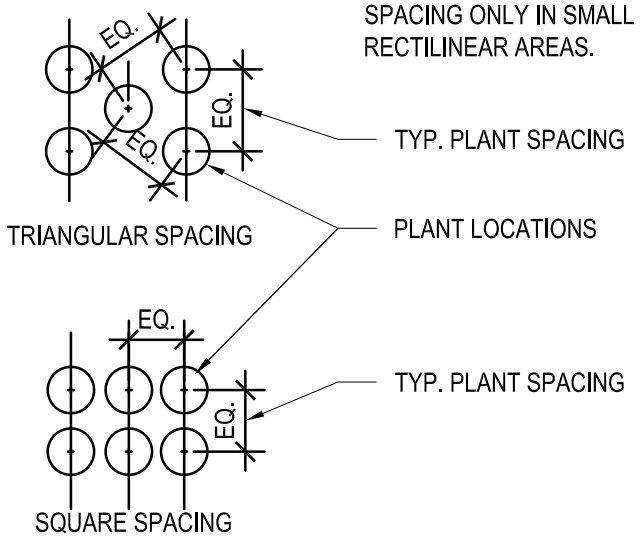
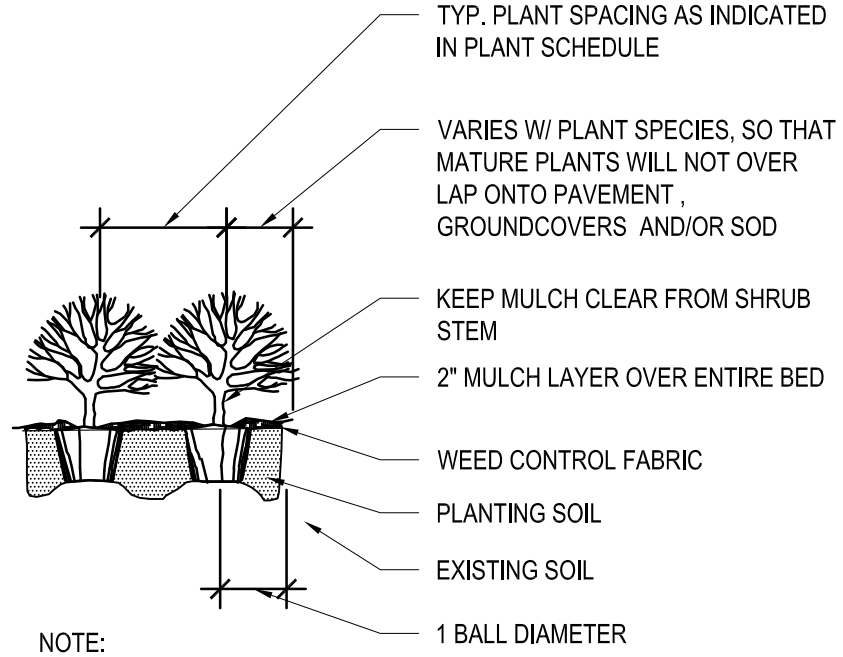


NOTE:
THE TRIANGLE METHOD IS PREFERRED. USE SQUARE SPACING ONLY IN SMALL RECTILINEAR AREAS.

SHRUB AND GROUNDCOVER SPACING

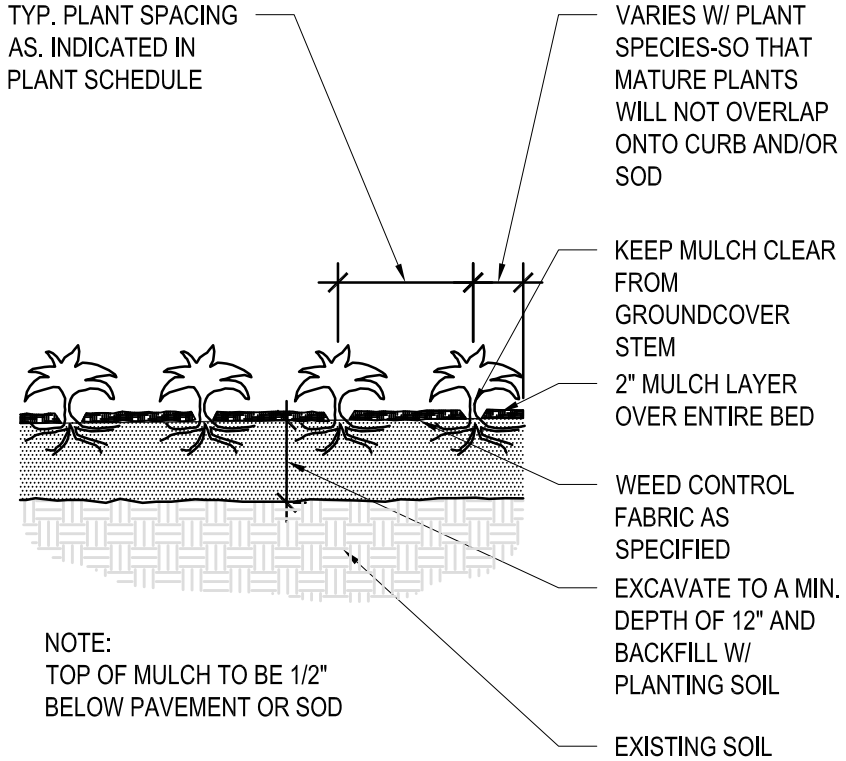
Scale: 1/4"=1'-0"



NOTE:
TOP OF MULCH TO BE 1/2" BELOW PAVEMENT OR SOD

SHRUB PLANTING DETAIL

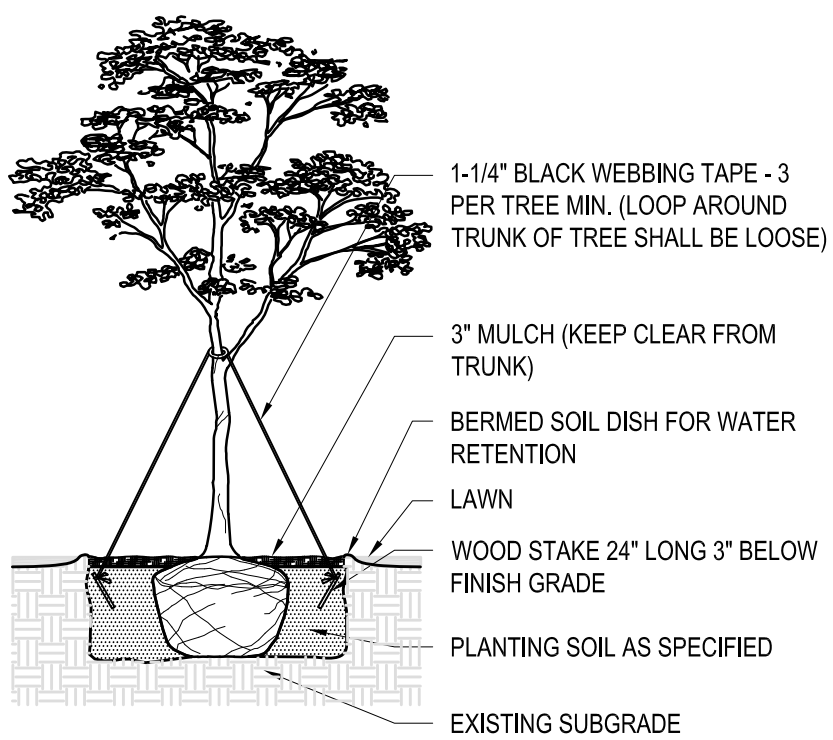
Scale: 1/4"=1'-0"



NOTE:
TOP OF MULCH TO BE 1/2" BELOW PAVEMENT OR SOD

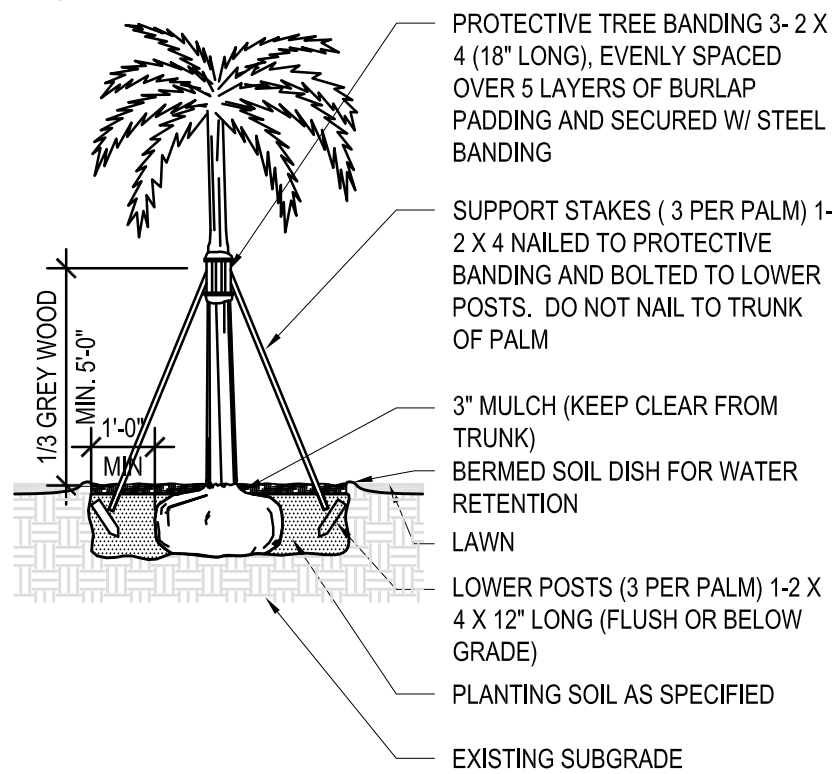
GROUNDCOVER PLANTING DETAIL

Scale: 1/4"=1'-0"



MEDIUM TREE PLANTING DETAIL

Scale: 1/4"=1'-0"



PALM PLANTING DTL - LAWN AREA

Scale: 1/4"=1'-0"

Esperanza Kelly
Florida Landscape Architect
LA6667109

PLOT STUDIO
South Miami, FL 33143
LC26000540

5011 PINE TREE DRIVE
Miami Beach, Florida

PLANTING DETAILS

No.	Description	Date		
			Project number	200004
			Date	05-11-2020
			Drawn by	EK
			Checked by	EK

A.9003

LANDSCAPE SPECIFICATIONS

1.00 GENERAL

1.01 The Contractor is reminded that the General Conditions and / or Special Conditions of this contract govern the work of this section of the Specifications whether attached hereto or not. Subcontractors undertaking to perform work under this Section shall be made fully aware of these documents and of their responsibilities and obligations thereunder. In the event of any discrepancies between the drawings and specifications and the following 'Scope of Work', the latter shall prevail.

2.00 SCOPE OF WORK

2.01 The work of this Section shall include all labor, materials, equipment, appliances, and accessories necessary for the complete performance of all excavation, grading, planting and backfill work in accordance with these Specifications and the Contract Drawing. Without restricting the generality of the foregoing, the items listed below, and similar items shown on the Contract Drawings shall constitute the work of this Section:

A. Finish grading and final site preparation of all areas to be landscaped.

B. Furnishing and incorporating fertilizer and other soil amendments.

C. Furnishing plant materials and grass materials and installing same.

D. Furnishing and placing 'Planting Mixture' and other miscellaneous items to complete the work.

E. Replacement of unsatisfactory plant material.

F. Clean-up.

3.00 SITE PREPARATION and SITE SITEWARDSHIP FOR SUSTAINABLE SITES

3.01 The Contractor shall provide finish grading and final preparation of all areas to be landscaped to within 6" of finish grade. This will require raking and pulverizing of all areas in order to crumble dirt, clogs and / or debris. The Landscape Contractor shall be responsible for finish grading, which is the top 6" of the site.

3.02 The Contractor must perform the following preventative measures for erosion controls during construction:

- Stockpile and Protect disturbed Topsoil from erosion.
- Control the path and velocity of runoff with silt fencing or equivalent.
- Protect sewer inlets, streams, and lakes with straw bales or silt fencing.
- Provide swales to divert surface water from hillsides, use tiers, erosion blankets, compost blankets, etc. on sloped areas.

3.03 Contractor must minimize disturbed area of site where site is not previously developed by following tree / plant protection plan and enforcing 'No Disturbance Zones' quarantined by use of Construction tape or Fencing. When site is previously developed, Contractor must enforce Tree / Plant protection Plan and use Hay bales, silt fencing, etc. for erosion controls.

3.04 All Landscaping must be 24" from finish wall of structures for pest control measures.

4.00 MATERIALS

4.01 Plant materials shall be furnished by the Landscape Contractor and as indicated on the plans. All plant materials shall meet or exceed the following standards.

A. Plant species and sizes shall conform with plant list. Nomenclature shall conform to Standardized plant names, in accordance with the latest edition of the Florida Department of Agriculture's Grades and Standards for Nursery Plants.

B. All plants shall be nursery grown or as stipulated herein and shall comply with all required inspections, grading standards and plant regulations as set forth in the Florida Department of Agriculture 'Grades and Standards for Nursery Plants', including revisions. Ensure that plant materials are shipped with tags stating the botanical and common name of the plant.

C. The minimum grade for all trees, palms, shrubs, and groundcovers shall be Florida No. 1 and shall meet or exceed the size and quality standards of the American Association of Nursery Stock, sponsored by the American Association of Nurserymen, latest addition, unless otherwise indicated and all plants shall be sound, healthy and vigorous, well-branched and densely foliated when in leaf. They shall have healthy, well developed root systems and shall be free of disease and insect pests, eggs or larvae. Florida Fancy material shall be provided where plant list specifies 'specimen'.

D. The determining measurements for trees shall be the height and spread, and shall be measured from the top of the plant to the root crown, not to include the immediate terminal growth. Their width shall be measured across the normal spread of the branches. Both measurements shall be made with the plants in their normal position.

E. Plants larger in size than those specified may be used with approval of the Landscape Architect at no additional cost to the Owner. If the use of the larger plants is approved, the ball of earth or spread of roots shall be increased proportionately.

F. Container grown same quality as balled and burlapped plants may be substituted in lieu thereof. Plants grow in containers shall be delivered and remain in the containers in a shady location until planted. Plants in containers shall be watered prior to transportation and shall be kept moist until planted. The container must be removed prior to planting, with care as not to injure the roots.

G. Grass materials shall consist of the following:

1. Sod: Solid sod shall be as indicated on the drawings. Sod must be strongly rooted and free of pernicious weeds. Mow to a height not to exceed 1 1/2" before lifting. Lifts shall have a uniform thickness of 1 inch to 1 1/2 inches. Sod containing nutgrass, lippia water sedge, dollar weed, or other common turfweed species (if applicable), will not be accepted.

4.02 Materials used to install the job shall meet or exceed the following standards:

A. Planting mix to be used for 4" soil blankets and backfilling around trees shall be: 60%coarse sand / 40% Inland Glades Muck. 70% sand / 30% muck shall be used in planters or areas with poor drainage.

B. Fertilizers: Fertilizer shall be delivered mixed as specified in standard bags, sealed, and showing weight by analysis and name of manufacturer. Fertilizer shall be stored in weatherproof storage and in such a manner that its effectiveness will not be impaired.

C. Mulch: Mulch shall be shredded melaleuca, Grade B, clean, bright, and free of weeds, moss, sticks, and other debris.

D. Water: All water required for the execution of the work shall be supplied at the site by the Owner.

5.00 INSTALLATION

5.01 The Planting operations used to install the job shall meet or exceed the following standards:

A. Excavation of Plant Pits: Plant pit excavations shall be roughly cylindrical in shape, with their side approximately vertical. Pit shall be excavated so that bottom of pit is same depth as root ball. Plants shall be centered in the hole, with the trunk location as shown in the plans. Holes for balled and burlapped plants shall be large enough to allow 12" minimum(depending on root ball size) of back fill around the sides of the root ball, and 12" of back fill beneath the root ball. In all cases the diameter of the plant hole shall be twice the diameter of the root ball. Where excess material has been excavated from the plant hole, the excavated material may be used to backfill to the proper level. Mix existing excavated material in 50% / 50% ratio with new planting soil mix. The Contractor, in excavation for plantings shall take care not to damage underground utilities or other sub-surface obstructions, and shall be held liable for their repair, if damaged.

B. Setting Plants: All trees shall be set so, that when settled, the top of the root ball will be flush with the surrounding area of the finish grade or slightly above finish grade. Each plant shall be planted in planting soil mix in the center of the pit. Shrubs shall be set flush with the surrounding finish grade of the planting area. The back fill shall be made with prepared planting in mixture as specified herein and shall be firmly rodded and watered, so that no air-pockets remain. The quantity of water applied immediately upon planting shall be sufficient to thoroughly moisten all of the backfilled earth. Plants shall be kept in a moistened condition the duration of the planting.

C. Staking and Guying: All trees shall be staked or guyed as shown in the details and according to the following specifications.

1. Use wide plastic, rubber or other flexible strapping materials to support the tree to stakes or ground anchors that will give as the tree moves in any direction up to 30 degrees. Use strapping material 'Arbor Tie' by Deep Root (800) 458-7668 dark green color or approved equal. Do not use rope or wire through a hose. Use guy chords, hose or any other thin bracing or anchorage material which has a minimum 12" length of high visibility flagging tape secured to guys, midway between the tree and stakes for safety.
2. Stake trees as per details

D. Pruning: All broken or damaged roots or branches shall be cut smoothly, and the tops of all trees shall be pruned in a manner complying with standard horticultural practice. At the time pruning is completed, all remaining wood shall be alive.

E. Mulching: Within one week after planting, mulch material shall be uniformly applied to a minimum loose thickness of 3 inches, over the entire area of the backfilled hole or bed. The mulch shall be maintained continuously in place until the time of final inspection and must be a minimum of 3 inches thick to be accepted. Mulch shall not be placed against stems or trunks.

F. Fertilizing: Feeding of all trees and specimen shrubs shall be done with slow release, 'Woodace' Briquettes, 17 gram, tablet fertilizer, analysis 14-3-3, as per manufacturer's instructions. Fertilizing shall not occur until after flush of new growth.

G. Sodding installation:

1. Sodding shall be done as soon as practical following finish grading. Ground shall be covered with a 4" blanket of soil using specified 60/40 topsoil mixture where necessary to create a 4" soil blanket. The day before sod installation, the contractor shall rake 50# Milorganite per 1000 sf of area to receive sod. Ground shall be leveled with the back of a rake and sod laid with joints closely butted so that no voids are visible, keeping surface of sod flush with the adjoining seeded areas and or pavements. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Hand tamp to ensure contact with subgrade, and water thoroughly with a fine spray immediately after laying.
2. After sod is in place, it shall be top dressed with enough sharp, clean 60%sand/40% muck soil mix to fill all voids remaining and thoroughly watered to wash the top dressing into the sodded surface.
3. All sod areas shall then be rolled using a vibrating #1500 sod roller. The contractor shall apply a preemergent herbicide to all sodded areas.
4. It is the Landscape Contractor's responsibility to keep new sod properly watered until completion of the contract. All watering shall meet specifications according to 'Grades and Standards' Section 983.
5. Substitutions in plant species or size will be made only with prior written permission of the Landscape Architect.
6. If, in the opinion of the Landscape Architect, materials and /or work do not conform with the plans and specifications, it may be rejected and upon rejection, must be removed immediately from the site by the Contractor and replaced.
7. The Contractor shall be responsible for the certification and inspection of plant material that may be required by local, state, or federal authorities and shall bear the cost of the same, if any.

H. The landscape contractor shall be responsible for obtaining water and watering to maintain soil moisture during the guarantee period at a minimum of:

First month	Daily
Second month	3 times per week
Third-fourth month	2 times per week
Last eight months	1 time per week.

6.00 MAINTENANCE

6.01 Maintenance shall be as per Maintenance specifications.

7.00 GUARANTEE

7.01 The Landscape Contractor shall guarantee all new trees and relocated palms for one year and the shrubs, groundcovers and sod for 90 days. The Landscape Contractor shall replace at the direction of the Landscape Architect all trees, shrubs, or groundcovers deemed by the Landscape Architect to be unacceptable, due to death or damage; acts of God, Owner negligence and vandalism excepted.

7.02 New material used to replace material unacceptable to the Landscape Architect, shall be guaranteed for similar period from date of installation

8.00 FINAL INSPECTION AND ACCEPTANCE

8.01 The Landscape Contractor shall advise the Landscape Architect in writing at the end of the guarantee period that the project is ready for final inspection. Only upon notification to the Landscape Architect by the Landscape Contractor in writing and subsequent inspection attended by the Landscape Contractor shall the requirements of the guarantee be met.

9.00 CLEAN-UP

9.01 Upon completion of all work under this section, and intermittently as required, the Landscape Contractor shall clear the site of all debris, superfluous material and all equipment to the satisfaction of the Landscape Architect

9.02 End

Esperanza Kelly
Florida Landscape Architect
LA6667109

PLOT STUDIO
South Miami, FL 33143
LC26000540

5011 PINE TREE DRIVE
Miami Beach, Florida

LANDSCAPE SPECIFICATIONS

No.	Description	Date

Project number	200004
Date	05-11-2020
Drawn by	EK
Checked by	EK

A.9004

MAINTENANCE SPECIFICATIONS

1.00 GENERAL

1.01 The landscape design objectives are to provide a visually-pleasing and environmentally-sound landscape with a moderate level of maintenance needs.

1.02 The scope-of-work for landscape maintenance at this property is summarized

Irrigation System Checks and Repairs	1 per month
Mowing	38 cuts per year
	Summer 1 per week
	Winter 1 per 2 weeks
Edging and trimming	1 per month
Mulching	3 per year
Weeding	38 times per year
	Summer 1 per week
	Winter 1 per 2 weeks
Tree Pruning	once per 2 years
Palm Pruning	3 times per year
Fertilization	3 times per year
Pest scouting and treatment	1 per month

2.00 QUALITY ASSURANCE

2.01 Contractor shall be an individual or firm of established reputation, which is regularly engaged in, and which maintains a regular force of workers skilled in performing work as outlined in this document.

2.02 All Contractors shall be insured with Workers' Compensation Insurance as required by the State of Florida, General Liability Insurance with a minimum limit of $1,000,000 combined single limit per occurrence and proof of Comprehensive Automobile Liability Insurance.

2.03 All Contractors shall have any and all current licensing as required to perform the specified services in the municipality of which work is to be performed.

2.04 All Contractors shall visit the site and inspect the landscape prior to submitting a bid.

2.05 All Contractors shall comply with all sections of these specifications.

2.06 No work is to be subcontracted without the prior written consent of the Owner

2.07 All Contractors shall comply with all applicable local, state and federal health and safety requirements, including the latest revisions of Occupational and Safety and Health Administration (OSHA) standards, American National Standards Institute (ANSI) Z133.1-2000 (Tree Care Operations-Safety Requirements) and State of Florida Department of Transportation (FDOT vehicle safety and traffic control requirements).

2.08 All Contractors shall designate a competent supervisor or foreman to oversee all activities described in these specifications.

2.09 All Contractors shall be responsible for notifying the Owner and for the cost and repair of any damage to irrigation systems, buildings, vehicles or other structures, properties or possessions, which occur as a result of improper or negligent activities within their respective realm of responsibility, as defined in these specifications.

2.10 Contractors shall not be responsible for damages caused by others, vandalism, or Acts of Nature.

3.00 PRODUCTS AND MATERIALS

3.01 All Contractors shall be responsible for providing all labor and materials needed to completely and accurately perform the work outlined in these specifications. Equipment and materials furnished shall be of the appropriate type, size and quantity needed to adequately accomplish the specified work.

3.02 All Contractors shall be responsible for regularly inspecting all equipment to be used on the job site and for providing scheduled preventative maintenance, so as to prevent any damage or injury to landscaping, structures or the environment.

4.00 SCOPE OF WORK - IRRIGATION MANAGEMENT

4.01 Landscape Contractor shall be responsible for the maintenance, repairs, and timing of the irrigation system. The system shall be inspected at least 1 time per month to check for broken heads, lines, valves, timers, and water coverage patterns.

4.02 Broken heads and lines, and water coverage adjustments shall be made within 24 hours by the Contractor. Malfunctioning valves, pumps, or timers shall be reported to the Owner for repair by a licensed irrigation contractor.

4.03 Should the Landscape Maintenance crew cause or note any broken heads or lines or other irrigation problems during the course of their regular duties, they shall immediately report such damage to their supervisor so that it can be repaired.

4.04 Irrigation timers shall be set according to specific needs of each area or zone, and may be altered as per plant, site, and weather conditions.

5.00 SCOPE OF WORK - LANDSCAPE MAINTENANCE MOWING

5.01 All turf areas shall be mowed with rotary mowers 1 time each 7 days between May 1 and October 31. The rest of the year it shall be mowed 1 time each 14 days, as needed to keep the grass from growing more than 1.5” above the cutting height. Total number of cuts per year shall be at least 38.

5.02 Mowing height for St. Augustine grass shall be 2” to 3”, as measured on a flat, paved surface. Mowing height in shaded areas shall be slightly higher. All debris and/or litter shall be removed from turf areas prior to mowing.Injuries to tree trunks, exposed roots, and shrub bases shall be avoided by either mowing at a greater height or by mowing around them and hand-trimming later.

5.03 Mower blades shall be kept sharp at all times so as to prevent tearing of leaf blades.

5.04 All grass clippings shall be removed from parking areas, driveways, courtyards, decks, sidewalks, and planter beds using blowers, vacuums, brooms and/or rakes. Clippings shall not be blown out into streets or adjacent areas.

6.00 SCOPE OF WORK - EDGING AND TRIMMING

6.01 All edges along bed lines, tree rings, parking areas, driveways, sidewalks, etc. shall be mechanically edged at least 1 time per month.

6.02 All turf around all sprinkler heads shall be trimmed as needed to prevent it from interfering with or intercepting the output of water.

6.03 The use of nylon cord trimmers (weed-eaters) around tree trunks or hedges shall not be permitted (tree rings and bed lines must be maintained); they may be used around sprinkler heads, fences, posts, and other non-living structures provided they do not cause damage to those structures.

6.04 All trimmings shall be removed from parking lots, driveways, courtyards, sidewalks, and planter beds using blowers, vacuums, brooms, and/or rakes. Clippings shall not be blown out into streets or adjacent areas.

6.05 All trimmings shall be collected daily and disposed of at authorized dumping or recycling sites.

7.00 SCOPE OF WORK - SHRUB PRUNING

7.01 All landscaped areas shall be inspected at least 1 time per week to ascertain whether any pruning and trimming is needed to maintain plants within their intended bounds, to remove dead or damaged plant parts including limbs, branches, palm fronds, stems, or flowers, and to keep plants from encroaching upon parking areas, driveways, sidewalks, streets, windows, signs, lighting, etc.

7.02 Appropriate pruning tools (hedge trimmers, pruning clippers, loppers, and hand saws) shall be used and properly maintained with sharpened blades at all times. Machetes, breakage by hand, and climbing spikes shall not be permitted.

7.03 All shrub beds are to be massed in a naturalistic fashion. Shrub beds shall be pruned as needed to maintain plants within their intended bounds, prune off old flowers, clean out old leaves, and create a naturalistic mass effect. Plants shall not be individually shaped. Maximum bloom shall be maintained by minimizing pruning. Periodic cutbacks of specific plantings may be necessary 1 to 2 times per year.

7.04 All ground cover material shall be regularly pruned and cleaned as needed to remove any dead or damaged plant parts, including old leaves, flowers, and stems. Periodically, it may be necessary to thin or reduce the size of the plantings by removing sections of plants or clusters.

7.05 Hedges and formal border plantings shall be pruned at least 1 time per month or more often if needed to maintain them at the heights and widths specified by the landscape architect.

7.06 All vines shall be pruned and trained as needed onto trellises or other structures as intended.

7.07 All palms which are less than 15 feet in overall height shall be pruned as needed to remove brown fronds, coconuts, and inflorescences. Each individual frond shall be cut as close to the trunk as possible, removing the entire leaf base, including all spines. Thatch accumulations on trunks shall be regularly removed as it naturally loosens.

7.08 All clustering palms which are less than 15 feet in overall height shall be pruned as needed to remove brown fronds and inflorescences. Periodically (no more than one time per year), some thinning of the clusters may be required; approximately 1/4 to 1/3 of the total number of stems, evenly distributed throughout the cluster and at staggered heights, shall be cut at ground level and removed. Palms shall not be “cleaned” to remove all young stems.

7.09 All hardwood trees which are less than 15 feet in overall height shall be pruned as needed to remove dead branches, or to raise or reduce crowns to prevent them from encroaching into pedestrian/vehicular areas, over windows, sidewalks, lights, signs, etc. There shall be no other “cleaning”,“thinning”, or “raising” of tree crowns by the Landscape Contractor. All other tree and palm pruning shall be the responsibility of a certified arborist or tree crew.

7.10 All clippings and debris, including fallen palm fronds and nuts, shall be collected daily and disposed of at authorized dumping or recycling sites.

8.00 SCOPE OF WORK - MULCHING

8.01 All hedges, shrubs, planter beds, and free-standing palms and hardwood trees shall be mulched 3 times per year using naturally-colored, shredded cypress, eucalyptus, or heat-sterilized melaleuca mulch, Grade B or better, layered to and maintained at a depth of 3 inches at all times.

8.02 All free-standing palms and shade trees shall have circular tree rings maintained uniformly at a distance of at least 18-inch radius (36-inch diameter) from the trunk, within which mulch shall be maintained.

8.03 Mulched areas shall begin 2 to 4 inches from trunks or stems and continue out to completely fill in shrub beds and tree rings. Mulch shall not be allowed to cover crowns of shrub plants or accumulate against the trunks of trees and palms.

9.00 SCOPE OF WORK - WEED CONTROL

9.01 Weeds shall be removed by hand on an on-going basis throughout the year in all landscaped areas, including the removal of weeds growing in thatch on palm trunks, fallen palm fruits, and tree/palm seedlings (“volunteers”) in hedges and shrub beds.

9.02 All weeds in driveways, sidewalks, fence lines, or other hardscape areas shall be removed by hand as the mowing scheduel or more often if needed to keep them under control.

9.03 After adequate plant establishment, chemical pre- and post-emergent herbicides may be used on an as-needed basis in turf and shrub areas (see PEST CONTROL section).

9.04 All debris shall be collected daily and disposed of at authorized dumping or recycling sites.

Esperanza Kelly
Florida Landscape Architect
LA6667109

PLOT STUDIO
South Miami, FL 33143
LC26000540

5011 PINE TREE DRIVE
Miami Beach, Florida

MAINTENANCE SPECIFICATIONS

No.	Description	Date

Project number	200004
Date	05-11-2020
Drawn by	EK
Checked by	EK

A.9005