPTER 26 (RS1 - RS4 Single Family Home Residential)**

**ZONING: RS LOT SIZE: 24,938 SF ACRES: .57**

**TREES**  
FRONT YARD - 3 TREES REQUIRED / 2 TREES PROVIDED / 3 NATIVE GUMBO LIMBO TREES  
REAR YARD - 3 TREES REQUIRED / 3 TREES PROVIDED / 3 SILVER BUTTWOOD TREES

**TOTAL OF 6 TREES REQUIRED FOR LOTS UP TO 6,000 SF. 1 ADDITIONAL TREE IS REQUIRED FOR EACH ADDITIONAL 1,000 SF OF LOT AREA.**

24,938 SF - 6,000 = 18,938 SF (19+6) 25 TOTAL TREES REQUIRED / 7 EXISTING TREES PROVIDED + 62 NEW TREES PROVIDED. (3 NATIVE GUMBO LIMBO TREE + 11 NATIVE CLUSIA ROSEA TREES + 8 NATIVE SILVER BUTTWOOD TREE + 18 NATIVE ALL SPICE TREES + 10 JAMAICAN CAPER TREES + 12 NATIVE SIMPSON STOPPER TREES PROVIDED)

**DIVERSITY REQUIREMENT**  
21-30 REQUIRED TREES = 6 TREE SPECIES / 6 SPECIES PROVIDED

**NATIVE TREES**  
30% OF REQUIRED TREES OR .30 X 25 = 7.5 / 8 NATIVE TREES REQUIRED / 62 NATIVE TREES PROVIDED (3 NATIVE GUMBO LIMBO TREE + 11 NATIVE CLUSIA ROSEA TREES + 8 NATIVE SILVER BUTTWOOD TREE + 18 NATIVE ALL SPICE TREES + 10 JAMAICAN CAPER TREES + 12 NATIVE SIMPSON STOPPER TREES PROVIDED)

**LOW MAINTENANCE TREES**  
50% OF REQUIRED TREES OR .50 X 25 = 12.5 LOW MAINTENANCE TREES REQUIRED / 62 LOW MAINTENANCE TREES PROVIDED (3 NATIVE GUMBO LIMBO TREE + 11 NATIVE CLUSIA ROSEA TREES + 8 NATIVE SILVER BUTTWOOD TREE + 18 NATIVE ALL SPICE TREES + 10 JAMAICAN CAPER TREES + 12 NATIVE SIMPSON STOPPER TREES PROVIDED)

**STREET TREE REQUIREMENT**  
AVERAGE STREET TREE SPACING 20' ON CENTER  
EAST SAN MARINO: 85 LF / 20 = 4.25 / 5 STREET TREES REQUIRED / 5 SILVER BUTTWOOD STREET TREES PROVIDED

**SHRUBS**  
12 SHRUBS (OR VINES) REQUIRED FOR EACH REQUIRED LOT AND STREET TREE or 12 X (25) = 300 REQUIRED / 365 SHRUBS PROVIDED.

**NATIVE SHRUBS**  
50% OF TOTAL SHRUBS REQUIRED MUST BE NATIVE or .50 X 300 = 150 / 265 NATIVE SHRUBS PROVIDED (100 NATIVE BAHAMMA COFFE + 150 NATIVE CRABWOOD SHRUBS + 15 SPANISH STOPPER SHRUBS PROVIDED)

**LARGE SHRUBS / SMALL TREES**  
10% OF TOTAL SHRUBS REQUIRED MUST BE LARGE SHRUBS OR SMALL TREES or .10 X 150 = 22 LARGE SHRUBS / SMALL TREES PROVIDED (25 SMALL TREES PROVIDED)

**NATIVE LARGE SHRUBS / SMALL TREES**  
50% OF TOTAL LARGE SHRUBS REQUIRED MUST BE NATIVE or .50 X 15 = 22 NATIVE SMALL TREES PROVIDED)

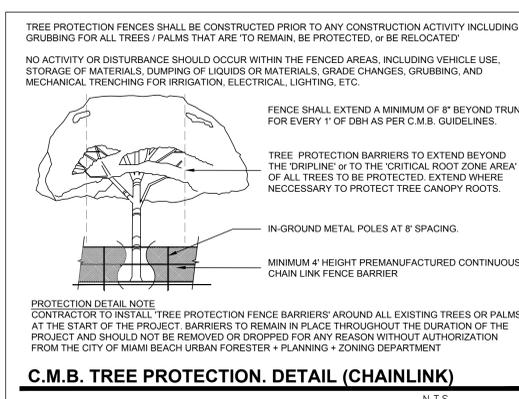
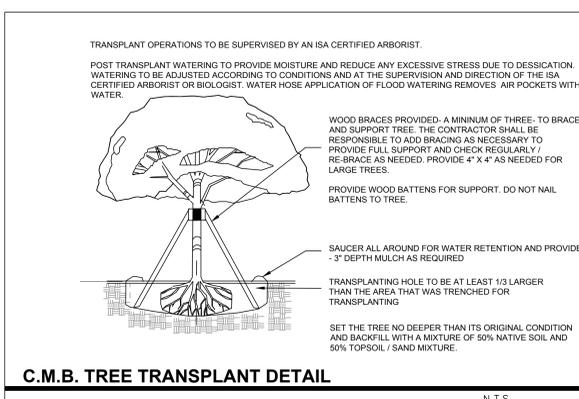
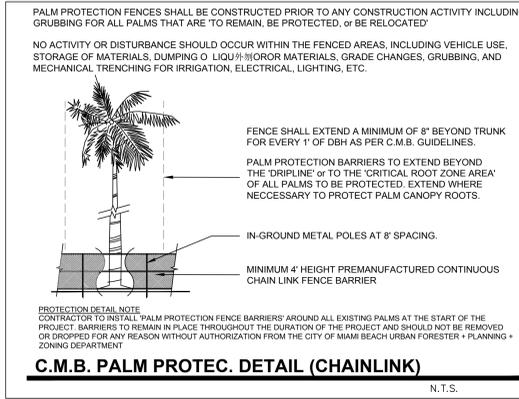
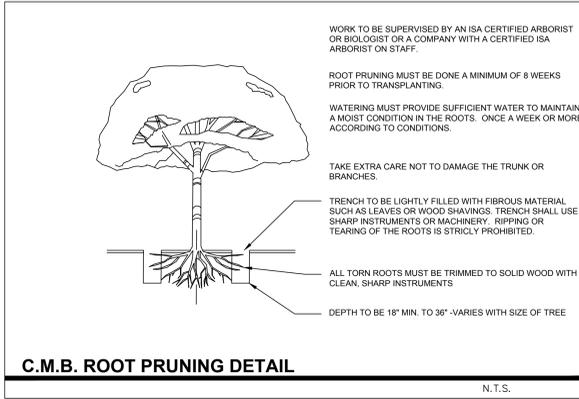
**LAWN AREA**  
50% MAXIMUM OF LANDSCAPE AREA. NEW LAWN AREAS ARE LESS THAN 50% OF LANDSCAPE AREA

**IRRIGATION SYSTEM**  
100% COVERAGE PROVIDED PURSUANT TO MIAMI DADE CODE

**PLANTLIST - 421 EAST SAN MARINO**

SYM.	NATIVE	QTY.	COMMON NAME	BOTANICAL NAME	HT. X SPR. & SPECIFICATION
<b>TREES</b>					
BS	YES	3	GUMBO LIMBO TREE	Bursera simarubra	200 gallon, 18" overall height, 12" spread, 6" dbh
CC	YES	10	JAMAICAN CAPER	Capparis cynophallophora	65 gal, 12" height x 6" spread, 4" clear trunk, 4" dbh
CS	YES	8	SILVER BUTTWOOD TREE	Coccoloba erecta	100 gallon, 14" overall height, 8" spread, multi-trunk,
CR	YES	11	PITCH APPLE TREE	Clusia rosea	65 gal, 16" height x 6" spread, 4" clear trunk, 4" dbh
MF	YES	12	SIMPSON STOPPER TREES	Mycrhanthes fragrans	100 gal, 12" height x 6" - 8" spread, 4" dbh
PD	YES	18	ALLSPICE TREE	Pimenta dioica	65 gallon, 14" height, 6" spread, 5" clear trunk, 3" dbh, space 5" on center
<b>PALMS</b>					
BS	NO	1	GIANT BLACK BAMBOO	Bambusa lako	Field grown specimen, 24" overall height, full to base
CN	NO	6	COCONUT PALMS MAYPAN	Cocos nucifera 'Maypan'	18" graywoods, Florida Fancy,
CO	NO		CAT PALM	Chamaedorea catractarum	7 gallon, 5' height, 5' spread, full to base
DC	NO	7	CABADA PALM	Dypsis cabada	14" overall height, full to base, for planter in front water feature
DS	YES	3	MEXICAN CYCAD	Dioon spinulosum	4" height x 4" spread, full head
LGE	NO	3	LIQIAL PALM	Litsea grandis	6" - 8" height x 6" spread, full head, multi trunks
RHE	NO		LADY PALM	Rhapis excelsa	4" height x 4" spread, full head
SL	NO		SATAKENTIA PALM	Satakenia lakuenis	8" gray wood, 22" - 24" overall height, Florida Fancy
TM	NO		FLORIDA THATCH PALM	Thrinax radiata	6" height x 5" spread, tripe, full head
<b>SHRUBS</b>					
CNN	NO	100	DWARF CLUSIA 'NANA'	Clusia 'Nana'	3 gallon, 18" height x 18" spread, 18" o.c. spacing, full
EUF	YES	15	SPANISH STOPPER SHRUBS	Eugenia foetida	8" height, x 2" spread, space 30" on center, to screen equipment
GYL	YES	150	CRABWOOD SHRUBS	Gyneranthus lucidum	6" height, x 2" spread, space 30" on center, to screen equipment
PSY	YES	100	DWARF BAHAMA COFFEE	Psychotria ligustrifolia	3 gallon, 18" height x 18" spread, 18" o.c. spacing, full
<b>TROPICALS &amp; GROUNDCOVERS</b>					
ALP	NO		RED or PINK GINGER	Alpinia purpurata 'red / pink'	25 gallon, 4" height, 4" spread, 4" on center
CAM	YES		DWARF CARISSA	Carissa mac 'Emerald Blanket'	3 gallon, 18" x 18", 18" on center spacing
FIP	NO		CREEPING FIG	Same	1 gallon, full long runners
LIR	NO		LIRIOPE 'BIG BLUE'	Liriope 'Big Blue'	1 gallon, 12" x 12", 12" on center spacing
MOD	NO		SWISS CHEESE PLANT	Monstera deliciosa	3 gallon, 24" x 24", 24" on center spacing
NMR	NO		GIANT APOSTLE IRIS	Neomarica 'Regina'	3 gallon, 24" x 24", 12" on center spacing
PEN	NO		WHITE FOUNTAIN GRASS	Pennisetum setaceum 'Alba'	3 gallon, 24" x 24", 24" on center spacing
PRC	NO		PHILODEN 'ROJO CONGO'	Same	3 gallon, 24" x 24", 24" on center spacing
POG	NO		PHILODEN 'GREEN CONGO'	Same	3 gallon, 24" x 24", 24" on center spacing
PGL	NO		PHILODEN 'GLORIOSUM'	Same	3 gallon, 24" x 24", 24" on center spacing
TRF	YES		DWARF FAKAHATCHEE GRASS	Tripsacum floridana	3 gallon, 18" x 18", 18" on center spacing
TRJ	NO		CONFEDERATE JASMINE	Trachelospermum jasminoides	6" height trellis, full, 3' o.c center spacing
<b>SOD, AGGREGATE, &amp; MULCH</b>					
LAWN			ARTIFICIAL TURF OR EMPIRE ZOYSIA GRASS - OVER 2" TOPSOIL BED, SEE PLANTING SPECS.		
MLC			SHREDDED ORGANIC MULCH, PER OWNER'S PREFERENCE - NO CYPRRESS MULCH OR RED DYED MULCH		
AGR			3/8" - 1/2" DECOMPOSED GRANITE AGGREGATE OR STONE TO BE SELECTED, INSTALL OVER FILTER FABRIC		
OLP			OOOLITIC LIMESTONE PAVERS / 250 SF		





**C.M.B. CANOPY MITIGATION NOTES**

THE CANOPY MITIGATION OF 7,144 SF AS REQUIRED BY THE CITY OF MIAMI BEACH, CHAPTER 46 - ENVIRONMENT, DIVISION 2, TREE PRESERVATION and PROTECTION ORDINANCE HAS BEEN MET AND EXCEEDED. A TOTAL 10,800 SF OF CANOPY HAS BEEN PROVIDED.

**CANOPY MITIGATION SUMMARY**

- (3) NATIVE GUMBO LIMBO TREES: 900 SF (MB category I @ 300 SF each)
- (11) NATIVE CLUSIA ROSEA TREES: 3,300 SF (MB category I @ 300 SF each)
- (10) NATIVE JAMAICAN CAPER TREES: 1,500 SF (MB category II @ 150 SF each)
- (8) NATIVE SILVER BUTTWOOD TREES: 1,200 SF (MB category II @ 150 SF each)
- (12) NATIVE SIMPSON STOPPER TREES: 1,800 SF (MB category II @ 150 SF each)
- (18) NATIVE ALL SPICE TREES: 1,800 SF (MB category III @ 100 SF each)
- (6) COCONUT PALMS: 300 SF (MB category IV @ 50 SF each)

**C.M.B. EXISTING TREE INVENTORY + DISPOSITION CHART - 421 EAST SAN MARINO DRIVE**

NUMBER	COMMON NAME	BOTANICAL NAME	SPECIMEN D.B.H. (IN)	HEIGHT (FT)	SPREAD (FT)	CONDITION	DISPOSITION	CANOPY AREA	CANOPY DBH FT MT. HDB, DBT	COMMENTS	PERMIT REQ	
#1	BOTTLE BRUSH TREE	Callistemon viminalis	YES	+/- 30"	+/- 30'	+/- 22'	FAIR	REMOVE	380 SF	760 SF	MITIGATION PROVIDED / SEE ARBORIST REPORT	TREE PERMIT REQ
#2	BLUE LATAN PALM	Latania loddigesii	YES	+/- 12"	+/- 18'	+/- 12'	GOOD	RELOCATE	114 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#3	SENEGAL DATE PALM	Phoenix reclinata	YES	+/- 84"	+/- 24'	+/- 28'	GOOD	RELOCATE	615 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#4	ALEXANDER PALM	Pythosperma elegans	NO	+/- 4"	+/- 14'	+/- 6'	GOOD	REMOVE	29 SF	0 SF	PROHIBITED SPECIES IN MIAMI BEACH / NO MITIGATION REQ.	NO PERMIT REQ
#5	ALEXANDER PALM	Pythosperma elegans	NO	+/- 4"	+/- 14'	+/- 6'	GOOD	REMOVE	29 SF	0 SF	PROHIBITED SPECIES IN MIAMI BEACH / NO MITIGATION REQ.	NO PERMIT REQ
#6	ALEXANDER PALM	Pythosperma elegans	NO	+/- 4"	+/- 14'	+/- 6'	GOOD	REMOVE	29 SF	0 SF	PROHIBITED SPECIES IN MIAMI BEACH / NO MITIGATION REQ.	NO PERMIT REQ
#7	ALEXANDER PALM	Pythosperma elegans	NO	+/- 4"	+/- 14'	+/- 6'	GOOD	REMOVE	29 SF	0 SF	PROHIBITED SPECIES IN MIAMI BEACH / NO MITIGATION REQ.	NO PERMIT REQ
#8	ALEXANDER PALM	Pythosperma elegans	NO	+/- 4"	+/- 14'	+/- 6'	GOOD	REMOVE	29 SF	0 SF	PROHIBITED SPECIES IN MIAMI BEACH / NO MITIGATION REQ.	NO PERMIT REQ
#9	COCONUT PALM	Cocos nucifera	YES	+/- 12"	+/- 16'	+/- 22'	GOOD	REMAIN	379 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#10	STRANGLER FIG	Ficus aurea	YES	+/- 36"	+/- 30'	+/- 30'	POOR	REMOVE	706 SF	706 X 2 = 1,412 SF	MITIGATION PROVIDED / SEE ARBORIST REPORT	TREE PERMIT REQ
#11	GUMBO LIMBO TREE	Bursera simarubra	YES	+/- 12"	+/- 18'	+/- 10'	GOOD	RELOCATE	79 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#12	CHRISTMAS PALM (multi)	Adonidia merrillii	NO	+/- 6"	+/- 20'	+/- 15'	GOOD	REMOVE	177 SF	177 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#13	MACARTHUR PALM	Pythosperma macarthurii	NO	+/- 3"	+/- 6'	+/- 4'	GOOD	REMAIN	12 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#14	CABADA PALM (multi)	Dypsis cabadea	YES	+/- 12"	+/- 18'	+/- 5'	GOOD	RELOCATE	20 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#15	CABADA PALM (multi)	Dypsis cabadea	YES	+/- 12"	+/- 18'	+/- 5'	GOOD	RELOCATE	20 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#16	CABADA PALM (multi)	Dypsis cabadea	YES	+/- 12"	+/- 18'	+/- 5'	GOOD	RELOCATE	20 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#17	MANGO TREE	Mangifera indica	YES	+/- 20"	+/- 28'	+/- 28'	GOOD	RELOCATE	615 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#18	QUEEN PALM	Arecatum nonaenae	NO	+/- 10"	+/- 16'	+/- 20'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#19	FISHTAIL PALM	Caryota mitis	YES	+/- 44"	+/- 36'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#20	ROYAL PALM	Royalea elata	NO	+/- 8"	+/- 16'	+/- 20'	GOOD	REMOVE	314 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#21	FISHTAIL PALM	Caryota mitis	YES	+/- 48"	+/- 36'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#22	FISHTAIL PALM	Caryota mitis	YES	+/- 40"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#23	FISHTAIL PALM	Caryota mitis	YES	+/- 48"	+/- 36'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#24	ROYAL PALM	Royalea elata	NO	+/- 10"	+/- 16'	+/- 20'	FAIR	REMOVE	314 SF	314 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#25	ROYAL PALM	Royalea elata	YES	+/- 12"	+/- 16'	+/- 20'	GOOD	REMOVE	314 SF	314 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#26	STRANGLER FIG	Ficus aurea	YES	+/- 120"	+/- 50'	+/- 40'	POOR	REMOVE	1,296 SF	1,296 X 2 = 2,592 SF	MITIGATION PROVIDED / SEE ARBORIST REPORT	TREE PERMIT REQ
#27	ROYAL PALM	Royalea elata	NO	+/- 6"	+/- 16'	+/- 4'	POOR	REMOVE	12 SF	12 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#28	ALEXANDER PALM	Pythosperma elegans	NO	+/- 6"	+/- 6'	+/- 12'	POOR	REMOVE	114 SF	114 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#29	FISHTAIL PALM	Caryota mitis	YES	+/- 30"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#30	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#31	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#32	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#33	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#34	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#35	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#36	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#37	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#38	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#39	FISHTAIL PALM	Caryota mitis	NO	+/- 6"	+/- 30'	+/- 15'	GOOD	REMAIN	177 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#40	CANARY ISLAND DATE	Phoenix canariensis	YES	+/- 30"	+/- 16'	+/- 28'	GOOD	REMAIN	615 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#41	ROYAL PALM	Royalea elata	YES	+/- 16"	+/- 20'	+/- 30'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#42	ROYAL PALM	Royalea elata	YES	+/- 16"	+/- 20'	+/- 20'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#43	ROYAL PALM	Royalea elata	YES	+/- 16"	+/- 20'	+/- 20'	GOOD	REMAIN	314 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#44	MANGO TREE	Mangifera indica	YES	+/- 4"	+/- 8'	+/- 28'	GOOD	REMOVE	615 SF	615 SF	MITIGATION PROVIDED	
#45	ROYAL PALM	Royalea elata	YES	+/- 24"	+/- 24'	+/- 24'	GOOD	REMAIN	452 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#46	WHITE BIRD OF PARADISE	Strelitzia alba	NO	+/- 6"	+/- 10'	+/- 6'	GOOD	REMOVE	29 SF	29 SF	MITIGATION PROVIDED	NO PERMIT REQ
#47	WHITE BIRD OF PARADISE	Strelitzia alba	NO	+/- 6"	+/- 10'	+/- 6'	GOOD	REMOVE	29 SF	29 SF	MITIGATION PROVIDED	NO PERMIT REQ
#48	WHITE BIRD OF PARADISE	Strelitzia alba	NO	+/- 6"	+/- 10'	+/- 6'	GOOD	REMOVE	29 SF	29 SF	MITIGATION PROVIDED	NO PERMIT REQ
#49	WHITE BIRD OF PARADISE	Strelitzia alba	NO	+/- 6"	+/- 10'	+/- 6'	GOOD	REMOVE	29 SF	29 SF	MITIGATION PROVIDED	NO PERMIT REQ
#50	ROYAL PALM	Royalea elata	YES	+/- 30"	+/- 40'	+/- 18'	GOOD	REMAIN	254 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#51	ROYAL PALM	Royalea elata	YES	+/- 14"	+/- 20'	+/- 32'	GOOD	REMAIN	803 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#52	BIZMARCK PALM	Bismarckia nobilis	YES	+/- 24"	+/- 18'	+/- 16'	GOOD	REMAIN	200 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#53	BIZMARCK PALM	Bismarckia nobilis	YES	+/- 16"	+/- 18'	+/- 16'	GOOD	RELOCATE	200 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#54	BIZMARCK PALM	Bismarckia nobilis	YES	+/- 18"	+/- 18'	+/- 24'	GOOD	RELOCATE	452 SF	0 SF	SEE NEW LOCATION SHEET L-100	
#55	BOUGAINVILLEA	Bougainvillea spp	NO	+/- 16"	+/- 10'	+/- 12'	FAIR	REMOVE	114 SF	114 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#56	MANGOSTEEN TREE	Garcinia spicata	NO	+/- 6"	+/- 6'	+/- 4'	GOOD	REMOVE	12 SF	12 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#57	MANGOSTEEN TREE	Garcinia spicata	NO	+/- 6"	+/- 6'	+/- 4'	GOOD	REMOVE	12 SF	12 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#58	WAX LEAF PRIVET TREE	Ligustrum japonica	NO	+/- 10"	+/- 18'	+/- 14'	GOOD	REMOVE	153 SF	153 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#59	HIBISCUS	Hibiscus spp	NO	+/- 5"	+/- 6'	+/- 10'	FAIR	REMOVE	79 SF	79 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#60	PONYTAIL PALM	Beaucarnea recurvata	YES	+/- 24"	+/- 6'	+/- 12'	GOOD	REMOVE	114 SF	114 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#61	LIGNUM VITAE	Qualecun sanctum	NO	+/- 6"	+/- 10'	+/- 16'	GOOD	REMAIN	200 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
#62	SONG OF JAMAICA	Dracaena reflexa	YES	+/- 24"	+/- 16'	+/- 20'	FAIR	REMOVE	314 SF	314 SF	MITIGATION PROVIDED	TREE PERMIT REQ
#63	PITCH APPLE TREE	Clusia rosea	YES	+/- 24"	+/- 24'	+/- 24'	GOOD	REMAIN	452 SF	0 SF	PRESERVE + PROTECT. SEE PROTECTION DETAIL	
<b>TOTAL MITIGATION REQUIRED: 7,144 SF</b>												
<b>TOTAL MITIGATION PROVIDED: 10,800 SF</b>												

**Biscayne Environmental, Inc.**

Environmental and Land Development Consultants • Mitigation Design and Contracting

May 25, 2017

Via email

Christopher Cawley, RLA  
780 NE 69<sup>th</sup> Street, Suite 1108  
Miami, FL 33138

RE: 421 E. San Marino Drive, Miami Beach  
Evaluation of Existing Tree Resources  
BEI Project No. 2017-11

Dear Mr. Cawley,

Pursuant to your request and authorization, I conducted a field inspection of the subject property on May 16, 2017. The purpose of the inspection was to identify and evaluate the existing tree resources to determine whether any of the existing trees are significant and warrant preservation or on-site relocation. The findings from the inspection follow.

The on-site inspection revealed that the existing tree resources include non-native ornamental trees that were planted originally as landscape material, fruit trees, exotic nuisance trees, and a native strangler fig tree and banyan tree that appear to have volunteered on the property. Trees observed in the front yard include 3 Bismarck palms, 1 Canary Island date palm, 1 mango, 1 gumbo limbo, 2 garcinia trees, a cluster of solitaire palms, and a cluster of cabada palms. Trees along the north property line include 2 royal palms and a banyan tree; and a cluster of solitaire palms and reclining date palms are found in the rear of the property adjacent to the swimming pool. A large strangler fig, royal palm, latania palm, and bottlebrush tree occur along the south property line.

Except for the large strangler fig on the south property line and the banyan tree along the north property line, the trees have been generally well maintained and are in good condition. The large ficus tree has a number of rotten trunks and structural damage to major canopy branches from prior storm damage and recent pruning that occurred (see attached photographs). Therefore, it is recommended that this strangler fig be removed and replaced with desirable native shade trees. The banyan tree on the north property line is growing in a very limited area between the two houses which has resulted in the canopy being cut back significantly (see attached photographs). The banyan tree also shows evidence of previous storm damage and the root system is running along the surface due to its close proximity to a CBS wall and the house. For these reasons, the banyan tree should be removed.

Because of their location along the north property line, the royal palms should be able to remain in place. All of the other palms could either remain in place (Canary Island date palm in particular), or be relocated on-site, or replaced by other desirable trees. The bottlebrush at the southeast corner of the property by the seawall should be removed and the 2 garcinia trees at the entrance of the house could either be removed or replaced.

Please contact me if you have any questions regarding the findings in this report.

Sincerely,  
BISCAYNE ENVIRONMENTAL, INC.

*David Ettman*  
David Ettman, Senior Biologist  
President

DE/ cs  
Attachments

1761 Cleveland Road • Miami Beach, Florida 33141 • Telephone 305-710-2359 • Email biscayneinc@bellsouth.net

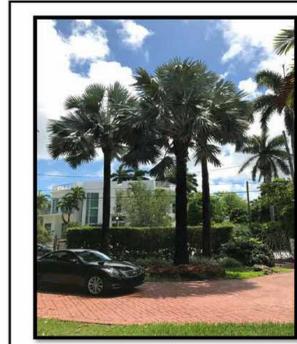


Photo 1 Bismarck palms in center of circular driveway.

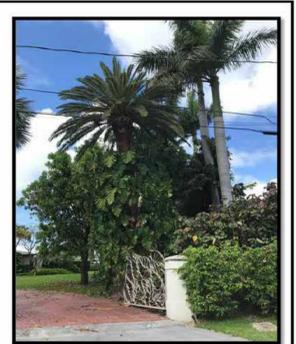


Photo 2 Canary Island date palm at southwest corner of property.

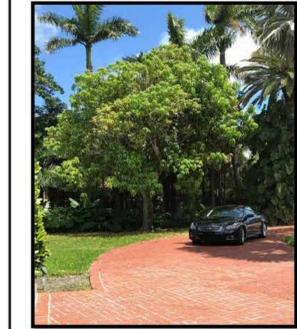


Photo 3 Mango tree at southwest corner of property.



Photo 4 Cabada cluster at front entryway of house.

<b>Biscayne Environmental, Inc.</b>	Project: 421 E San Marino Drive
1761 Cleveland Road	Sheet Name: Site Photographs
Miami Beach, FL 33141	Prepared For: Chris Cawley
Tel. 305.710.2359	Address: 421 E San Marino Drive
Email: biscayneinc@bellsouth.net	Project No.: 2017-11 Date: 5/25/17 Scale: NTS Sheet 1

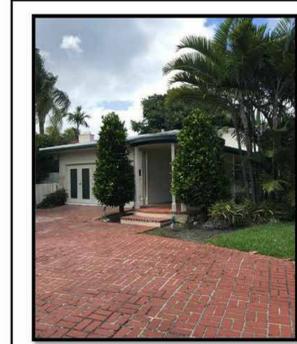


Photo 5 Garcinas at front entrance of house.



Photo 6 Gumbo limbo in front yard.



Photo 7 Reclining date palm cluster in side yard.



Photo 8 Strangler fig along south property line.

<b>Biscayne Environmental, Inc.</b>	Project: 421 E San Marino Drive
1761 Cleveland Road	Sheet Name: Site Photographs
Miami Beach, FL 33141	Prepared For: Chris Cawley
Tel. 305.710.2359	Address: 421 E San Marino Drive
Email: biscayneinc@bellsouth.net	Project No.: 2017-11 Date: 5/25/17 Scale: NTS Sheet 2

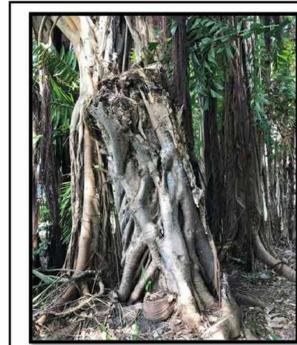


Photo 9 Rotten trunk on west face of strangler fig.



Photo 10 Structural damage to canopy branches of strangler fig.

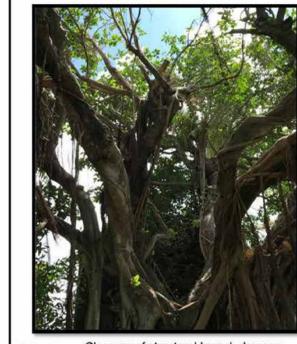


Photo 11 Close-up of structural branch damage.



Photo 12 Branch cluster on right half of photo resulting from storm damage regrowth.

<b>Biscayne Environmental, Inc.</b>	Project: 421 E San Marino Drive
1761 Cleveland Road	Sheet Name: Site Photographs
Miami Beach, FL 33141	Prepared For: Chris Cawley
Tel. 305.710.2359	Address: 421 E San Marino Drive
Email: biscayneinc@bellsouth.net	Project No.: 2017-11 Date: 5/25/17 Scale: NTS Sheet 3



Photo 13 Banyan tree along north property line growing in confined space.



Photo 14 Close-up of banyan canopy showing shaving off of canopy on north side.



Photo 15 Exposed roots of banyan tree.

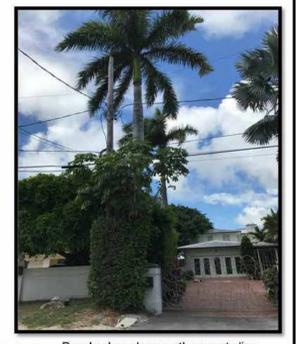


Photo 16 Royal palms along north property line.

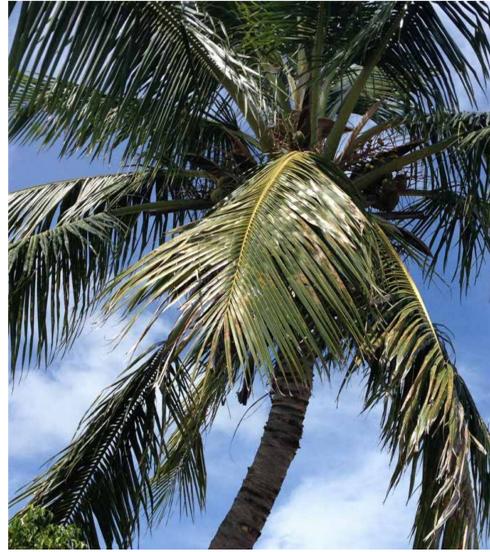
<b>Biscayne Environmental, Inc.</b>	Project: 421 E San Marino Drive
1761 Cleveland Road	Sheet Name: Site Photographs
Miami Beach, FL 33141	Prepared For: Chris Cawley
Tel. 305.710.2359	Address: 421 E San Marino Drive
Email: biscayneinc@bellsouth.net	Project No.: 2017-11 Date: 5/25/17 Scale: NTS Sheet 4



EXISTING BISMARCK PALMS



PD / ALL SPICE TREES



CN / COCONUT PALMS



BS / BLACK BAMBOO



CR / CLUSIA ROSEA TREE



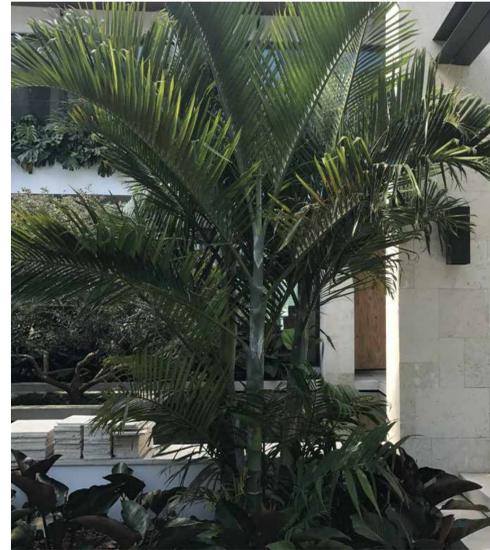
TRF / DWARF FAKAHATCHEE GRASS



LG / LICUALA PALMS



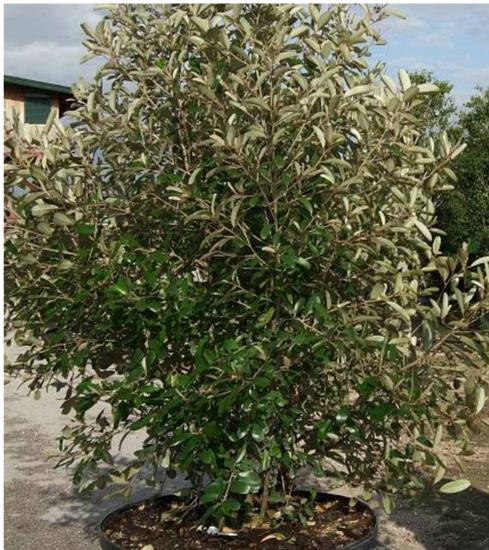
MF / SIMPSON STOPPER TREE



DC / CABADA PALMS



EXISTING ROYAL PALMS



CC / JAMAICAN CAAPER



PGL / PHILODENDRON GLORIOSUM  
TROPICAL GROUNDCOVER



MOD / MONSTERA DELICIOUSA  
TROPICAL GROUNDCOVER



SL / SATAKENTIA PALM



CS / SILVER BUTTONWOOD  
STREET TREES