

GENERAL LANDSCAPE NOTES

REFER TO ARCHITECTURE FOR SITE, BUILDING, AND ZONING INFORMATION.

1. The Contractor shall be responsible for verifying all underground utilities prior to digging in any area. The Contractor shall notify all necessary utility companies 48 hours minimum prior to digging for verification of all underground utilities, irrigation and all other obstructions and coordinate with Owner's Representative prior to initiating operations. Drawings are prepared according to the best information available at the time of preparing these documents.
2. The Contractor is responsible to ensure proper watering and maintenance of new and relocated materials during the warranty period.
3. Contractor is to report any discrepancies between the construction drawings and field conditions to the Owner immediately.
4. All planting materials shall meet or exceed Florida Grade # 1 as specified in Grades and Standards for Nursery Plants and Part II, Palms and Trees, current edition.
5. Contractor shall familiarize himself/herself with existing site conditions prior to initiating planting. All existing site furnishings, paving, landscape and other elements to remain shall be protected from any damage throughout all construction phases unless otherwise noted.
6. Landscape Contractor shall coordinate all work with related contractors and with the general construction of the project in order not to impede the progress of the work of others or the Contractor's own work. Landscape contractor shall provide schedule of his/her works two weeks in advance, beginning two weeks prior to commencing landscape trade construction.
7. Contractor shall be responsible to remove existing ground cover for all planting beds as specified prior to planting relocated material. Contractor shall be responsible to replace all portions of existing landscape and hardscape areas damaged while completing planting installation with same grass or materials species to the satisfaction of the Owner.
8. The Contractor shall bear all costs of testing of soils, amendments, etc. associated with the work and included in the specifications. Prior to commencement of the landscape planting work the Contractor shall provide complete soil tests with recommendations for the installation area.
9. All plant material that may need to be replaced shall be in full and strict accordance to Florida No. 1 grade, according to the "Grades and Standards for Nursery Plants", published by the Florida Department of Agriculture and Consumer Services, the project manual and/or specifications. Plant material in some cases may exceed Florida No. 1 grade in order to meet the minimum requirements for the project.
10. Landscape Contractor shall field stake the location of all plant material prior to initiating installation for the review and approval of the Owner and/or Landscape Architect.
11. Landscape Contractor shall field adjust location of plant material as necessary to avoid damage to all existing underground utilities and/or existing above ground elements. All changes required shall be completed at the Contractor's expense and shall be coordinated with the Owner and the Landscape Architect.
12. Any substitutions in size and/or plant material must be approved by the Landscape Architect or Owner prior to modification of the contract, purchasing and delivery of plants. All plants will be subject to approval by Landscape Architect and/or Owner before planting can begin. All plant materials will not include any plants considered to be invasive to South Florida's native plant communities.
13. Contractor shall refer to the landscape planting details, general notes and the project manual and/or specifications for further and complete landscape planting instructions.
14. Landscape Contractor shall coordinate all planting work with permanent or temporary irrigation work. Landscape Contractor shall be responsible for all hand watering as required by Owner to supplement irrigation watering and rainfall.
15. Landscape Contractor shall be responsible for hand watering in all planting areas, regardless of the status of existing or proposed irrigation.
16. Landscape Contractor shall clean the work areas at the end of each working day. Rubbish and debris shall be collected and deposited off-site daily. All materials, products and equipment shall be stored in an organized fashion as directed by the Owner.
17. Landscape Contractor shall regrade all areas disturbed by plant removal, relocation and/or installation work. Landscape Contractor shall replace (by equal size and quality) any and all existing plant material disturbed or damaged by plant removal, relocation, and/or installation work.
18. Guying I staking practices shall not permit nails, screws, wires etc. , to penetrate outer surface of tree or palm. Trees or palms rejected due to this practice shall be replaced at the Contractor's expense.
19. Burlap material, wire cages, plastic straps, etc. , must be cut and removed from top one - third (1/3) of root ball.
20. Trees grown in grow bags or grow bag type material are not allowed.
21. Plant size specifications take precedence over container size.
22. Contractor to verify quantities and report any discrepancies to Owner and/or Landscape Architect.
23. Remove and replace sidewalk. Reconstruct swale. Mill and resurface 2in. avg. using type S-III asphalt mix design on the driving lane. Any work and/or improvements to the right of way including landscaping and irrigation require a separate CMB Public Works Department ROW Construction Permit.
24. The locations of hardscape and landscape, as shown in these plans, are approximate. The final locations may be adjusted to accommodate unforeseen field conditions, to comply with safety setback criteria, to avoid creating unsafe sight conditions, or as otherwise directed by or approved by the landscape architect.
25. Existing grades and existing site information shown on this plan is compiled from base information supplied by the surveyor and architect. The contractor is responsible for confirmation of actual site conditions. Urban robot accepts no responsibility for existing topographic and existing site information.

26. The general contractor shall require landscape installation sub-contractor to provide a detailed report and strategy for the transplanting, staging and reuse of any existing trees or palms within the proposed landscape plans. This shall be verified and approved by the landscape architect.
27. All dimensions and layout information is referenced to coordinates points provided on the survey.
28. The contractor shall verify all existing conditions prior to the commencement of work. Any discrepancies shall be reported to the owner's representative immediately.
29. The contractor shall perform all work in accordance with all local, state and federal regulations and shall obtain all necessary permits for this project.
30. All site work shall be performed in accordance with landscape (l) and, if applicable, civil (c) drawing sets.
31. All notes and dimensions are typical unless otherwise noted.
32. All dimensions are square (parallel or perpendicular) unless otherwise noted. The contractor shall notify the owner/owner's representative immediately in the event of any discrepancies found in the documents and/or field, or of conditions uncovered in the work which are not reflected in the plans.
33. The contractor shall take every precaution to prevent damage to all utilities (both above and below ground) within the project area. Damage to any utilities as a result of actions by the contractor shall be restored by the contractor, at his expense, to conditions equal to or better than before the damage was done.
34. Any areas disturbed by equipment, material storage, demolition and/or installation procedures are to be restored to original (or better) condition by contractor before completion of project and are subject to approval by owner's representative. All existing grassed areas not adequately protected and therefore damaged during construction, shall be replaced by the contractor at no additional cost to the owner.
35. The contractor is responsible for keeping the site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plans.
36. Contractor is responsible for general clean-out of all drainage basins (new and existing), manholes and/or other drainage features which have accumulated sediment as a result of construction activities.
37. The contractor shall provide all equipment, labor, materials and related work necessary for the prevention and control of dust resulting from operations in the performance of work of this contract. All cost in connection there with shall be considered to be included in the various unit and/or lump sum prices bid for the various item as listed in the bid.
38. Contractor shall submit shop drawings and/or samples of all materials to landscape architect as required within the detail drawings and notes.
39. All installation shall comply with City of Miami Beach ordinances. All discrepancies shall be notified to Landscape Architect immediately.

L1

Landscape Plans

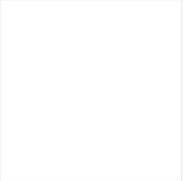
- L1.1 Landscape Notes
- L1.2 Arborist Report A
- L1.3 Arborist Report B
- L1.4 Tree Disposition Plan
- L1.5 Tree Disposition Schedule
- L1.6 Site Planting Plan
- L1.6a Site Planting Plan Bus Stop Removed Alternative
- L1.7 Site Planting Schedule
- L1.8 Mezzanine & Parking Roof Planting Plan
- L1.9 Atrium Planting Plan
- L1.10 Roof Planting Plan
- L1.11 Planting Details



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411 Michigan Avenue
Miami Beach, Florida

Landscape Notes



HPB FINAL SUBMITTAL
07 FEBRUARY 2022

L1.1

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Arborist Report
411 Michigan Avenue
Miami Beach

10/18/2021



Arborist Report

10/18/2021

On October 13th, 2021 I visited the property located at 411 Michigan Avenue at the request of Urban Robot Associates. I evaluated the trees on the site in anticipation of new construction. For each tree, I confirmed species, location, and size (Height, Spread, DBH); evaluated condition (Poor, Fair, Good); provided relevant comments about health and condition; and took photographs. Street trees are included.

For tree disposition and Tree Protection Zones, please see the landscape plans. For trees and palms that are to remain, protective barriers shall be placed at the dripline or 10ft radius from the trunk, whichever is greater. Barriers shall be installed prior to the start of construction, and shall remain in place until development is completed and until the department authorizes their removal. Barriers shall be a minimum of 4ft high, and shall be constructed of continuous chain link fence with metal posts at 8ft spacing, or of 2x4 posts with three equally spaced 2x4 rails. Posts may be shifted to avoid roots. No materials shall be placed or disposed of within the TPZ. Natural grade shall be maintained within the TPZ.

My findings are summarized in the following pages. This report shall in no shape or form be construed as a tree risk assessment which is beyond the scope of work written in the contractual agreement. Please feel free to contact me should any questions arise. Thank-you for the opportunity to assist in this manner.

Alexis Alvey

Alexis Alvey
ISA Board Certified Master Arborist* #NY-5539B

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Property Location -
411 Michigan Avenue
Miami Beach, FL 33139

Client -
Urban Robot Associates
Justine Velez, RLA, Principal
420 Lincoln Road, Suite 600, Miami Beach, FL 33139
786.246.4857 / justine@urbanrobot.net

ALVEY TREE CONSULTING

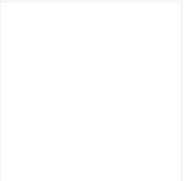
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ALVEY TREE CONSULTING

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4



Tree #5
Common Name - Green Buttonwood
DBH (in) - 48
Height (ft) - 28
Condition - Poor
Native? - Yes
Scientific Name - *Conocarpus erectus*
Canopy Spread (ft) - 40



Tree #5 is a large Green Buttonwood street tree located along Fifth Street. It is growing in a planting swale that is approximately 13ft wide at its widest. The tree is multi-trunked and in poor condition. One main leader was hatracked previously, and now a dead trunk is present (circled in red, below left). Many of the trunks have included bark and there is decay in the tree crotch (circled in red, below right). The canopy hangs low over the street and sidewalk. One main leader spreads over the sidewalk with only approximately 6ft of overhead clearance. This is hazardous for taller pedestrians. A number of other limbs in the canopy have been hatracked. There are large surface roots throughout the entire planting swale area. If this tree is proposed to remain, a tree risk assessment is recommended.



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Tree #6
Common Name - Brazilian Pepper
DBH (in) - 16
Height (ft) - 35
Condition - Good
Native? - Invasive
Scientific Name - *Schinus terebinthifolius*
Canopy Spread (ft) - 25



Tree #6 is a Brazilian Pepper located on the south side of the property. The tree is in good condition. It has a dense canopy and has grown quite tall for a Pepper. This species is highly invasive in South Florida and this tree will therefore need to be removed.

Tree #7
Common Name - Mahogany
DBH (in) - 9.5
Height (ft) - 35
Condition - Fair
Native? - Yes
Scientific Name - *Swietenia mahagoni*
Canopy Spread (ft) - 12



Tree #7 is a Mahogany located on the south side of the property. It is in fair condition with a narrow columnar habit. It is growing through the canopy of Brazilian Pepper #6 and is competing with it. There is an injury to the trunk that is closing over well (circled in red).

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6

Tree #8
Common Name - Mahogany
DBH (in) - 10.5
Height (ft) - 18
Condition - Poor
Native? - Yes
Scientific Name - *Swietenia mahagoni*
Canopy Spread (ft) - 8



Tree #8 is a Mahogany located on the south side of the property. It is in poor condition with a small canopy. The tree has been hatracked.

Tree #9
Common Name - Mahogany
DBH (in) - 14.5
Height (ft) - 40
Condition - Poor
Native? - Yes
Scientific Name - *Swietenia mahagoni*
Canopy Spread (ft) - 15



Tree #9 is a Mahogany located on the south side of the property. It is in poor condition. There is little that remains of the canopy. Many limbs have been removed and the tree has poor form. There is an injury on the trunk where one limb split off.

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Tree #10
Common Name - Sabal Palm
DBH (in) - 13
Height (ft) - 30
Condition - Good
Native? - Yes
Scientific Name - *Sabal palmetto*
Canopy Spread (ft) - 12



Tree #10 is a Sabal Palm located on the south side of the property. It is in good condition.

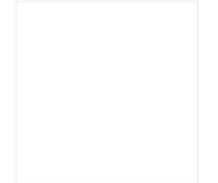
Tree #11
Common Name - Foxtail Palm
DBH (in) - 8.5
Height (ft) - 20
Condition - Poor
Native? - No
Scientific Name - *Wodyetia bifurcata*
Canopy Spread (ft) - 15



Tree #11 is a Foxtail Palm located on the south side of the property. It is in poor condition with a hatracked trunk and chlorotic foliage.

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8



Tree #12

Common Name - Mahogany
DBH (in) - 10.5
Condition - Poor
Native? - Yes

Scientific Name - *Swietenia mahagoni*
Height (ft) - 16
Canopy Spread (ft) - 10



Tree #12 is a Mahogany located in the southwest corner of the property. The tree is in poor condition and has been hatracked. Little canopy remains.

Notes - TPZ Calculations & Tree and Palm Relocation

Tree Protection Zone (TPZ) -
- For trees and palms that are to remain, protective barriers shall be placed at the dripline or 10ft radius from the trunk, whichever is greater.
- For trees and palms that are relocated, protective barriers shall be placed at the dripline or 1 - 2ft outside the rootball, whichever is greater.

Tree and Palm Relocation Notes -
1. All phases of transplanting trees and palms to be performed or supervised by Certified Arborist.
2. Trees to be relocated shall be root pruned six to eight weeks prior to transplanting. Landscape Contractor shall maintain transplanted material during construction period by watering, moving, spraying, fertilizing, and pruning.
3. Landscape Contractor is responsible for verifying locations of all underground and overhead utilities and easements prior to commencing work. All utility companies and/or the General Contractor shall be notified to verify locations prior to digging. Utility trenching is to be coordinated with the Landscape Contractor prior to beginning of project. The Owner and Certified Arborist shall not be responsible for damage to utility or irrigation lines.
4. The Landscape Contractor shall comply with all local and state codes and shall be responsible for obtaining all applicable permits.
5. The Landscape Contractor shall regularly inspect the relocated material to ensure compliance with standard horticultural practices.
6. The Landscape Contractor is responsible for guaranteeing the transplanted trees and palms for a period of one year. At the time of the final inspection all transplanted trees and palms that are not in viable condition shall be replaced by the Landscape Contractor.
7. The Landscape Contractor shall take all precautions to minimize shock of root pruning and transplanting in accordance with standard arboriculture practices.
8. The diameter of the root ball to be transplanted shall follow the guidelines set forth in the latest edition of the Florida Grades and Standards for Nursery Plants.
9. Roots shall be cleanly cut with a sharp spade, hand saw, chainsaw, or other approved root-pruning equipment.
10. Trees shall not be pruned at transplanting to compensate for root loss. Any pruning required shall be as per the ANSI A300 Standards.
11. For all palms except Sabal palmetto, only dead fronds shall be removed. Sabal palmetto shall have all fronds cut without damaging the bud. Fronds shall be securely tied around the bud prior to relocation and shall be untied after placement in the new planting hole. The bud shall be protected from damage or injury during relocation.
12. After root pruning trees, backfill roots to original existing grade with existing soil free of any deleterious material to root growth.
13. Provide a layer of 3" mulch over backfill area to prevent weed growth, conserve moisture and prevent evaporation. Keep mulch 6" away from the trunk.
14. Provide tree protection as per Landscape Architect's Tree Protection Detail to ensure that the tree or root system is not damaged during the root-pruning period.
15. After root pruning and prior to relocation, tree(s) shall be watered a minimum of twice weekly.
16. Transplanting shall occur within 24 hours after being dug for relocation. The root ball shall be kept moist.
17. Digging and preparation of the new hole for the transplant shall be done prior to removing the tree from the existing location.
18. The depth of the new hole shall be equal to the depth of the root ball and the width shall be equal to two to three times the width of the root ball.
19. Trees and palms shall be lifted from the ground with heavy equipment designed specifically for tree relocation so that the trunk and crown is not impacted and damaged by the equipment.
20. The slings used to lift the trees and large palms shall be non-binding nylon slings that are wrapped under the root ball to support the weight of tree or palm. Slings shall not be solely wrapped around the trunk of the tree. Padding the sling may be necessary so that the trunk is not damaged.

Notes - Tree and Palm Relocation (Contd.)

21. Trees and palms shall be planted so that the top of the rootball is flush with the existing grade. Ensure that deep planting does not occur. The tree and palm shall be centrally positioned in the planting hole and set straight, plumb or normal to the growth pattern prior to transplanting.
22. Transplanted trees and palms shall be backfilled with a uniform mix of 25% fully decomposed compost and 75% existing site soil cleaned free of weeds and rocks.
23. Trees and palms shall be watered to eliminate air pockets in the backfill mix prior to mulching.
24. A 4" soil berm shall be created around the edge of the planting hole to hold water, or as per the Landscape Architect's Planting Details.
25. Install tree and palm bracing as per the Landscape Architect's Planting Details, to ensure stability of trees and palms.
26. After transplanting trees and palms, the Landscape Contractor shall be responsible for watering to maintain soil moisture during the guarantee period. The following schedule is suggested: First month - Daily; Second month - 3 times per week; Third and Fourth month - 2 times per week; Last Eight months - 1 time per week. For trees over 4" in caliper at the time of planting, the suggested schedule is: First 6 weeks - Daily; from 1.5 months to 6 months - 3 times per week, last 6 months - 1 time per week.

Notes - Tree and Palm Protection

1. Fences shall be erected to protect trees and palms to be preserved. Fences define a specific protection zone for each tree or group of trees. Fences shall be installed prior to the beginning of construction and are to remain until all site work has been completed. Fences may not be relocated or removed without the written permission of the Arborist. Refer to the Landscape Architect's Tree Protection Detail.
2. Construction trailers, traffic, and storage areas must remain outside fenced areas at all times.
3. All underground utilities and drain or irrigation lines shall be routed outside the tree protection zone. If lines must traverse the protection area, disturbance shall be minimized by using techniques such as tunneling or boring.
4. No materials, equipment, spoil, or waste or washout water may be deposited, stored, or parked within the tree protection zone.
5. Additional tree pruning required for clearance during construction must be approved by the Certified Arborist and shall be performed by trained arborists, not by construction personnel.
6. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Landscape Contractor and the Certified Arborist should be notified immediately.
7. Any grading, construction, demolition, or other work that is expected to encounter tree roots must be monitored by the Landscape Contractor.
8. All trees shall be irrigated at least two times a week. Each irrigation session shall wet the soil within the tree protection zone to a depth of 30 inches.
9. Before grading, pad preparation, or excavation for foundations, footings, walls, or trenching near trees the trees shall be root pruned at the edge of the tree protection zone by cutting all roots cleanly to a depth of 36 inches. Roots shall be cut manually by digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root-pruning equipment.
10. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.
11. Spoil from trenches, basements, or other excavations shall not be placed within the tree protection zone, either temporarily or permanently.
12. No burn piles or debris pits shall be placed within the tree protection zone. No ashes, debris, or garbage may be dumped or buried within the tree protection zone.
13. Maintain fire-safe areas around the fences. Also, no heat sources, flames, ignition sources, or smoking is allowed near mulch or trees.
14. Protective barriers shall be placed around each tree, cluster of trees, or the edge of the preservation area at the specified distance. Protective barriers shall be a minimum of four feet above ground level and shall be constructed of wood, plastic, or metal, and shall remain in place until development is completed. Protective barriers shall be in place prior to the start of any construction.
15. Understory plants within protective barriers shall be protected.
16. No excess oil, fill, equipment, building materials or building debris shall be placed within the areas surrounded by protective barriers, nor shall there be disposal of any waste material such as paints, oils, solvents, asphalt, concrete, mortar or any other material harmful to trees or understory plants within the areas surrounded by protective barriers.
17. Trees shall not be braced in such a fashion as to scar, penetrate, perforate or otherwise inflict damage to the tree.
18. Natural grade shall be maintained within protective barriers. In the event that the natural grade of the site is changed as a result of site development such that the safety of the tree may be endangered, tree wells or retaining walls are required.
19. Fences and walls shall be constructed to avoid disturbance to any protected tree. Post holes and trenches located close to trees shall be dug by hand and adjusted as necessary, using techniques such as discontinuous footings, to avoid damage to major roots.

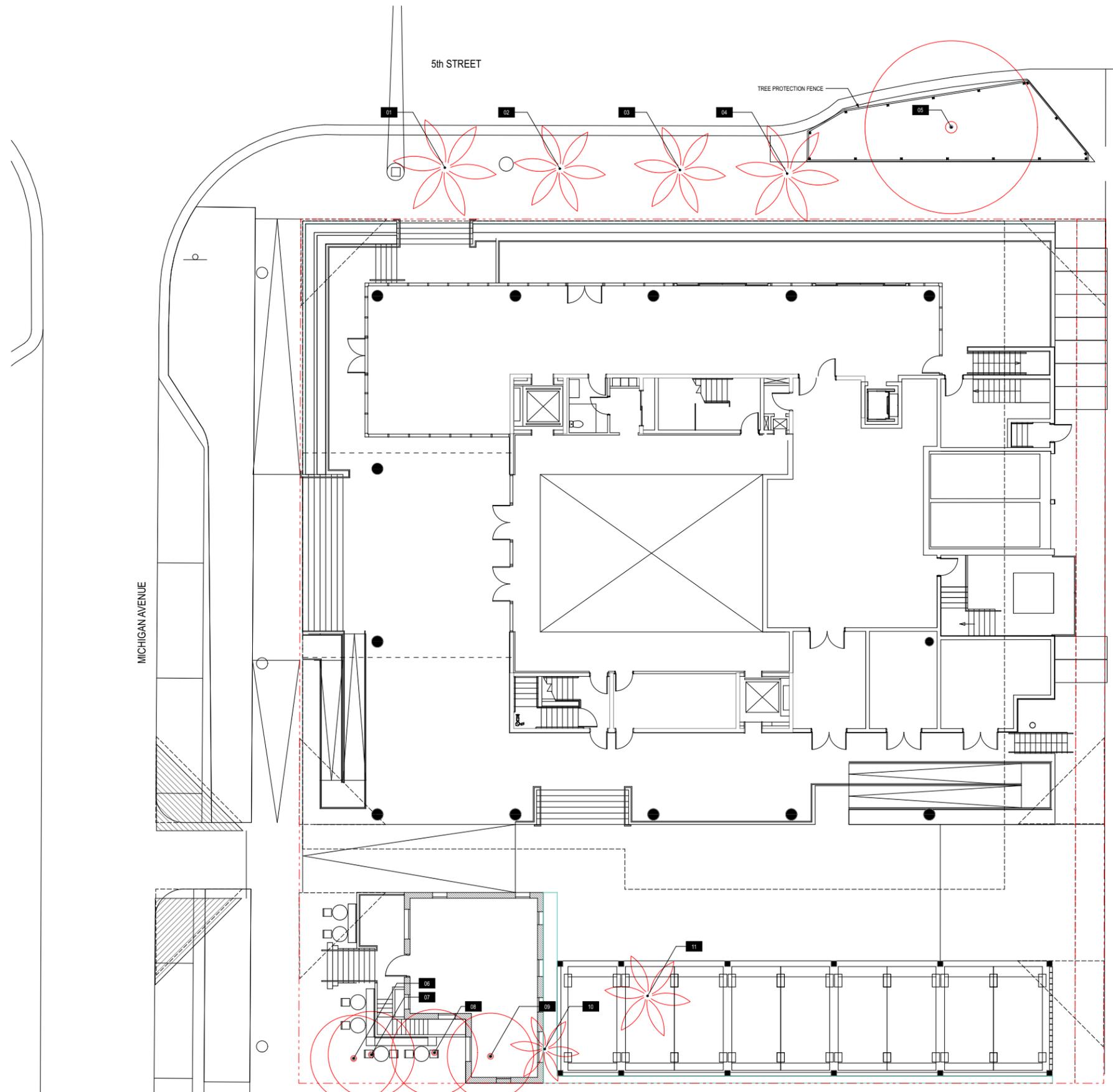
Note: Trees inherently pose a certain degree of hazard and risk from breakage, failure or other causes and conditions. Recommendations that are made are intended to minimize or reduce such hazardous conditions. However, there can be no guarantee or warranty that efforts to discover or correct unsafe conditions will prevent future breakage or failure, nor can there be any guarantee that all hazardous conditions have been detected. The client should not infer that a tree is safe either because services have been recommended or done to reduce risk, or because no services have been recommended or done on a specific tree. The client assumes any and all risks associated with pursuing consultant's advice and fully understands that he or she is engaged in securing professional consultation regarding the above-mentioned property.

LEGEND

EXISTING TREE TO REMOVE 

NOTE
REFER TO DISPOSITION FULL SCHEDULE ON SHEET L1.5

DISPOSITION SCHEDULE						
ID	Symbol	Botanical Name	Common Name	DBH	Height	Spread
01		Roystonea regia	Royal Palm	16.5"	40'	18'
02		Roystonea regia	Royal Palm	14"	35'	16'
03		Roystonea regia	Royal Palm	17"	35'	16'
04		Roystonea regia	Royal Palm	16"	33'	18'
05		Conocarpus erectus	Green Buttonwood	48"	28'	40'
06		Schinus terebinthifolius	Brazilian Pepper	16"	35'	25'
07		Swietenia mahagoni	Mahogany	9.5"	35'	12'
08		Swietenia mahagoni	Mahogany	10.5"	18'	8'
09		Swietenia mahagoni	Mahogany	14.5"	40'	15'
10		Sabal palmetto	Sabal Palm	13"	30'	12'
11		Wodyetia bifurcata	Foxtail Palm	8.5"	20'	15'



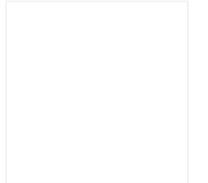
411 Michigan Avenue
Miami Beach, Florida

Tree Disposition Plan
Scale: 1" = 20'-0"

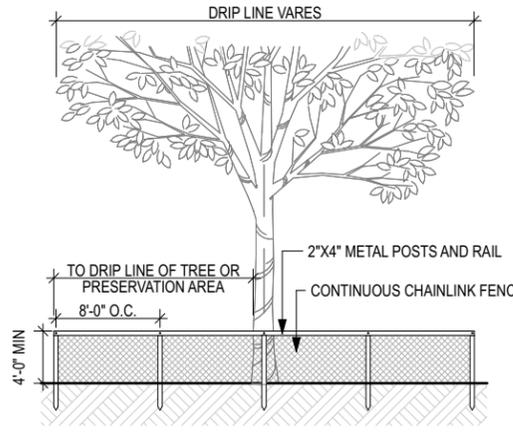


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L1.4



DISPOSITION SCHEDULE												
ID	Symbol	Botanical Name	Common Name	DBH	Height	Spread	Native	Condition	Protect	Remove	Relocate	Reason for Removal
01		Roystonea regia	Royal Palm	16.5"	40'	18'	Y	FAIR; FDOT ROW		X		
02		Roystonea regia	Royal Palm	14"	35'	16'	Y	FAIR; FDOT ROW		X		
03		Roystonea regia	Royal Palm	17"	35'	16'	Y	FAIR; FDOT ROW		X		
04		Roystonea regia	Royal Palm	16"	33'	18'	Y	FAIR; FDOT ROW		X		
05		Conocarpus erectus	Green Buttonwood	48"	28'	40'	Y	POOR; FDOT ROW		X		
06		Schinus terebinthifolius	Brazilian Pepper	16"	35'	25'	N	GOOD		X		INVASIVE
07		Swietenia mahagoni	Mahogany	9.5"	35'	12'	Y	FAIR		X		
08		Swietenia mahagoni	Mahogany	10.5"	18'	8'	Y	POOR		X		
09		Swietenia mahagoni	Mahogany	14.5"	40'	15'	Y	POOR		X		
10		Sabal palmetto	Sabal Palm	13"	30'	12'	Y	GOOD		X		
11		Wodyetia bifurcata	Foxtail Palm	8.5"	20'	15'	N	POOR		X		



NOTES:

- Protective barriers shall be placed at the drip line of each tree, cluster of trees, or preservation area, and in no case less than ten feet from the trunk of any protected tree, tree cluster or preservation area.
- In situations where trees have been transplanted to the project site, the protective fencing shall be placed no closer to the tree than a point one to two feet outside the root ball, or at the drip line, whichever is greater.
- Fenced tree protection zones shall be extended where necessary to protect tree canopies roots.
- If trees are to be preserved in place and root pruning is required to accommodate new construction, the root pruning locations shall be identified and approved by the environment and sustainability department, and fencing shall be installed one to two feet beyond the edge of the root ball. The installation of the fencing shall be coordinated with any phased root pruning.
- All protective barriers shall be installed prior to the start of any construction or site development, including tree removal, demolition or land-clearing activities, and shall remain in place throughout all phases of construction. Protective barriers shall be maintained in place until development is completed and shall not be removed until the environment and sustainability department inspects the site and authorizes their removal.
- Understory plants within areas surrounded by protective barriers shall be protected.
- No disposal of any waste material such as paints, oils, solvents, asphalt, concrete, mortar, or any other material shall occur within the areas surrounded by protective barriers.
- Natural grade shall be maintained on areas surrounded by protective barriers. In the event that the natural grade of the site is changed as a result of site development such that the safety of the tree may be endangered, tree wells or retaining walls are required.
- Only hand digging and grading activities will be permitted within the tree protection zone. All surrounding areas must be graded to a point that meets the outside of the tree protection zone.
- Underground utility lines, including, but not limited to, irrigation, plumbing, electrical, or telecommunication lines, shall be placed outside the areas enclosed by protective barriers. If such placement is not possible, disturbance and root damage shall be minimized by using techniques such as tunneling, hand digging, excavation with an air spade, or the use of overhead utility lines.
- No vehicles or equipment shall be permitted within areas surrounded by protective barriers.
- The cutting of roots with a diameter of two inches or larger is prohibited, unless there is no feasible alternative, as determined by the environment and sustainability director.
- Trees shall be evaluated by the environment and sustainability director to determine whether the root cutting will destabilize the tree or cause unacceptable damage to the tree.
- Root cuts shall be made, at minimum, a distance from the trunk equivalent to three times the tree's trunk diameter at four and one-half feet above ground unless unavoidable because of sidewalks, pavement, or other infrastructure. Root cuts must be made at a distance from the trunk equivalent to five times the tree's DBH or greater in all other circumstances.

2 Tree Protection Detail
NOT TO SCALE

TOTAL TREES AND PALMS TO BE REMOVED
TREES 109" DBH
PALMS 6
SEC. 46-61. - TREE REPLACEMENT
SMALL TREES: minimum of 2" DBH x 6' spread in canopy x 12' in height LARGE TREES: minimum of 4" DBH x 8' spread in canopy x 16' in height PALMS: minimum 12 feet overall height with a two-inch DBH

PROPOSED TREES — SEE PLANTING PLANS
STREET TREES SMALL TREES: 19 19 Silver Buttonwoods*
GROUND FLOOR SMALL TREES: 7 4 Simpson's stoppers*, 2 Silver Buttonwoods*, 1 White Tabebuia* LARGE TREES: 5 2 Gumbo Limbo*, 3 Satin Leaf*
UPPER STRUCTURE SMALL TREES: 3 2 Simpson's Stoppers*, 1 Olive Tree LARGE TREES: 1 1 Water Chestnut
TOTAL PROPOSED 29 SMALL TREES + 6 LARGE TREES *Native trees

REQUIRED MITIGATION
MITIGATION FOR REMOVED TREES: 40 SMALL TREES OR 20 LARGE TREES
TOTAL PROPOSED: 29 SMALL TREES + 6 LARGE TREES
SHORTFALL: 0 SMALL TREES OR 0 LARGE TREES

LANDSCAPE LEGEND

CITY OF MIAMI BEACH

LANDSCAPE LEGEND

INFORMATION REQUIRED TO BE PERMANENTLY AFFIXED TO PLANS

Zoning District C-PS2 Lot Area 21,000 Acres 0.48

OPEN SPACE

A. Square feet of required Open Space as indicated on site plan:

Lot Area = 21,000 s.f. x _____ % = _____ s.f.

B. Square feet of parking lot open space required as indicated on site plan:

Number of parking spaces _____ x 10 s.f. parking space = _____

C. Total square feet of landscaped open space required: A+B= _____

LAWN AREA CALCULATION

A. Square feet of landscaped open space required

B. Maximum lawn area (sod) permitted= 20 % x 21,000 s.f.

REQUIRED/
ALLOWED PROVIDED

4,200 0

TREES

A. Number of trees required per lot or net lot acre, less existing number of trees meeting minimum requirements=

0.48 trees x 22 net lot acres - number of existing trees=

10 11

B. % Natives required: Number of trees provided x 30% =

4 10

C. % Low maintenance / drought and salt tolerant required:

Number of trees provided x 50%=

6 11

D. Street Trees (maximum average spacing of 20' o.c.)

0.48 linear feet along street divided by 20'=

E. Street tree species allowed directly beneath power lines:

(maximum average spacing of 20' o.c.):

150'/20 + 140'/20 linear feet along street divided by 20'=

15 (8 + 7) 19

SHRUBS

A. Number of shrubs required: Sum of lot and street trees required x 12=

300 199

B. % Native shrubs required: Number of shrubs provided x 50%=

113 196

LARGE SHRUBS OR SMALL TREES

A. Number of large shrubs or small trees required: Number of required shrubs x 10%=

30 25

B. % Native large shrubs or small trees required: Number of large shrubs or small trees provided x 50%=

15 22

NOTE:

4 Additional trees on structure (1 Pachira aquatica, 2 Simpson's Stoppers, 1 Olive Tree)

1776 Additional shrubs on Roof (1776 Clusia Nana)

33 Additional large shrubs on Roof (33 Bougainvillea)

Ground Level Tree Schedule

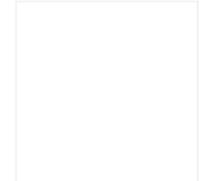
Symbol	ID	Qty	Botanical Name	Common Name	Cal	Height	Spread	Native	Remarks
	BS	2	Bursera Simaruba	Gumbo Limbo	4" min	16' min	10'	Y	Florida Fancy; 5'CT, Peeling Trunk. Lot Tree
	CE	7	Conocarpus erectus	Green Buttonwood	3" min	18' min	10'	Y	6' CT, FL#1, Single Leader. Street Trees
	CES	2	Conocarpus erectus 'Sericeus'	Silver Buttonwood		16' min	10'	Y	4' CT, Florida Fancy, Multi-stemmed; Lot Tree
	CES	8	Conocarpus erectus 'Sericeus'	Silver Buttonwood	3" min	16' min	10'	Y	4' CT, Florida Fancy, Single Leader. Street Trees
	CO	2	Chrysophyllum oliviforme	Satin Leaf	6"	16' min	20'	Y	5' CT, Florida Fancy, Single Leader, Lot Tree
	MF	4	Myrcianthes fragrans	Simpson's Stopper	N/A	12' min	8'	Y	5' CT, Florida Fancy, Multi-stemmed; Lot Trees
	TB	1	Tabebuia bahamensis	White Tabebuia		10' min	10'	Y	4' CT; Florida Fancy; Multi-stemmed; specimen

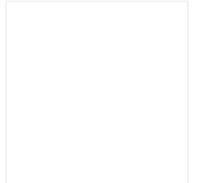
Ground Level Shrub Schedule

Symbol	ID	Qty	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Remarks
	Ae	10	Ardisia escallonioides	Marlberry	3 gal	2'	2'	See Plan	Y	Shrub
	Cc	7	Capparis cynophallophora	Jamaica caper	15 gal	4'	4'	See Plan	Y	Large Shrub
	lv	30	Ilex vomitoria 'nana'	Dwarf Yaupon Holly	7 gal	2'	2'	30" OC	Y	Shrub
	Pnp	8	Psychodria nervosa "Little Psycho"	Dwarf Wild Coffee	3 gal	24"	24"	24"	Y	Shrub

Ground Level Groundcover & Vine Schedule

Symbol	ID	QTY	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Area (sf)	Remarks
	BA	3	Bougainvillea arborea	Vine Bougainvillea		8'-10'			N	0	Purple, Trained to Wood Trellis
	ag	5361	Arachis glabrata	Golden Ornamental Peanut	1 gal			10"	N	1,891	Sidewalk improvements
	tj	60	Trachelospermum jasminoides	Confederate Jasmine	3 gal			5'	Y	311	Twining Vine
	wa	227	Wrightia antidysenterica	Asian Snow	3 gal			10"	N	43	Lower Terrace





411 Michigan Avenue
Miami Beach, Florida

Mezzanine & Parking Roof
Planting Plan

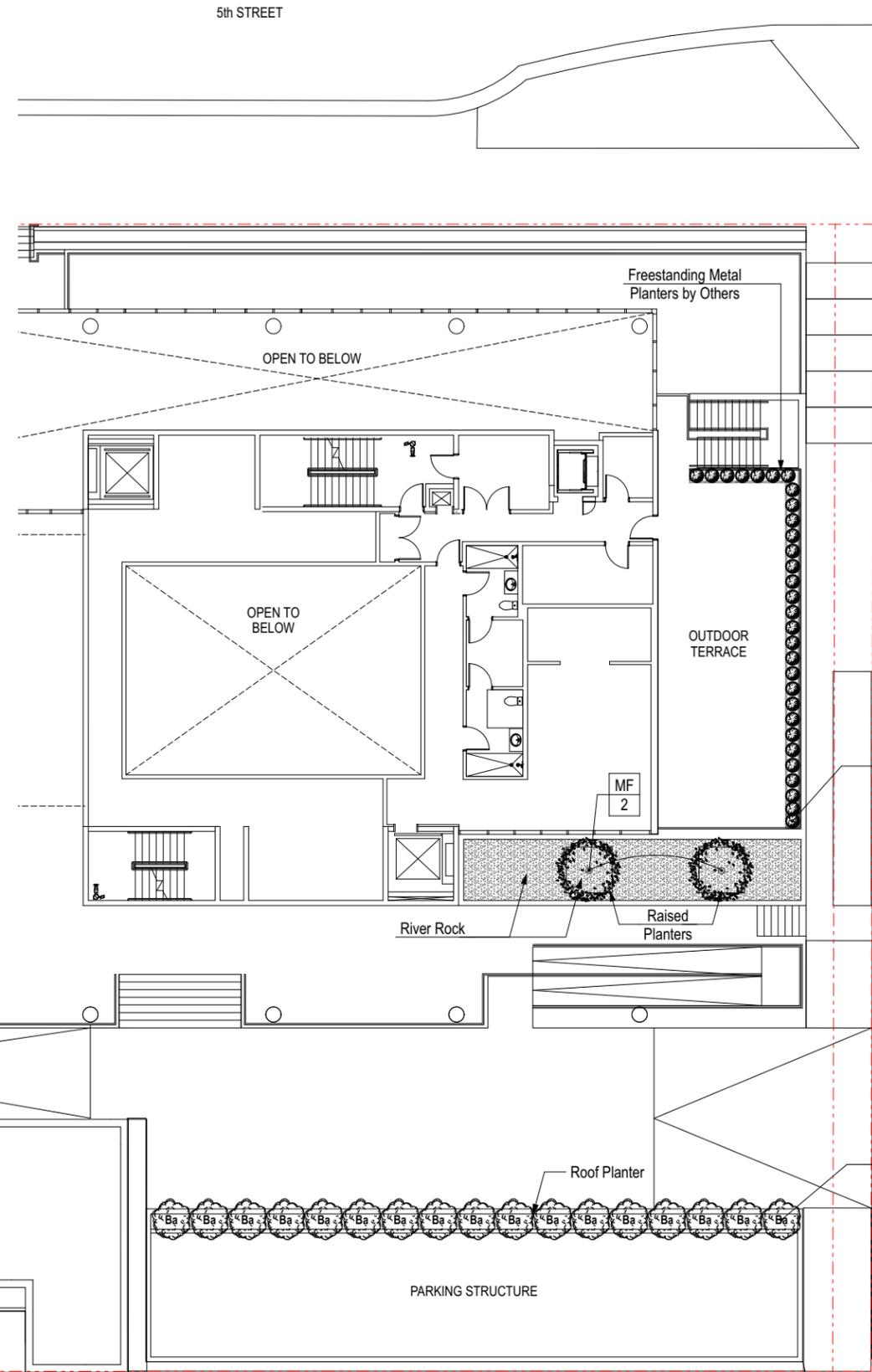
Scale: 1" = 20'-0"



Mezzanine Tree Schedule									
Symbol	ID	Qty	Botanical Name	Common Name	Cal	Height	Spread	Native	Remarks
	MF	2	Myrcianthes fragrans	Simpson's Stopper	N/A	6' min	6'	Y	5' CT, Florida Fancy, Multi-stemmed; Lot Trees

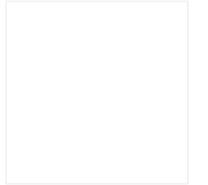
Mezzanine Shrub Schedule										
Symbol	ID	Qty	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Remarks
	Ba	17	Bougainvillea arborea	Vine Bougainvillea	25gal	8'-10'	3'		N	Purple, Trained to Wood Trellis

Mezzanine Groundcover & Vine Schedule											
Symbol	ID	QTY	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Area (sf)	Remarks
	pm	30	Podocarpus macrophyllus 'Pringles'	Dwarf Podocarpus - 'Pringles'	3gal			24"	N	0	Hedge in Freestanding Planters



MEZZANINE PLANTING PLAN
SCALE: 1" = 20'





411 Michigan Avenue
 Miami Beach, Florida

Atrium Planting Plan
 Scale: 1" = 20'-0"

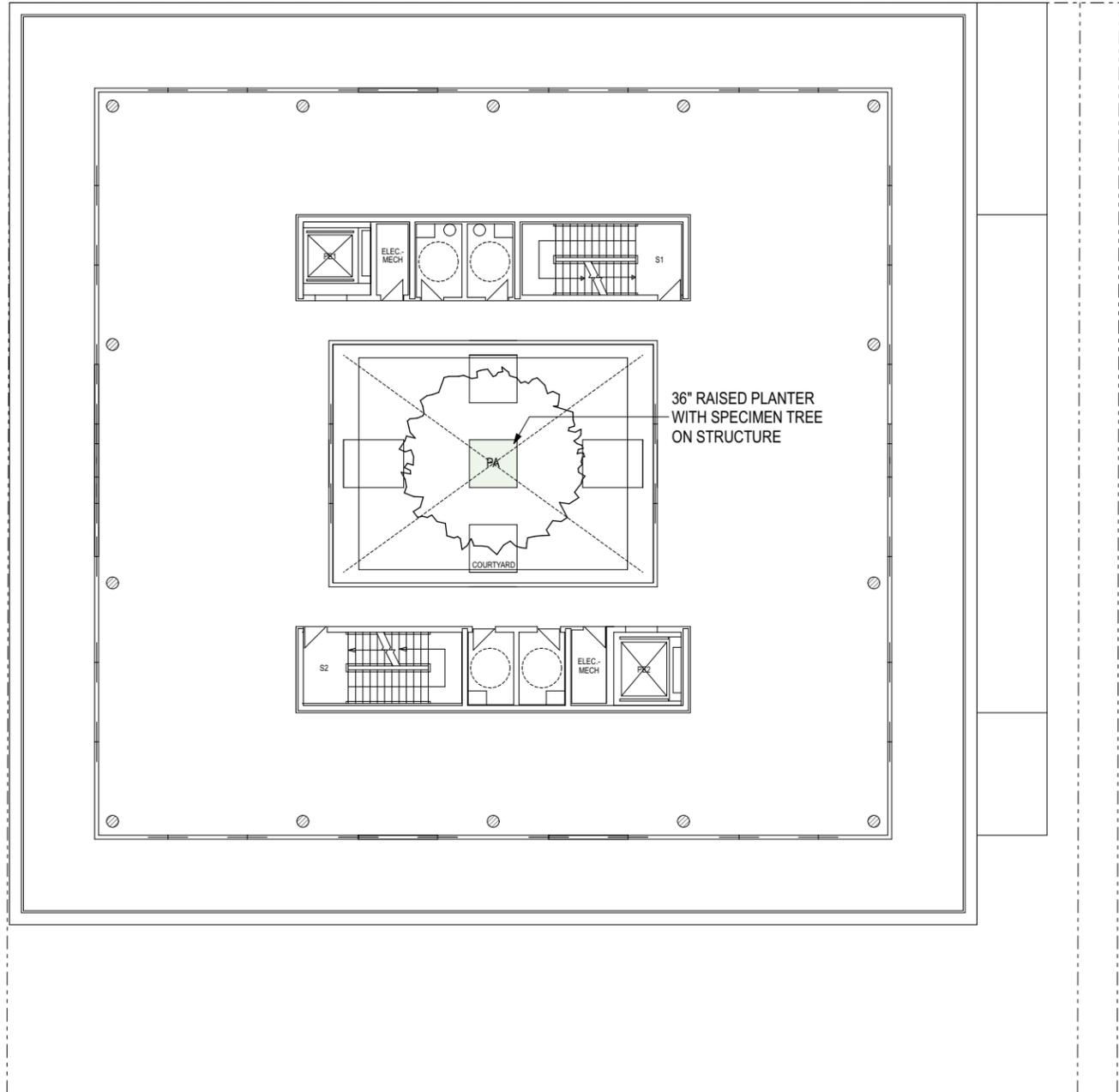


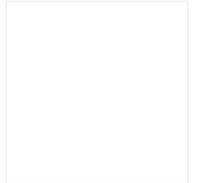
HPB FINAL SUBMITTAL
 07 FEBRUARY 2022

L1.9

FIFTH STREET

Atrium Tree Schedule									
Symbol	ID	Qty	Botanical Name	Common Name	Cal	Height	Spread	Native	Remarks
	PA	1	Pachira aquatica	Water Chestnut	6"	18'	10'	N	Collected specimen





411 Michigan Avenue
Miami Beach, Florida

Roof Planting Plan
Scale: 1" = 20'-0"



HPB FINAL SUBMITTAL
07 FEBRUARY 2022

L1.10

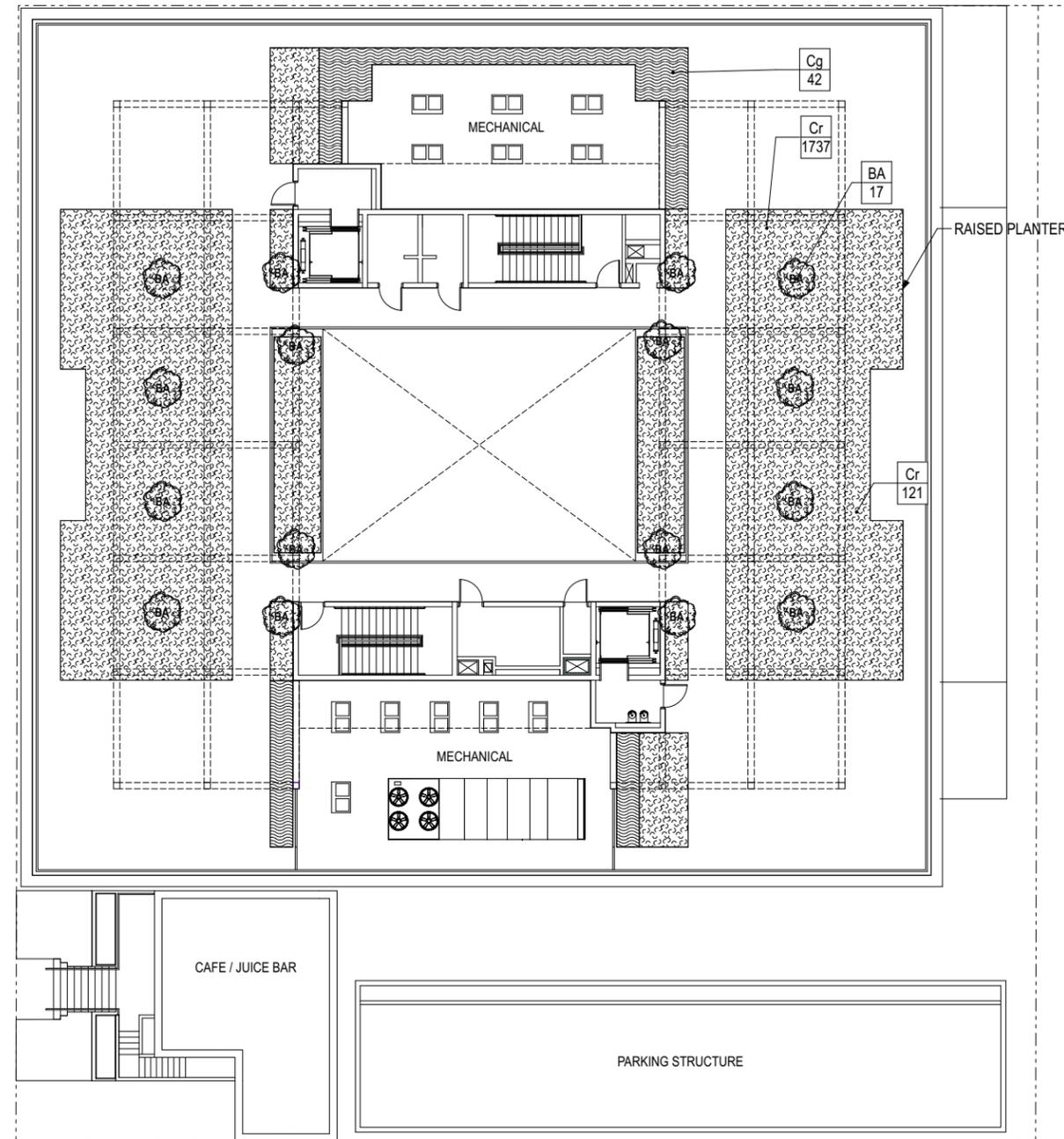
5th STREET

Roof Tree Schedule										
Symbol	ID	Qty	Botanical Name	Common Name	Cal	Height	Spread	Native	Remarks	
	BA	16	Bougainvillea arborea	Tree Bougainvillea		12'-14'		N	FL #1, Purple	

Roof Shrub Schedule										
Symbol	ID	Qty	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Remarks
	Cg	42	Clusia guttifera	Small Leaf Clusia	15g	5'	5'	3'	N	FL #1

Roof Groundcover Schedule											
Symbol	ID	QTY	Botanical Name	Common Name	Size	Height	Spread	Spacing	Native	Area (sf)	Remarks
	Cr	1,737	Clusia rosea 'nana'	Dwarf Pitch Apple	3g	18"	12"	18"	N	3,393	FL #1

MICHIGAN AVENUE



ALLEY



PLANTING SPECIFICATIONS

- The Contractor is responsible for maintaining, all planting areas (including watering, spraying, mulching, mowing, fertilizing, etc.) until the job is accepted, in full, by the Owner and/or Landscape Architect.
- All root balls shall conform to the size standards set forth in "American Standards for Nursery Stock".
- All plant material shall be protected during transport and delivery to final location with shade cloth or other acceptable means of windburn prevention.
- All trees must be guyed or staked as shown in the details.
- Installation- All plant material shall be installed in a sound, workman- like manner and according to accepted good planting and tree relocation procedures with the quality of plant materials as hereinafter described. All elements of landscaping shall be installed so as to meet all applicable ordinances and code requirements.
- There shall be no chains or cables used on trees or palms. Handle with two inch (2") minimum width nylon straps or equal.
- Contractor shall assure drainage and percolation of all planting pits prior to installation of plant material. Contractor shall fill all tree pits with water before planting to assure that proper drainage and percolation is available. Correct if required to assure percolation. Contractor is responsible for replacement of all plants lost due to inadequate drain- age conditions.
- Contractor to request final acceptance of project in writing. If all work is satisfactory and complete in accordance with conditions of contract documents, then the Owner and the Landscape Architect shall declare the project substantially complete.
- Contractor to replace rejected plant material within one (1) week of written notice.
- Contractor shall mulch all plant material throughout and completely to a three inch (3") depth of loose, weed free, sterilized Melaleuca mulch.
- Plant Material which is not installed at the direction of the landscape architect or owner will become the property of the contractor unless it becomes relocated on site. The Contractor shall provide the owner a credit for any plant material not installed on the site.

SOIL PREPARATION AND SOIL MIX

1. All shrub beds shall be provided with a minimum 30" depth of approved planting soil if existing soil is not acceptable to the Landscape Architect. Shrub beds shall be excavated to 30" depth and soil replaced as specified. Acceptable soil composition shall be 70% sand, 30% organic content with an overall pH range between 6.5 and 7.5.

2. Apply Roundup (manufactured by Monsanto Corp. or equal.) according to manufacturer's rate and specification within limits of all areas to be planted. Protect existing plants to remain from overspray or spray within root zone. Contractor to ensure total weed eradication from all areas to be planted.

3. Before replacing topsoil, rake subsoil surface clear of stones (1" diameter and larger), debris, rubbish, and remaining roots from removed plant material.

4. Scarify subsoil to a depth of six inches (6").

5. Contractor to apply "Surflan" or equal, or approved pre-emergent herbicide in accordance with manufacturer's rate and specifications.

Planting Soil Mixtures:

All plant material on grade with the exception of palms and beach material, shall be planted with the following soil mix:

Planting Soil Mixture A:

- Weed free soil and consist of
70% clean silica sand,
30% everglades muck, and
- There must be a slight acidic reaction to the soil with no excess calcium or carbonate.
- Soil shall be delivered in a loose friable condition.

All palms + beach material on grade shall be planted with the following:

Planting Soil Mixture B:

- 80% clean silica sand
- 20% everglades muck

All elevated planting areas on structure shall be planted with the following unless otherwise approved by L.A

Planting Soil Mixture C:

Mix specifically designed to meet project requirements based on climatic region and plant requirements.

- Coarse Stalite, 3/8" Expanded Slate 50%
- Fine Stalite Expanded Slate 10%
- USGA Root Zone Sand 25%
- Approved Compost 15%

7. Topsoil shall be natural, fertile, agricultural soil capable of sustaining vigorous plant growth. It shall be of uniform composition throughout, with admixture of subsoil. It shall be free of stones, lumps, live plants an their roots, sticks, and other extraneous matter. Spread topsoil mixture to minimum depth of three inches (3") throughout all lawn areas ..

8. Remove all rocks and other objects over one inches (1") in diameter.

9. Smooth all soil mixture to five inches (5") below top of surrounding pavement edges. This allows room for 3" of mulch and 2" clear space below top of pavement.

10. Smooth topsoil mixture to two inches (2") below finish grade in areas to be sodded.

11. Topsoil shall not be extremely acid or alkaline, nor contain toxic substances which may be harmful to plant growth. The topsoil pH shall be in the range of pH 6.5 to 7.5. If necessary, the Contractor shall apply the appropriate soil amendments adjusting soil pH to assure a pH range of 6.5 to 7.5.

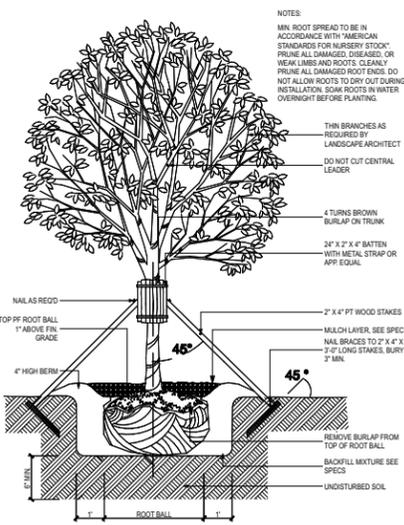
12. Finish grade all topsoil areas to a smooth, even surface, assuring positive drainage away from the structures and eliminate any low areas which may collect water.

13. Contractor shall assure percolation and drainage of all planting pits prior to planting. Contractor will be responsible for all plants lost due to the lack of percolation.

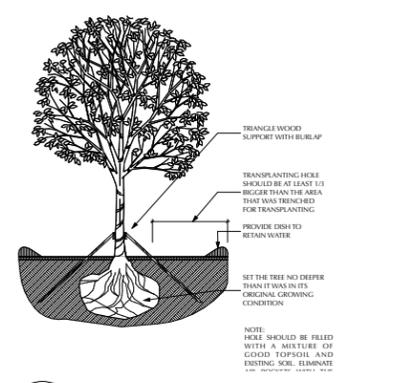
14. Contractor to remove debris and excess material daily from job site. Contractor shall remove all staking of trees and palms after twelve (12) months of substantial completion.

MULCH

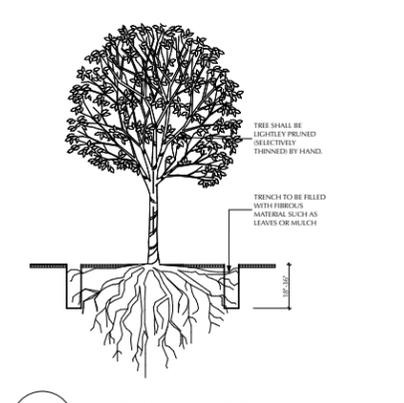
- Mulch shall be shredded Florimulch (100% Melaleuca mulch). Planting areas not covered by lawn grass/sod shall be mulched to a minimum depth of 3", in order to present a finished appearance.
- Any other mulch must be submitted to and approved.



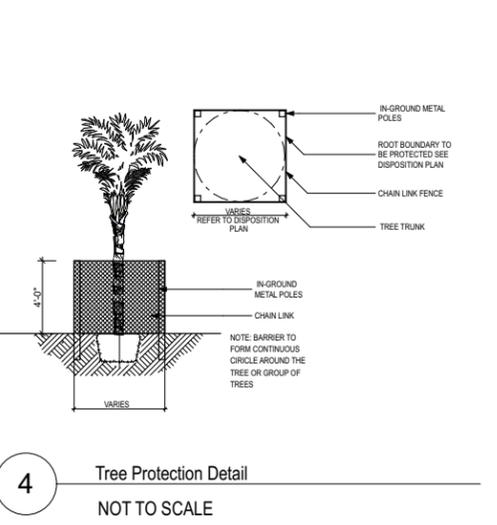
1 LARGE TREE STAKE DETAIL
NOT TO SCALE



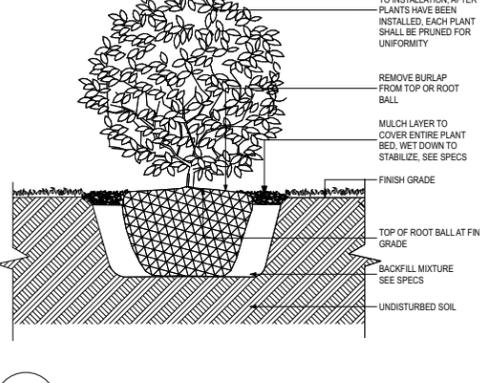
2 TREE TRANSPLANTING DETAIL
NOT TO SCALE



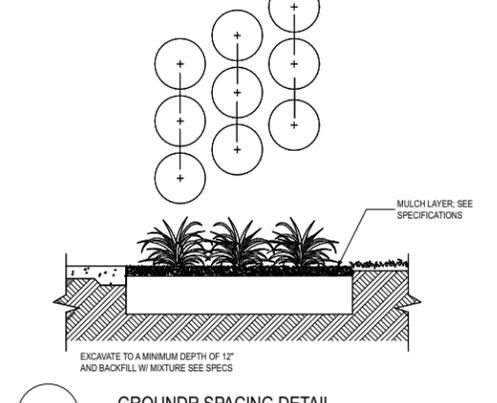
3 ROOT PRUNING DETAIL
NOT TO SCALE



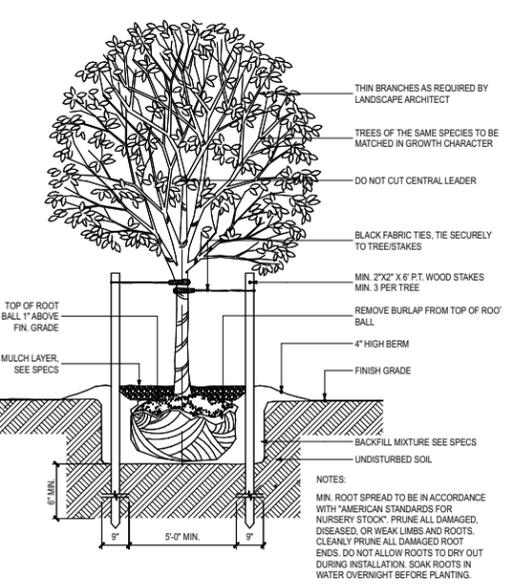
4 Tree Protection Detail
NOT TO SCALE



5 SHRUB DETAIL
NOT TO SCALE



6 GROUND SPACING DETAIL
NOT TO SCALE



7 SMALL TREE GUYING DETAIL
NOT TO SCALE



8 TREE TRANSPLANTING DETAIL
NOT TO SCALE