## City of Plantation Planting Criteria

All plant material shall be Florida No. 1 or better according to Grades and Standards for Nursery Plants. All trees that are designated as single-trunk trees shall have a single, dominant leader, proper structural branching and even distribution of their branches and a relatively straight trunk. Trees with bark inclusion, trees that have been tipped, and co-dominant trunks at any heights will not be accepted. Trees with girdling, circling and/or plunging roots will be considered culls and therefore rejected.

A pre-planting meeting is required with the Department of Planning, Zoning & Economic Development, Landscape at 954-797-2248 prior to any work being done on the property.

All trees and palms shall be field grown balled and burlapped.

All trees and palms must be planted so the top of the root ball, root flair, and first order roots are at the same level or slightly above the final grade. (Adventitious roots are not considered first order roots.)

All synthetic burlap, synthetic string or cords shall be removed from the rootballs before any trees are planted. The top portion of burlap must be removed from the top of the rootballs. The top 1/3<sup>rd</sup> of wire baskets shall be removed, the bottom 2/3<sup>rds</sup> shall be cut before the trees are installed.

All synthetic tape (i.e., tagging tape, nursery tape) shall be removed from trunks, branched, etc. before inspection. Remove all bamboo and metal stakes from the trees.

Trees shall have a mulch ring of a minimum of 4' diameter. Mulch should have a minimum depth of 2" and a maximum depth of 3". All planting beds much be mulched. Mulch should be kept 3" from the base of all plant material. Cypress mulch, red, gold and green mulch is prohibited. Other clean hardwood species or clean recycled mulch may be used. Establish clean planting bed lines, leave > 1½ ' on either side of the plant material for maintenance.

All trees and palms shall be guyed with proper horticultural and arboricultural techniques. Do not use wire, black strapping, or other synthetic material for the staking of trees. Please use biodegradable material for staking. Nailing into trees and palms for any reason is prohibited. All staking material shall be removed once trees are established.

Shrubs at the time of installation shall not be less than 2½' in height with a minimum height of 30" for perimeter hedge material.

Ground cover areas at the time of installation shall be planted with a minimum coverage of 75% coverage.

All landscape areas shall be provided with an automatically-operating underground irrigation system; with a minimum of 100% coverage, with 50% minimum overlap in groundcover and shrub areas. The rain sensor must be installed and operational as well as the rust inhibitor ii applicable.

In compliance with Section 13-34(6) of the City's landscape code of ordinances all planting bed areas must have a minimum of 6" of planting soil, and all sodded areas shall have 2" of planting soil. This soil shall be tilled into existing soil on site. All soil shall be free of weeds and other noxious materials. Recycled compost is encouraged as a soil amendment. Please contact the City prior to planting for an inspection of the planting beds/islands.

All utility equipment, such as FPL boxes, cable TV boxes, back flow preventers, irrigation equipment, and air conditioner units shall be screened with appropriate plant material.

Please use City approved planting details.

Where applicable, appropriate tree protection barriers must be in place prior to the commencement of ANY work on the

Where applicable, tree removal and/or tree relocation permits must be obtained through the Department of Planning, Zoning & Economic Development prior to any work being done on the property.

Please follow approved landscape plans for species, sizes, locations, quantities, quality, etc. If you are unable to locate plant material at required specifications please contact our department prior to any changes being made at 954-797-2248.

ADDITIONAL CITY NOTES:

ALLOW HEDGE SHRUBS TO

A CONTIGUOUS, SOLID HEDGE -

DO NOT PRUNE HEDGE

HEDGE PRUNING SCHEDULE

MATERIAL AS INDIVIDUAL

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Tree / Palm removal and relocation permits as well as mitigation fees must be obtained directly through the Department of Planning , Zoning & Economic Development - Landscape at the time of permiting. Please contact Diana at 954-797-2248 directly to obtain required permits. Tree trimming permits ('if any trimming of trees or palms is to be done) must be obtained directly through the Department of Planning, Zoning & Economic Development - Landscape at the time of permiting. Please contact Diana at 954-797-2248 directly to obtain required permits. An ISA certified Arborist must root prune any existing tree within paving or curbing areas to be installed.

LARGE TREE PRUNING SCHEDULE

GENERAL SPECIFICATIONS

1. All plant materials shall be Florida No. 1 or better as set forth by the Florida Department of Agriculture, Grades and Standards for Nursery Plants, current edition. All plants to be graded shall comply with the general requirements listed there in.

Certification that all plant materials installed are Florida No. 1 or better shall be the sole responsibility of the Landscape Contractor Said certification shall be provided to the Owner or his authorized representative at the time of delivery of the plant material to the job site. Any dispute regarding plant material grade shall be determined by a representative of the Division of Plant Industry of the State of Florida.

All rules and guidelines set by the State for the purposes of grading plant materials shall be followed.

2. Palms shall be planted so that all heads are clear of building walls and windows at mature spread.

3. All Sabal Palms, Queen Palms, Washingtonia Palms, Phoenix varieties and all other single trunk, upright varieties with six foot (6') of clear trunk or greater shall be staked as detailed.

4. All trees shall be planted so that heads will be clear of building walls, roof lines and windows at mature spread. Shade trees shall not be located closer that fifteen feet (15') from project light poles. Medium and small trees and palms shall not be planted closer than seven and one half feet (7 1/2') from project light poles.

Florida Power and Light tree location guidelines shall be followed in all cases relating to FPL power pole or easement locations. Where Codes require, locations of all trees planted in Rights-Of-Way

or utility easements shall be confirmed by the landscape contractor with the City or County Engineer before installation. All tree trunk calipers shall be measured at 4 1/2' above top of root ball. All trees that are designated as single - trunk trees shall have

a single, dominant leader and a relatively straight trunk. All trees that are designated as multi-trunk trees shall have at least three trunks with equal calipers originating from the base of the trees, and with angles no greater than 45 degrees. Trees with bark inclusion or codominant trunks will not be accepted. 5. All Trees and Palms shall be kept in an upright position.

Under no circumstances shall any support method used employ the driving of nails or other mechanical devices of any kind into the bark of any tree or palm. All staking except Terra Toggle shall be removed approximately

6 months after planting or at the time of establishment of the tree. Any exposed Terra Toggle straping shall be cut and removed after the wood supports have decomposed. All synthetic burlap, synthetic string or cords shall be removed before any trees are planted. All synthetic tape (ie. tagging tape, nursery tape) shall be removed from trunks, branches, etc. before inspection. The top one-third of any natural burlap shall be removed before the trees are backfilled. All wire baskets shall be removed from the top and sides of the rootball to a depth of 3"

and all remaining wire shall be cut to prevent gurdling. All trees, (except palms) and other plants shall be planted with the top of their rootballs 2" (+/-) above the final grade surrounding the planting area as detailed. Palms shall be planted with the top of the rootball flush with the surrounding area. 6. All trees within or overhanging pedestrian areas shall

have a clear trunk high enough to allow unobstructed pedestrian movement under or around trees.

Sight distance concerns must be maintained for clear sight visibility from thirty (30) inches to seventy-two (72) inches, tree trunks excluded.

7. All hedges shall be planted with twelve inches (12") clear space between outer branches and building walls, fences or pavement edges and three feet (3') back from edge of parking spaces at the time of planting. Spacing of shrubs center to center shall be as specified by the municipality for screening requirements. All mechanical equipment, air conditioning, irrigation pumps, FPL transformers, pool pumps, etc., must be screened on three (3) sides by shrubs.

8. Irrigation shall be by underground, automatic, rust free system with 100% coverage and a minimum of 50% overlap of spray. Irrigation rain sensor shall be installed. Irrigation water shall not be directed onto or over impervious surfaces. Irrigation systems other than City water shall require a South Florida Water Management District water use permit prior to the issuance of the required irrigation permit from the City and/or the operation of the irrigation system. Approved irrigation permits shall be required from the City prior to installation.

9. Planting soil shall be at least 30% muck and 70% sand pulverized and weed free, to be mixed with existing soil free from rocks and debris and backfilled into plant pits by washing in. Planting soil for Sabal Palms shall be clean sand. Existing soil may be used as planting soil if approved by the Landscape Architect. 10. Fertilizer for trees and shrubs shall be a general purpose 50% organic fertilizer low in phosphorus, with minor elements, iron and

manganese and shall be mixed with the planting soil at the time of backfilling. Recommended analysis of 8-2-12. Fertilizer for palms shall be a palm special type to include manganese and magnesium sulfate. Recommended analysis of 13-3-13.

Application rates for all fertilizers at the time of planting shall be 1/2 the manufacturers recommendations for established

Cypress, red or dyed mulch shall not be accepted.

11. Mulch shall be shreaded eucalyptus or other clean hardwood species grade "B" or better set at a 3" minimum depth and wet down to prevent wind displacement.

All mulch shall be certified "Arsenic Free". All trees shall have a water ring with a minimum depth of two inches, maximum of three inches, and a diameter of 3 feet to 4 feet around the base. No mulch shall be placed over the rootball of any tree. All mulch shall be kept two inches from the stems of all shrub plant material.

12. Sod shall be Stenotaphrum secundatum "Floritam" or "Palmetto" solid sod. weed free and set with staggered joints. Sod shall be placed on all areas not used for buildings, vehicular use areas, walks, site structures or planting beds and shall extend to any abutting street pavement edge and to the mean waterline of any abutting canal, lake or waterway. Sod shall be placed no closer that three (3) feet from the trunk of any tree.

Sod placed adjacent to pavement and curbs shall be set with top of

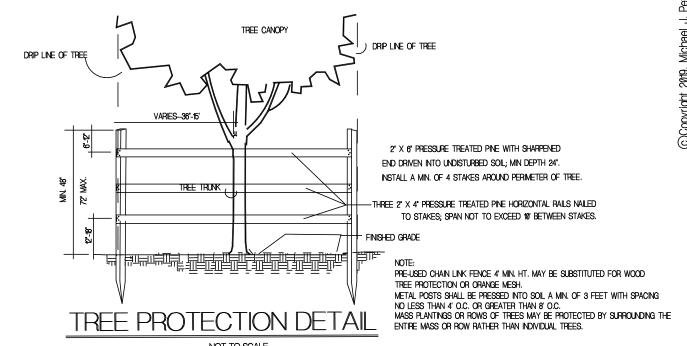
sod-soil set flush with the top of the adjacent pavement and/or curb. 13. Planting plans take precedence over plant lists. The Landscape Contractor shall be responsible for doing his own takeoff. The Landscape Contractor shall familiarize himself with the municipal code and deed restrictions of the

municipality in which the project is located. All existing codes and deed restrictions pertaining to the municipality in which the project is located shall apply and may supersede these General Specifications. The more stringent requirement shall

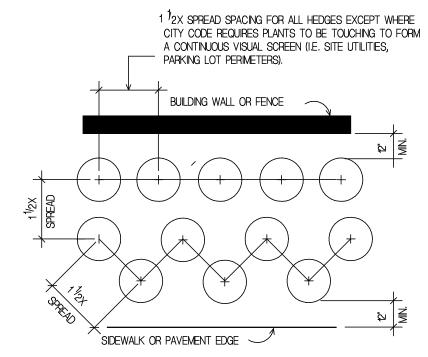
14. The Landscape Contractor shall be aware of the locations of all easements and utilities above and below ground and shall call for utility stakeout forty eight (48) hours before any diaging operations begin.

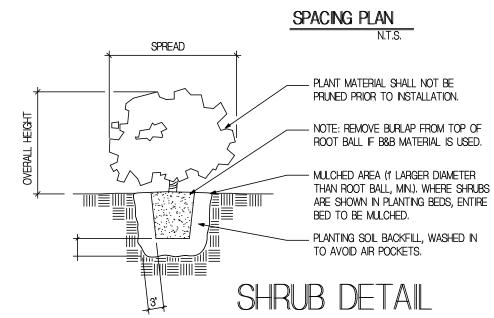
plant pits located in easements shall be hand dug. 15. The Landscape Contractor shall provide a written guarantee to the Owner for all plant materials and workmanship for a period no less than one year from the time of final inspection and acceptance by the Owner.

At the end of the guarantee period, all plant materials shall be inspected by the Landscape Contractor and the Owner. All plants that are in a healthy, growing condition at the time of the inspection shall be free from further guarantee and shall be the Owners responsibility. All plants that are in questionable condition due to transplant shock shall continue under the guarantee until recovery or, if deemed severely retarded in growth or dead, shall be replaced. Replaced plant material shall be guaranteed for the same time period and under the same conditions as the original plant material. This guarantee does not apply if the plant materials have not been maintained by the Owner as instructed by the Landscape Contractor, are damaged by storms, vandalism, insect or freeze damage or acts of God beyond the Landscape Contractors control. All plants shall be free from harmful plant pests at the time of planting.



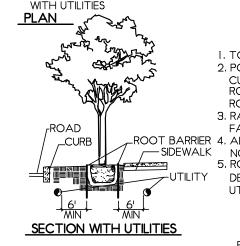
1. BARRICADES AS SHOWN ON THIS DETAIL FOR EXISTING TREES WITH OVER A 30' DIA. CANOPY, SHALL HAVE THE VERTICAL STAKES PLACED AT LEAST 15' FROM THE TRUNK OF THE TREE.







WITHOUT UTILITIES



PRUNE LOW HANGING BRANCHES

TO 9:00 AND 3:00 LEVEL ONLY

"LIFTING" OF BRANCHES IS NOT ALLOWED

1. TOP OF ROOT BARRIER MUST BE AT 1/2" ABOVE FIN. GRADE 2. POSITION ROOT CONTROL BARRIER AGAINST SIDE OF WALK, CURB OR ROAD PAVEMENT, DEEP ROOT ROOT BARRIER UB18 OR UB24 SHALL BE USED TO PROTECT CURBS, ROADS OR WALKS DEPENDING ON CURB DEPTH 3. RAISED ROOT DEFLECTORS MUST BE FACING TOWARD THE TREE. ROOT BARRIER 4. ALL MFGR. SPECIFICATIONS SHALL BE FOLLOWED EXCEPT SIDEWALK NO GRAVEL BACKFILL IS REQUIRED FOR LINEAR INSTALLATION.

5. ROOT BARRIER SHALL EXTEND BELOW ANY UTILITY TO BE PROTECTED. UTILITY DEEP ROOT ROOT BARRIER UB42 OR UB48 SHALL BE USED FOR ALL UTILITY PROTECTION INSTALLATIONS. SECTION WITHOUT UTILITIES

> POSITION ROOT BARRIER ALONG SIDE OF CURB~ PARKING ISLAND PROTECTION

12. ROOT BARRIER SYSTEM AS INDICATED ON THE PLANS IF APPLICABLE.

ROOT BARRIER

PLANTING HOLE SHALL BE TWICE AS WIDE AT THE ROOT BALL AND NO DEEPER THAN THE HEIGHT OF THE ROOT BALL. THE TOP OF THE ROOT BALL SHALL BE APPROXIMATELY I' ABOVE THE FINISH GRADE. THE TRUNK FLAIR MUST BE VISIBLE ABOVE GRADE. 4. EXISTING UNDISTURBED SOIL 3 STRANDS OF 3/4' DIAMETER BIODEGRADABLE ROPE TIED TO EACH TREE AND SUPPORTED IN THE GROUND WITH 3-1' x 2' x 1' BURIED SO TOP 18 1' BELOW GRADE top of rootball is 1° above final grade. 6. TILL AND LOOSEN SOIL TO A DEPTH OF 8" WITH A RADIUS OF 5" FROM TRUNK OF TREE. 1. PLACE SOIL AMENDMENTS (I.E. "TERRASORS", FERTILIZER TABLETS) IN THE TOP S' OF THE PLANTING HOLE. REMOVE TOP US THIRD OF THE NATURAL BURLAP AND WIRE BASKET COMPLETELY IF WIRE BASKETS CANNOT BE REPOYDED DUE TO ROOT BALL STABILITY, SLICE THE BASKET TO THE BOTTOM OF THE ROOT BALL ON A MINIMUM OF 4 SIDES. 9. BACK FILL TO BE 50% SAND 4 50% MUCK, MIXED WITH 50% EXISTING SOIL UNLESS 10. SINGLE DOMINATE LEADER GOOD STRUCTURE, FLORIDA 4 OR BETTER. II. TILL AND LOOSEN EXISTING SOIL TO A DEPTH OF 8' IN ALL PLANTING BEDS THEN TILL IN 4' OF PLANTING SOIL THROUGHOUT

Tree Planting Detail

– root flair or first order roots must be visible 2x diameter at root ball base

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ROOT CONTROL BARRIER INSTALLATION DETAIL & SPECIFICATIONS ROOT BARRIER SHALL BE USED ON ALL TREES AND PALMS PLANTED WITHIN 6' OF ANY PUBLIC INFRASTRUCTURE, SIDEWALK, ROAD, CURB OR UTILITY

CONTRACT SIGNATURE DRAWINGS MITTAL OR OR ORIGINAL S SEALED

CONSTRUCTION & EMBOSSED ( MAY BE USED