

TREE RELOCATION ASSESSMENT

SITE LOCATION: Pinnacle on Sixth – 610 S H Street, Lake Worth Beach, FL 33460

DATE OF INSPECTION: August 10, 2026

SPECIES: Ficus conforming with Banyan fig (*Ficus benghalensis*)

PURPOSE: Assess the feasibility of tree relocation and evaluate the potential for long-term survival post relocation.

BACKGROUND INFORMATION:

ChenMoore (CM) assessed the above-referenced site to determine if the existing mature tree, Tree 105, could be relocated in accordance with the current edition of the International Society of Arboriculture (ISA) *Best Management Practices - Managing Trees During Construction* and the current edition of the American National Standards Institute (ANSI) *A300 - Tree Care Standards*. Development is proposed within the above-referenced site. The current building footprint would require either removal or relocation of Tree 105. CM was contacted to evaluate the potential impact of the proposed relocation. The location of Tree 105 and the proposed structure is depicted in the attached Tree Disposition and Landscape Plans (**Attachment 1**) and representative photos are included in the photo documentation log (**Attachment 2**). This report summarizes the findings from the tree relocation assessment.

The City of Lake Worth Beach (City) Land Development Regulations state that “the “Tree Protection Manual for Builders and Developers” published by the Division of Forestry of the State of Florida, Department of Agriculture and Consumer Service (recent edition), shall be the standard for determining the appropriateness of proposed techniques.” (Sec. 23.6-1(j)(3)). This publication, originally published in 1985, is out of print. The Florida Department of Agriculture and Consumer Services (FDACS) website states that “any recommendations that our agency provides on this topic are based on the book *Trees and Development: A Technical Guide to Preservation of Trees During Land Development*, written by Nelda Matheny and James R. Clark.” Recommendations and calculations within this report were prepared accordingly. Additional guidance was obtained from recent publications from the University of Florida – Institute for Food and Agricultural Sciences and applicable industry standards.

TREE EVALUATION FINDINGS:

CM staff conducted an assessment of Tree 105 on August 10th, 2026 (see **Attachment 2**). The assessment was performed by CM staff persons holding ISA Certified Arborist credentials. Tree dimensions were recorded; height and spread data were estimated using a laser rangefinder/clinometer (TruPulse 360R).

Defect observations and condition ratings were based upon a Level 1 (Limited Visual) assessment per the ISA Tree Risk Assessment Manual (Second Edition) and the Council of Tree and Landscape Appraisers *Guide for Plant Appraisal*, 10th Edition (second printing); note that this level of evaluation does not constitute a Tree Risk Assessment. The resulting data for Tree 105 is detailed in **Table 1** below. Tree 105 is depicted within the photo documentation log (**Attachment 2**), and a summary of tree conditions observed is provided below.



Table 1: Tree Data Table

Tree ID	Common Name	Scientific Name	DBH (in)	Multi Trunk	Height* (ft)	Spread* (ft)	Condition Rating** (%)	Dripline Radius*** (ft)	Estimated Root Ball Diameter**** (ft)	Optimal Tree Protection Zone Radius***** (ft)
105	Banyan Fig	<i>Ficus benghalensis</i>	78	No	40	55	50%	27.5	45.5	78

Notes:

* Height and spread data were estimated using a laser rangefinder/clinometer.

** Condition ratings were assigned per the Council of Tree and Landscape Appraisers *Guide for Plant Appraisal*, 10th Edition (second printing).

*** Dripline radius was estimated based on the measured canopy spread on the day of inspection.

**** Root ball measurements were estimated based on calculations for mature trees, obtained from UF IFAS¹.

***** Optimal tree protection zone radius was based on *Trees and development: A technical guide to preservation of trees during land development*³.

Tree 105 was a 78-inch in diameter at breast height (DBH) ficus tree, conforming with a banyan fig. Arborists observed major trunk damage in multiple locations within the trunk. A large wound was observed on the north side of the trunk on the inner portion of the root structure (Photos 7-9). Sounding indicated major internal decay is likely. Fruiting fungal bodies were observed on the south side of the wound. Supplemental aerial root development was observed on the south side of the wound. The wound is not visible on the outer portion of the trunk (Photo 10).

A large decaying trunk was observed on the southeast side of the tree, associated with a large pruning wound (Photo 5). Significant aerial root development was observed on the south side of the wound. Damage was observed on the root flare adjacent to this defect, extending into a visible root (Photo 6).

Trunk and root flare damage was observed on the southwest side of the tree, depicted in Photo 4. Sounding indicated minor internal decay is possible. Small diameter aerial root development was present adjacent to the trunk and root flare damage.

Multiple cavities were present at previous pruning wounds on the northeast side of Tree 105 (Photo 10). Moderate reaction wood development was present at the cavity locations. A large wound was observed on the north side of the tree at a major branch union, approximately 3 feet in length (Photo 11). A large cavity was observed at the bottom of this wound. Although sounding could not be performed from the ground, the presence of a cavity indicates potential internal decay at this location. CM recommends an aerial inspection is performed to examine the extent of the cavity and potential internal decay.

Tree 105 displayed a form typical of the species (banyan). This species is known to grow additional aerial roots to support the trunk and limbs as the tree matures. This growth habit allows the tree to continue growth after a trunk or leader has been injured or removed. The tree has developed many aerial roots around the trunk that provide additional support to the wounded areas. Tree 105 was in good health, displaying good vigor at the time of inspection. Defects observed were primarily structural. The structural defects observed cannot be corrected through pruning or plant health care actions; however, the tree's development of additional aerial roots may provide additional support for the wounded areas on the trunk.

RELOCATION EVALUATION FINDINGS:

Tree 105 displayed good health; however, extensive structural defects within the trunk and the canopy were observed. While the site history is not known, the large wound and cavity associated with a major branch union indicate that a previous scaffold branch failure has occurred. CM estimates that Tree 105 is *mature*, meaning the tree is between 20% to 80% of the tree's life expectancy³. Trees that have reached *mature* age are less tolerant of construction activities³.



Species tolerance to construction was classified as *moderate*, although species specific documentation of construction tolerance was not available at the time of this report. Tree 105 displayed a *poor* suitability for preservation ranking, per *Trees and Development: A Technical Guide to Preservation of Trees During Land Development*³. Therefore, relocation of Tree 105 is not recommended.

Tree 105 has a DBH of approximately 78 inches; therefore, the root ball required for relocating the tree is approximately 45.5 feet in diameter¹ (see **Table 1**). Assuming a soil weight of 100 lb/ft³, the approximate weight of the root ball is 244 tons. The estimated weight of the trunk alone, based on the green log weight of a banyan tree⁴, is approximately 10 tons. Please note that this estimated weight accounts for ±12 feet of trunk below branching. This calculation does not include the weight associated with the branching and foliage of the tree. Relocation of Tree 105 may require multiple cranes, and potentially multiple days. If relocation requires cranes for more than one day, the cost of relocation may increase. Details and calculations are provided within **Attachment 3 – Opinion of Probable Cost**.

If the tree is relocated, root pruning should be performed prior to moving the tree to the final location. The tree should be irrigated for two (2) to four (4) weeks prior to performing root pruning^{1,2}. Ideally, root pruning should be performed on one (1) side each year and irrigated throughout². This method provides the best results during relocation². This method, which increases the chances of a successful relocation, takes approximately three (3) years to execute. At minimum, root pruning should be performed at least three (3) to four (4) months prior to transplanting¹. Please note that increasing the length of time between the root pruning and transplanting the tree will result in increased development of new roots at the root pruning locations. Root pruning should be performed in stages to prevent shock and tree instability¹. During this process, the exposed sides of the root ball should be covered with plastic sheeting and backfilled with soil to prevent desiccation of new roots¹. Bracing may be required to ensure safety. CM recommends a minimum of six (6) months of time between root pruning and relocation to allow for at least one (1) growing season. Irrigation is required throughout the period between root pruning and relocation.

Reduction pruning may be required to reduce the weight of the tree and the size of the canopy. Relocation of Tree 105 to an off-site location, such as Bryant Park, Royal Poinciana Park, or the Lake Worth Beach Municipal Golf Course would require temporary road closures, temporary removal of traffic lights, temporary modification of power/utility lines, and potential clearance pruning for street trees adjacent to the relocation path. Relocation of Tree 105 to parcel C will require temporary road closures on S H Street and temporary modification of power/utility lines; however, temporary removal of traffic lights, and/or clearance pruning of street trees are not anticipated with this location. Additionally, reduction pruning may be required to reduce the weight of the tree and/or the size of the canopy.

Parcel C previously contained a residential structure. Soil within the footprint of the structure has been compacted during construction and from periodic vehicular traffic associated with the residential structure. If Tree 105 is relocated to parcel C, CM recommends performing aeration of the soil prior to the installation of Tree 105. Parcel C is approximately 50 feet wide; therefore, the canopy of Tree 105 is anticipated to cover the width of the parcel and extend over the right-of-way (ROW) and the parcel to the south. Additional considerations for relocation to parcel C include the increased occupancy rates post development, specifically within the proposed dog park. Prior to relocation, CM recommends performing an aerial assessment to identify the extent of decay associated with the large wound and cavity present at a major branch union. The increased occupancy post development may require additional considerations for risk associated with the structural defects described within the tree evaluation findings.

If Tree 105 is relocated to an offsite, publicly owned area such as Bryant Park, Royal Poinciana Park, or Lake Worth Beach Municipal Golf Course, CM recommends restricting the area beneath the tree to reduce the potential risk associated with the structural defects described within the tree evaluation findings. This would allow the public to enjoy the tree and receive the environmental benefits while ensuring that risk is adequately mitigated.



During relocation, the tree should be planted in the same orientation as it exists in its current location. Bracing should be erected to reduce the potential of windthrow or tree failure during the establishment period. Watering or irrigating the tree is required throughout establishment, for a period of approximately two (2) years. Monitoring is recommended twice a month within the establishment period. Additional considerations prior to relocation include the removal of the adjacent tree, Tree 138A. Tree 138A should be removed prior to the relocation of Tree 105 to allow for access on the west side of Tree 105. Stump grinding of Tree 138A should be performed after the root pruning on the west side of Tree 105 is completed. Prior to relocation, soil testing of the current site and the chosen relocation site are recommended to ensure compatibility.

Success of mature tree relocations is highly variable and not guaranteed^{2,3}. Relocation success is dependent on proper root pruning and irrigation prior to relocation, and proper irrigation post-transplant. Estimates of potential survival of Tree 105 post relocation assume all work was performed within industry standards and according to recommended timeframes. Structural defects within the existing tree may become further compromised during the relocation, potentially resulting in trunk and/or branch failure. The presence of these structural defects may reduce the potential of survival through relocation and establishment. CM estimates the potential chance of survival of Tree 105 through establishment to be low to moderate. CM prepared an Opinion of Probable Cost for the proposed relocation, indicating the relocation cost may equate to approximately \$58,240.00, as detailed within **Attachment 3**.

Recommendations within this report are based on industry standards and previous experience. Calculations provided are estimates and may change based on contractor guidance and/or pricing. Prior to relocation, it is recommended that an ISA certified arborist perform an aerial inspection to evaluate the extent of the cavity within the large wound at a major branch union. Root pruning and reduction pruning should be performed by or under the supervision of an ISA certified arborist, or equivalent, and in accordance with the ANSI A300 Standards.

RETENTION EVALUATION FINDINGS:

CM recommends retaining the tree in place, with modifications to the proposed development. Tree 105 could be retained in a parking lot setting, with an adequately sized planter. Additional methods for retention include using a suspended pavement system, at-grade pavement system, or root bridge within parking spaces near the trunk. These methods allow for additional root space while meeting parking space requirements. If Tree 105 is retained, adequate space for future trunk growth should be provided. Additional long-term considerations may include post-development hardscape modifications to accommodate soil space for aerial roots originating from branches.

Current industry standards indicate that trees with structural defects including but not limited to decayed wood, crown structural defects, or poor branch attachment are not suitable for preservation in areas where people and/or property may be damaged or injured³. Please note that retaining Tree 105 in place may require additional considerations for risk associated with the structural defects described above and the new site/occupancy conditions. Prior to retention, it is recommended that an ISA certified arborist perform an aerial inspection to evaluate the extent of the cavity within the large wound at a major branch union.

If retained, a tree protection barricade shall be erected at the dripline prior to construction, per Sec. 23.6-1(j)(3) and Sec. 23.6-1(m)(8). A tree protection plan may be required, per Sec. 23.6-1(j)(3). CM estimated the radius of the dripline of Tree 105 based on the measured canopy spread on the day of inspection (see **Table 1**). Taking into consideration the *mature* classification of Tree 105 and the *moderate* species construction tolerance (assumed), CM recommends the tree protection zone encompass a radius of approximately 78 feet for optimal preservation (see **Table 1**)³.

Mitigation for the potential removal of Tree 105 would consist of 78 DBH inches of replacement trees, at a minimum installation size of 6-inch DBH (per Sec. 23.6-1(m)(7)c).



SUMMARY:

CM arborists assessed one (1) 78-inch diameter ficus tree, conforming with a banyan, within the site (see **Attachment 1** and **Attachment 2**). Arborists observed multiple structural defects that may reduce the suitability for retention and/or relocation. The tree was estimated to be *mature* and the suitability for preservation was determined to be *poor*³. Therefore, relocation of Tree 105 is not recommended. Retention of Tree 105 may be feasible; however, further examination of the large wound with a cavity at a major branch union is warranted. CM recommends an aerial inspection is performed to inspect the extent of the cavity prior to either relocation or retention of Tree 105.

The opinion of probable cost (**Attachment 3**) estimated the relocation cost at \$58,240.00. There are many elements required to successfully relocate or retain a tree of this size, prior to, during, and following the transplanting process. Improper execution at any step may result in the loss of the tree. The estimated survival rate of Tree 105 post relocation, if all appropriate measures are taken, is low to moderate.

In the event relocation nor retention are chosen, the potential mitigation for the removal of Tree 105 would consist of 78 DBH inches of replacement trees, at a minimum installation size of 6-inch DBH (per Sec. 23.6-1(m)(7)c).

Should you have any questions, please do not hesitate to contact me at my office at (954) 730-0707, my cell phone at (314) 651-5476, or send me an electronic message at cschillizzi@chenmoore.com.

Sincerely,



ChenMoore
Camille Schillizzi
ISA Certified Arborist FL-9864-A

Attachments:

1. Tree Disposition and Landscape Plans
2. Photo Documentation Log
3. Opinion of Probable Cost



REFERENCES:

- ¹ Castro, D. (2022, January 14). *How to Root Prune and Transplant Field Grown Trees and Shrubs*. UF IFAS Blogs.
<https://blogs.ifas.ufl.edu/browardco/2021/09/16/how-to-root-prune-and-transplant-field-grown-trees-and-shrubs/>
- ² Gilman, E. F. (2020, January 24). *Transplanting*. UF/IFAS Landscape Plants.
<https://hos.ifas.ufl.edu/woody/transplanting.shtml>
- ³ Matheny, N. P., & Clark, J. R. (1998). *Trees and development: A technical guide to preservation of trees during land development*. International Society of Arboriculture.
- ⁴ Tree Care Industry Association. (2025, June 23). Green Log Weight Chart.



ATTACHMENT 1

Tree Disposition and Landscape Plans

Pinnacle on Sixth

Landscape Plan

Lake Worth Beach, Florida

NOTE: These Landscape Plans have been prepared to satisfy Lake Worth Beach zoning requirements and to conceptually reflect landscape requirements for the site. They are not to be utilized for construction drawings until final engineering and architectural plans are available. These drawings are not to be used for Building Permit application until these plans are finalized.

SHEET INDEX

COVER SHEET & PLANT SCHEDULE	LA-1
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PLANT SCHEDULE

- DROUGHT TOLERANT RATING BASED UPON SFWMD WATERWISE PUBLICATION - SOUTH FLORIDA EDITION.
- ALL PLANT MATERIAL SPECIFICATIONS AND CONTAINER SIZES LISTED IN THE PROJECT PLANT SCHEDULE ARE REQUIRED MINIMUMS. CONTRACTOR MAY EXCEED THE REQUIRED MINIMUM SPECIFICATION AND CONTAINER SIZE BASED ON MATERIAL AVAILABILITY.
- ALL PLANT MATERIAL SHALL MEET AND ADHERE TO LATEST EDITION OF FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS. ALL PLANT MATERIAL SHALL BE FLORIDA # 1 OR BETTER.THE LANDSCAPE ARCHITECT OR OWNER/OWNER'S REPRESENTATIVE HAVE THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING THESE STANDARDS.
- QUANTITIES ON PLANT SCHEDULE ARE FOR CONVENIENCE ONLY. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON LANDSCAPE PLANS.

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	NATIVE	DROUGHT TOLERANT
LARGE TREES					
	BU	14	Bursera simaruba / Gumbo Limbo Florida #1, 10' Ht. x 4' Spr., 2.5" Cal., Single Straight Trunk, Full Canopy	Yes	Yes
	QV	8	Quercus virginiana / Southern Live Oak Florida #1, 18' Ht. x 8' Spr., 6" Cal., Single Straight Trunk, Full and Even Canopy, No Low Crotch	Yes	Yes
MEDIUM TREES					
	TH	8	Tabebuia heterophylla / Pink Tabebuia Florida #1, 10' Ht. x 5' Spr., 2.5" Cal., Single Straight Trunk, Full Canopy	Yes	Yes
PALM TREES					
	PD	4	Phoenix dactylifera 'Zahidi' / Zahidi Date Palm Florida #1, 12' Ct., 18" O.A. Ht., Min. 9 Fronds, Single Trunk, Full Head, No Scarred Trunk	No	Yes
	SP	38	Sabal palmetto / Cabbage Palm Florida #1, 10-18' c.t., hurricane cut	Yes	Yes
	VM	31	Veitchia montgomeryana / Montgomery Palm - Single Florida #1, 12' Greywood., Single Trunk, Min. 18" O.A. Ht., Single Trunk, Full Head, No Scarred Trunk	No	Yes
SMALL TREES					
	CE	31	Conocarpus erectus 'sericeus' / Silver Buttonwood Florida #1, 8' Ht., x 3' Spr., 1.5" Cal., Single straight trunk, Full crown	Yes	Yes
	CS	19	Cordia sebestena / Orange Geiger Tree Florida #1, 8' Ht. x 3' Spr., 1.5" Cal., Single Straight Trunk, Full Canopy	Yes	Yes
	EF	25	Eugenia foetida / Spanish Stopper Min. 8' Ht. x 3' Spr. x 2.5" Cal., 5' Clear Trunk, Single Straight Trunk, Full Canopy	Yes	Yes
SHRUBS					
	CH2	631	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum Min. 24" Ht. x 18" Spr., Florida #1, Full to base plants, Unsheared, 24" o.c.	Yes	Yes
	CH3	30	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum 60" Ht. x 36" Spr., Florida #1, Full to base plants, Unsheared, 36" o.c.	Yes	Yes
	CLU	116	Clusia guttifera / Small Leaf Clusia 24" Ht. x 24" Spr., 4" O.C., Full to base, Unsheared	Yes	Yes
	CRQ	6	Crinum augustum 'Queen Emma' / 'Queen Emma' Crinum 15 Gal., 36" Ht. x 36" Spr. Full and Even Foliage, No Scarred Foliage	No	Yes
	PM6	66	Podocarpus macrophyllus / Southern Yew Florida #1, 6' ht. x 30" spr., Full to base and dense.	No	Yes
	PMP	124	Podocarpus macrophyllus 'Pringles' / Dwarf Podocarpus 16" Ht. x 12" Spr., 24" o.c., Full and Dense Shrub, Full to Base	No	Yes

LOCATION MAP



SITE DATA

APPLICATION NAME:	PINNACLE ON SIXTH
FUTURE LAND USE:	MIXED USE- EAST (MU-E)
ZONING:	MIXED USE- DIXIE HIGHWAY (MU-DH)
OVERLAY/STUDY AREA:	MAJOR THOROUGHFARE PLAN
PROPERTY CONTROL NUMBER(S):	
38-43-44-21-15-203-0100	38-43-44-21-15-205-0010
38-43-44-21-15-203-0130	38-43-44-21-15-205-0020
38-43-44-21-15-203-0140	38-43-44-21-15-205-0030
38-43-44-21-15-203-0150	38-43-44-21-15-205-0040
38-43-44-21-15-203-0160	38-43-44-21-15-223-0080
PROPOSED USE:	MULTI-FAMILY RESIDENTIAL
TOTAL SITE AREA:	2.01 AC. (87,750 S.F.)

DEVELOPMENT TEAM

DEVELOPER: PINNACLE ON SIXTH, LLC 9100 SOUTH DADELAND BLVD., STE. 700 MIMAI, FL 33156 (305) 854-7100	SURVEYOR BROWN & PHILLIPS 1860 OLD OKEECHOBEE RD., STE. 509 WEST PALM BEACH, FL 33409 CIVIL/TRAFFIC ENGINEER CIVIL DESIGN, INC. 1400 CENTREPARK BLVD., STE. 905 WEST PALM BEACH, FL 33401 (561) 659-5760
PLANNER/LANDSCAPE ARCHITECT URBAN DESIGN STUDIO 610 CLEMATIS ST., STE. CU02 WEST PALM BEACH, FL 33401 (561) 366-1100	ARCHITECT/PHOTOMETRIC ENGINEER LUCILLE HINNERS ARCHITECTURE, LLC 1440 SW 14TH DRIVE BOCA RATON, FL 33486 (305) 491-3320

LANDSCAPE DATA

PERIMETER BUFFER LANDSCAPE
PERIMETER BUFFER SCREENING REQUIRED WHERE OFF-STREET PARKING LOT IS NOT SCREENED BY AN INTERVENING BUILDING OR STRUCTRE, PER CODE OF ORDINANCES CITY OF LAKE WORTH ART. 6, SEC. 23.6-1.

	REQUIRED	PROVIDED
PARCEL A:		
EAST BUFFER:	1 SMALL TREE / 15 LF @ 122.6' = 8 TREES	8 TREES
WEST BUFFER:	1 SMALL TREE/ 15 LF @ 226.9' = 15TREES	16 TREES
SOUTH BUFFER:	1 SMALL TREE / 15 LF @ 111.0' = 7 TREES	7 TREES
PARCEL B:		
EAST BUFFER:	1 SMALL TREE / 15 LF @ 130.0' = 9 TREES	9 TREES
WEST BUFFER:	1 SMALL TREES/ 15 LF @ 39.1' = 3 TREES	3 TREES
NORTH BUFFER:	1 TREE / 20 LF @ 135.0' = 7 TREES	7 TREES
PARCEL C:		
NORTH BUFFER:	1 TREE / 20 LF @ 18.0' = 1 TREES	1 TREES
SOUTH BUFFER:	1 TREE / 20 LF @ 18.0' = 1 TREES	1 TREES

LANDSCAPE AREA	
SITE AREA	(2.01 AC) 87,750 SF (64.5%) 56,568.5 SF
IMPERVIOUS	
IMPERMEABLE PAVEMENT	26,127 SF
PERMEABLE PAVEMENT (15,669 SF @ 50% CREDIT)	7,834.5 SF
BUILDING	22,607 SF
PERVIOUS/LANDSCAPE AREAS	(35.5%) 31,181.5 SF
PERMEABLE PAVEMENT (15,669 SF @ 50% CREDIT)	7,834.5 SF
LANDSCAPE AREAS	23,347 SF

INTERIOR LANDSCAPE REQUIREMENTS

REQUIRED LANDSCAPE IN VEHICULAR USE AREA (34,846 SF OF VEHICULAR USE AREA @ 20%)	6,939 SF
PARCEL A (20,147 @ 20%):	4,029 SF
PARCEL B (12,968 @ 20%):	2,594 SF
PARCEL C (1,731 @ 20%):	346 SF
PROVIDED LANDSCAPE IN VEHICULAR USE AREA	7,166 SF
PARCEL A:	4,100 SF
PARCEL B:	2,720 SF
PARCEL C:	346 SF

	REQUIRED	PROVIDED
PARKING/VEHICULAR USE (1 TREE / 125 SF @ 6,939 SF)	56 TREES	56 TREES
PERVIOUS AREA NOT ASSOCIATED WITH DRY DETENTION (1 LARGE TREE / 625 SF @ 12,310 SF)	20 TREES	21 TREES
FOUNDATION PLANTING (1 SHRUB / 5 SF @ 5,976 SF)	1,195 SHRUBS	1,234 SHRUBS

NATIVE SPECIES (75% OF REQUIRED MATERIAL):	REQUIRED	PROVIDED
TREES	75% (96/128)	91% (117/128)*
*(INCLUDES 38 PALMS COUNTING AS 12 TREES)		
SHRUBS	75% (896/1,195)	106% (1,266/1,195)

PALMS IN PLACE OF REQUIRED TREES: (TOTAL REQUIRED TREES = 128; 128 X 0.2 = 26 TREES) (TOTAL PALMS PROVIDED = 73; 73 / 3 = 24 TREES)	ALLOWED 20% (26 TREES)	PROVIDED 18.9% (24 TREES)
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LANDSCAPE NOTES

- BASE INFORMATION OBTAINED FROM CIVIL PLANS PREPARED BY CIVIL DESIGN, INC. REVISION DATED 06/10/26.
- ALL INVASIVE SPECIES WILL BE ERADICATED FROM SITE AS REQUIRED BY CODE.
- ALL LANDSCAPE MATERIAL SHALL CONFORM TO THE MOST RECENT STANDARDS AS OUTLINED BY THE "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER.
- SIGHT TRIANGLES SHALL BE PROVIDED AND MAINTAINED BY OWNER CLEAR OF VEGETATION TO PROVIDE UNOBSTRUCTED VISIBILITY BETWEEN 30 INCHES AND 8 FEET ABOVE GRADE.
- UTILITY EASEMENTS SHALL NOT ENCROACH INTO LANDSCAPE BUFFERS MORE THAN 5 FEET OR AS PERMITTED BY CODE.
- FDOT TYPE "D" OR "F" CURB OR WHEEL STOPS TO BE PROVIDED ALONG ALL LANDSCAPE AREAS, INCLUDING DRIVE AISLES AND PARKING SPACES.
- ALL INSTALLATION WORK SHALL BE CARRIED OUT IN A PROFESSIONAL MANNER IN ACCORDANCE WITH STANDARD NURSERY AND INSTALLATION PRACTICES.
- ALL LANDSCAPE AREAS SHALL BE SODDED, MULCHED OR OTHERWISE COVERED WITH GROUND COVER PER THESE PLANS AS LABELED.
- TREES SHOWN ON THIS PLAN ARE GRAPHIC REPRESENTATION ONLY. TREE SPACING IS BASED ON DESIGN REQUIREMENTS AND TREES SHOWN ON THESE PLANS ATTEMPT TO ACCOMPLISH THAT SPACING WHILE MAINTAINING THE REQUIRED SETBACKS FROM UTILITIES. TREES MAY BE FIELD ADJUSTED TO AVOID CONFLICTS WITH DRIVEWAYS AND UNDERGROUND UTILITIES.
- CONTRACTOR TO COORDINATE PLANTING OPERATIONS WITH ALL UNDERGROUND UTILITY PROVIDERS AND CALL "SUNSHINE DIG" / 811 TO FLAG UTILITY LOCATIONS PRIOR TO COMMENCING PLANTING OPERATIONS FOR ANY PORTION OF THE SITE. IF "SUNSHINE DIG" / 811 DOES NOT LOCATE ALL UNDERGROUND UTILITIES ON-SITE, THE CONTRACTOR IS RESPONSIBLE FOR SECURING THESE SERVICES FROM A PRIVATE PROVIDER.
- LANDSCAPE CONTRACTOR TO HAND DIG PLANTING HOLES FOR TREES AND/OR SHRUBS WITHIN FIVE (5') OF ALL FP&L EASEMENTS.
- GROUND MOUNTED MECHANICAL EQUIPMENT TO BE SCREENED PER THESE PLANS INCLUDING AS-BUILT EQUIPMENT LOCATIONS AT TIME OF LANDSCAPE INSTALLATION. CONTRACTOR TO NOTIFY OWNER / OWNER'S REPRESENTATIVE OF ADDITIONAL REQUIRED PLANT MATERIAL QUANTITIES AT TIME OF LANDSCAPE INSTALLATION FOR ADDITIONAL MECHANICAL EQUIPMENT OR RELOCATED EQUIPMENT THAT MAY REQUIRE ADDITIONAL LANDSCAPE SCREENING.
- PLANTINGS ADJACENT TO OVERHEAD LINES TO COMPLY WITH FP&L's "RIGHT TREE IN THE RIGHT PLACE" GUIDELINES FOR MINIMUM SEPARATIONS TO OVERHEAD LINES.

UTILITY SETBACK NOTES

- ALL SETBACK DIMENSIONS SHOWN ON THE PLANS ARE TO BE MET AT THE TIME OF INSTALLATION.
- TREES ARE TO BE INSTALLED WITH A TEN FOOT (10') SEPARATION FROM ANY WATER OR SEWER MAIN AND/OR SERVICE, HYDRANTS, AND LIFT STATIONS, OR WITH A MINIMUM SEVEN FOOT (7') SETBACK IF INSTALLED WITH A ROOT BARRIER SYSTEM. REFER TO THE "ROOT BARRIER" DETAIL ON THE PLANTING DETAILS SHEET FOR INSTALLATION REQUIREMENTS. HOWEVER IN NO CASE SHALL A TREE ENCROACH INTO A UE WITHOUT PRIOR UTILITY PROVIDER APPROVAL AND ONLY SOD CAN BE INSTALLED WITHIN 5' OF ANY WATER METER AND WITHIN 7.5' OF ANY FIRE HYDRANT UNLESS OTHERWISE APPROVED BY THE FIRE MARSHAL AND UTILITY PROVIDER.
- TREES ARE TO BE INSTALLED WITH A TEN FOOT (10') SEPARATION FROM ANY DRAINAGE OR STORM SEWER INFRASTRUCTURE, OR WITH A MINIMUM SEVEN FOOT (7') SETBACK IF INSTALLED WITH A ROOT BARRIER SYSTEM. REFER TO THE "ROOT BARRIER" ON THE PLANTING DETAILS SHEET FOR INSTALLATION REQUIREMENTS.
- WHERE REQUIRED, ROOT BARRIER TO BE INSTALLED WITH A MINIMUM 5' SEPARATION TO THE EDGE OF ALL UNDERGROUND UTILITIES AND INFRASTRUCTURE.
- TREES SHALL BE PLANTED WITH A MIN. 2' SEPARATION BETWEEN ANY ROOT BARRIER (MEASURED FROM THE CENTER OF THE TREE).

LANDSCAPE EXCAVATION & BACKFILL NOTES

- TREE AND SHRUB PLANTING BEDS WHICH FALL WITHIN OR NEAR ROADWAY AREAS SHALL BE COMPLETELY EXCAVATED AND BACK-FILLED WITH TOPSOIL. ALL SHELL-ROCK OR OTHER BASE MATERIALS, AND ALL SUBSOIL AND DEBRIS, SHALL BE COMPLETELY REMOVED FROM BENEATH SUCH PLANTING AREAS, TO A MINIMUM DEPTH OF 36". UPON COMPLETION OF EXCAVATION, LANDSCAPE ARCHITECT OR OWNER SHALL INSPECT THE EXCAVATED AREA PRIOR TO BACKFILLING WITH TOPSOIL.
- ALL TREE AND/OR SHRUB PLANTING AREAS WITHIN 8' OF BUILDING FOUNDATIONS, AND ANY OTHER PLANTING AREAS WHERE SIGNIFICANT BURIED CONSTRUCTION DEBRIS IS ENCOUNTERED, SHALL BE COMPLETELY EXCAVATED TO A MINIMUM DEPTH OF 36". UPON COMPLETION OF EXCAVATION, LANDSCAPE ARCHITECT OR OWNER SHALL INSPECT THE EXCAVATED AREA PRIOR TO BACKFILLING WITH TOPSOIL.

MULCH NOTES

- MULCH SHALL BE GRADE A PREMIUM NATURAL CYPRESS MULCH, OR APPROVED EQUAL, FREE OF FOREIGN MATERIALS AND WEED SEEDS. MINIMUM DEPTH AFTER SETTLING SHALL BE THREE (3") INCHES.

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Pinnacle on Sixth

Lake Worth Beach, FL

Cover Sheet

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Date:	03/31/26
Project No.:	24-043.000
Designed By:	RD/JS
Drawn By:	RD/JS
Checked By:	RD

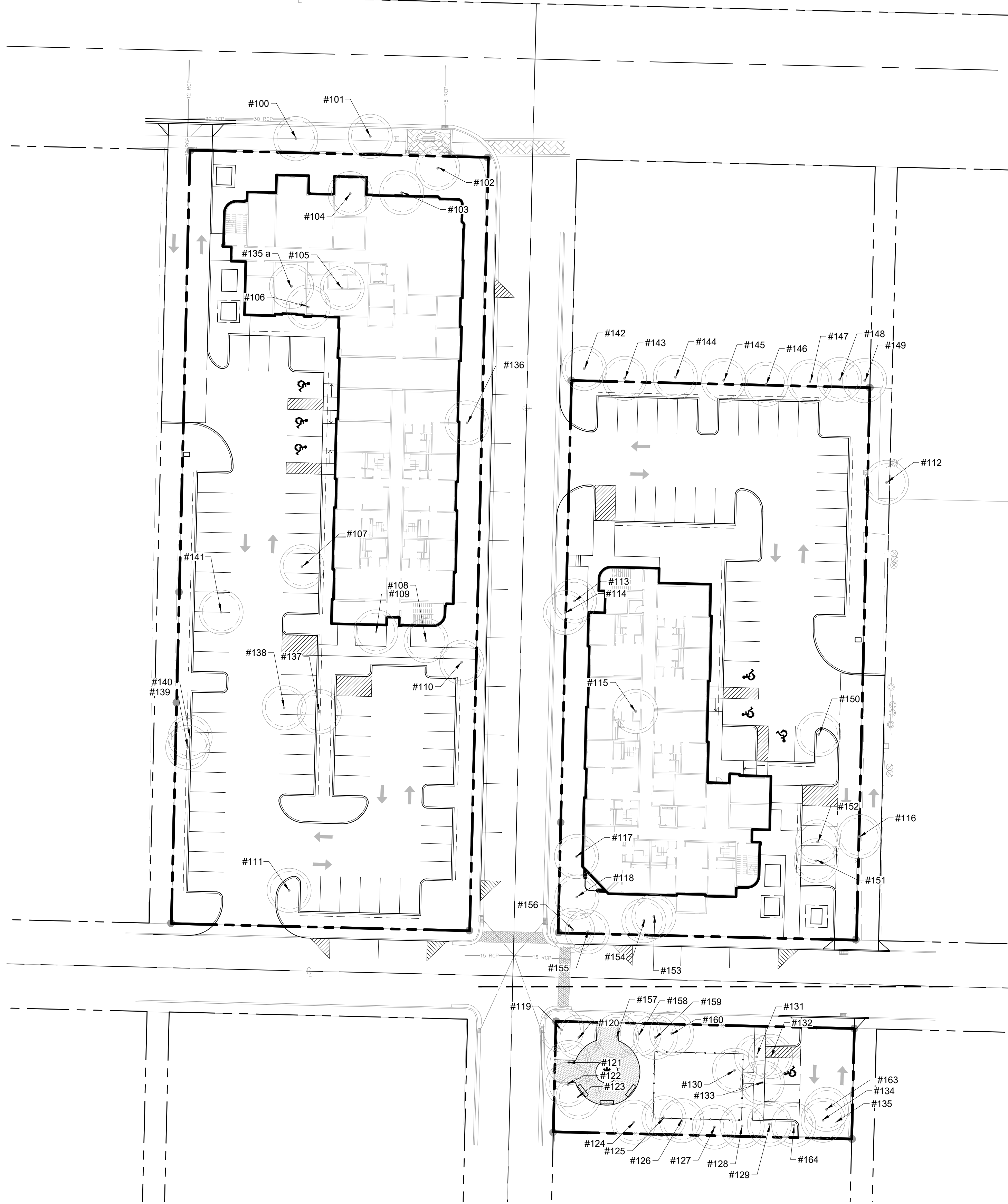
Revision Dates:	
06/12/2026	RESUBMITTAL
07/17/2026	RESUBMITTAL

LA-1

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RESUBMITTAL #1

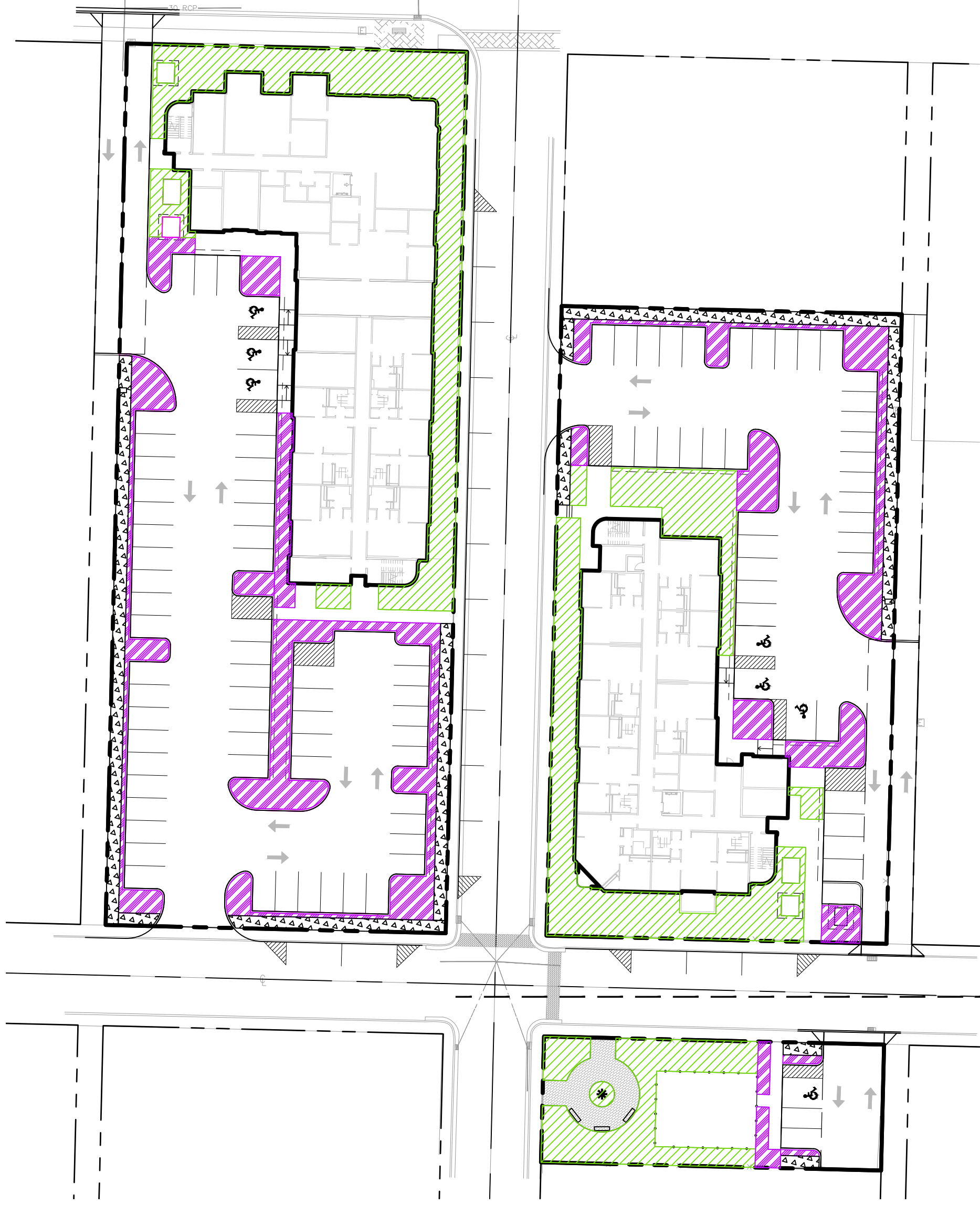
TREE DISPOSITION PLAN



TREE DISPOSITION CHART

Tag #	Species	Size (1)	Condition Rating (Percent)	Condition Rating (Word)	Condition Notes	Proposed Disposition	Notes
100	Live oak	10"	50%	Fair	Codominant leaders, Large diameter aspect ratio first order branches and mechanical injury at the base of the trunk.	N/A	N/A: Not on Site
101	Live oak	12"	50%	Fair	Codominant leaders, mechanical injury on the trunk, and large diameter aspect ratio first order branches.	N/A	N/A: Not on Site
102	Queen palm	26"	40%	Poor	Meandering trunk, mechanical injury near the crown, trunk constriction, and injury at the base of the trunk.	Remove	Mitigate on site; 1 palm
103	White bird of paradise	6"	50%	Fair	Meandering trunk	N/A	Not a Tree
104	Triangle palm	12"	50%	Fair	Trunk constriction and water stress damage at the base of the trunk.	Remove	Mitigate on site; 16' Ht.
105	Strangler fig	96"	50%	Fair	Multiple codominant leaders, mechanical injuries at the base of the trunk, and decay in the main branch union	Remove	Mitigate on site; 96"
106	Sabal palm	13"	60%	Fair		Remove	Mitigate on site; 16' Ht.
107	Mango	22"	50%	Fair	Multiple codominant leaders and mechanical injuries at the base of the trunk from line trimmer.	Remove	Mitigate on site; 22"
108	Queen palm	11"	40%	Poor	Meandering trunk, weak root structure and trunk constriction. Wobbly if you push on it!	Remove	Mitigate on site; 1 palm
109	Queen palm	10"	30%	Poor	Cavities at the base of the trunk, slight trunk constriction and weak root structure. Wobbly when you push it.	Remove	Mitigate on site; 1 palm
110	Java plum	23"	40%	Poor	Multiple codominant leaders with bark inclusion, previously hat racked, and asymmetrical canopy	Remove	Mitigate on site; 1 tree
111	Sabal palm	15"	55%	Fair	Trunk constriction and mechanical injuries at the base of the trunk from line trimmer.	Remove	Mitigate on site; 16' Ht.
112	Sabal palm	14"	70%	Good		N/A	N/A: Not on Site
113	Sabal palm	8"	50%	Fair	Meandering trunk and slight mechanical injuries at the base of the trunk from line trimmer.	Remove	Mitigate on site; 16' Ht.
114	Sabal palm	15"	30%	Poor	In decline, poor canopy growth	Remove	Mitigate on site; 1 palm
115	Coconut palm	24"	50%	Fair	Trunk constriction and small wounds on the whole trunk.	Remove	Mitigate on site; 24' Ht.
116	Sabal palm	13"	55%	Fair	Growing adjacent to utility lines AND chain-link fence.	Remove	Mitigate on site; 16' Ht.
117	Mahogany	23"	45%	Fair	Multiple codominant leaders with bark inclusion at the main branch union, several flush cut wounds, hatracked, injuries on the surface roots, and lion tailed.	Remove	Mitigate on site; 1 tree
118	Mahogany	23"	30%	Poor	Multiple codominant leaders, hatracked, lion tailed, multiple flush cut wounds, and mechanical injuries to the surface roots.	Remove	Mitigate on site; 1 tree
119	Mango	14"	50%	Fair	Multiple codominant leaders, asymmetrical canopy, and mechanical injury on the trunk.	Remove	Mitigate on site; 14"
120	Triangle palm	11"	50%	Fair	Trunk constriction and mechanical injuries on the trunk.	Remove	Mitigate on site; 16' Ht.
121	Pink tabebuia	10"	50%	Fair	Codominant leaders, asymmetrical canopy, fixed galls on each leader and mechanical injury at the base of the trunk.	Remove	Mitigate on site; 10"
122	Pink tabebuia	4"	45%	Fair	Codominant leaders, asymmetrical canopy, and several wounds on the tree	Remove	Mitigate on site; 1 tree
123	Triangle palm	8"	50%	Fair	Trunk constriction much high on the trunk and several wounds on the trunk.	Remove	Mitigate on site; 16' Ht.
124	Fox tail palm	12"	55%	Fair	Trunk constriction, wounds on the trunk, and adventitious roots.	Remove	Mitigate on site; 16' Ht.
125	Fox tail palm	13"	55%	Fair	Trunk constriction, wounds on the trunk, and adventitious roots.	Remove	Mitigate on site; 16' Ht.
126	Fox tail palm	12"	55%	Fair	Trunk constriction, wounds on the trunk, and adventitious roots.	Remove	Mitigate on site; 16' Ht.
127	Coconut palm	21"	50%	Fair	Curved trunk, trunk constriction in multiple locations on the trunk, and several wounds on the trunk.	Remove	Mitigate on site; 21' Ht.
128	Coconut palm	26"	50%	Fair	Trunk constriction in several locations, several wounds on the trunk and curved trunk	Remove	Mitigate on site; 26' Ht.

LANDSCAPE AREA DIAGRAM



LANDSCAPE AREA LEGEND

	BUFFER AREA 3,885 SF
	LANDSCAPE AREA IN VEHICULAR USE AREA 7,166 SF
	PERVIOUS AREA NOT ASSOCIATED WITH DRY DETENTION 12,296 SF

129	Coconut palm	25"	50%	Fair	Curved trunk, trunk constriction, and several wounds on the trunk	Remove	Mitigate on site
130	Coconut palm	25"	50%	Fair	Meandering trunk, several wounds on the trunk, trunk constriction and large wounds near the crown	Remove	Mitigate on site
131	Fox tail palm	14"	50%	Fair	Trunk constriction and adventitious roots	Remove	Mitigate on site; 1 tree
132	Orange geiger tree	5"	45%	Fair	Hatracked	Remove	Mitigate on site; 1 tree
133	Coconut palm	23"	55%	Fair	Trunk constriction, meandering trunk and several wounds on the trunk	Remove	Mitigate on site
134	Mango	6"	50%	Fair	Codominant leaders and planted too deep	Remove	Mitigate on site
135	Wild tamarind	9"	35%	Poor	Hatracked and several wounds and cavities on the trunk	Remove	Mitigate on site; 1 tree
136	Sabal palm	18"	45%	Fair	Abnormal crown, trunk constriction cavities at the base of the trunk and mechanical injuries at the base of the trunk from string trimmer	Remove	Mitigate on site; 1 palm
137	Sabal palm	12"	75%	Good		Remove	Mitigate on site; 16' Ht.
138	Woman's tongue	33"	45%	Fair	Multiple codominant stems with bark inclusions.	Remove	Mitigate on site; 1 tree
139	Paradise tree	9"	45%	Fair	Codominant stems	Remove	Mitigate on site; 1 tree
140	Carrot wood	28"	40%	Poor	Multiple codominant stems, INVASIVE	Remove	No Mitigation Required
141	Wild tamarind	10"	50%	Fair	Multiple codominant leaders and several wounds on the trunk	Remove	Mitigate on site; 10"
142	Green buttonwood	6"	45%	Fair	Central leader removed and shaped spherically	N/A	N/A: Not on Site
143	Live oak	5"	55%	Fair	Central leader was removed and shaped spherically	N/A	N/A: Not on Site
144	Green buttonwood	6"	45%	Fair	Central leader removed and shaped spherically	N/A	N/A: Not on Site
145	Green buttonwood	7"	45%	Fair	Central leader removed and shaped spherically	N/A	N/A: Not on Site
146	Live oak	5"	50%	Fair	Topped and shaped spherically	N/A	N/A: Not on Site
147	Crape myrtle	6"	30%	Poor	Hatracked	N/A	N/A: Not on Site
148	Crape myrtle	6"	30%	Poor	Hatracked	N/A	N/A: Not on Site
149	Crape myrtle	6"	30%	Poor	Hatracked	N/A	N/A: Not on Site
150	Coconut palm	25"	50%	Fair	Curved trunk, trunk constriction, wounds on the trunk, and adventitious roots.	Remove	Mitigate on site; 25' Ht.
151	Mahogany	25"	35%	Poor	Multiple codominant leaders, bark inclusion, Lowest first order branch, cavities in the trunk, hat racked, lion tailed, and asymmetrical canopy.	Remove	Mitigate on site; 1 tree
152	Avocado	13"	50%	Fair	Codominant leaders and asymmetrical canopy	Remove	Mitigate on site; 13"
153	Sabal palm	7"	50%	Fair	Growing against the house	Remove	Mitigate on site; 16' Ht.
154	Mango	3"	50%	Fair	Planted too deep and codominant leaders	Remove	Mitigate on site
155	Tropical almond	7"	50%	Fair	Large diameter aspect ratio first order branch, asymmetrical canopy and growing adjacent to chain-link fence	Remove	Mitigate on site; 7"
156	Sabal palm	7"	50%	Fair	Growing adjacent to chain-link fence and growing under utility lines.	Remove	Mitigate on site; 16' Ht.
157	Christmas palm	12"	50%	Fair	Meandering trunk, Mulch too high on the trunk, several wounds on the trunk, and trunk constriction.	Remove	Mitigate on site; 16' Ht.
158	Triple Christmas palm	11"	55%	Fair	Trunk constriction, several wounds on all 3 trunks, and adventitious roots	Remove	Mitigate on site; 16' Ht.
159	Christmas palm	12"	50%	Fair	Meandering trunk, trunk, constriction, wound at the base of the trunk, and several wounds the trunk.	Remove	Mitigate on site; 16' Ht.
160	Coconut palm	21"	50%	Fair	Meandering trunk several wounds on the trunk, adventitious roots and slight trunk constriction.	Remove	Mitigate on site; 21' Ht.
161	Triple Christmas palm	16"	45%	Fair	Trunk constriction, rubbing adjacent tree and several wounds on all trunks	Remove	Mitigate on site; 1 palm
162	Royal poinciana	7"	40%	Poor	Hatracked and rubbing adjacent palm	Remove	Mitigate on site; 1 tree
163	Starfruit tree	7"	45%	Fair	Multiple codominant leaders, bark inclusion in the main branch union, planted too deep, and several wounds on the leaders.	Remove	Mitigate on site; 1 tree
164	Mango	6"	55%	Fair	Superficial wound from girdling	Remove	Mit. via payment @ \$136/inch
135 a	Carrot wood	26"	40%	Poor	Codominant leaders with bark inclusion, injury at the base of one leader, and asymmetrical canopy; INVASIVE	Remove	No Mitigation Required

MITIGATION REQUIRED	
TREE MITIGATION REQUIRED	
11 TREES (<50% CONDITION)	
189" DBH (>50% CONDITION RATING)	
TREE MITIGATION PROVIDED	
11 TREES @ 2.5" Cal.	
185" (50 Trees @ 1.5"; 44 Trees @ 2.5")	
REMAINING MITIGATION VIA PAYMENT-IN-LIEU	
6" DBH @ \$136 PER INCH	= \$816
TOTAL IN-LIEU PAYMENT = \$816	
PALM MITIGATION REQUIRED	
6 PALMS (<50% CONDITION)	
462' HT. (>50% CONDITION RATING)	
TREE MITIGATION PROVIDED	
6 TREES @ 10' CT.	
630' HT. (35 Palms @ 18' OA HT.)	

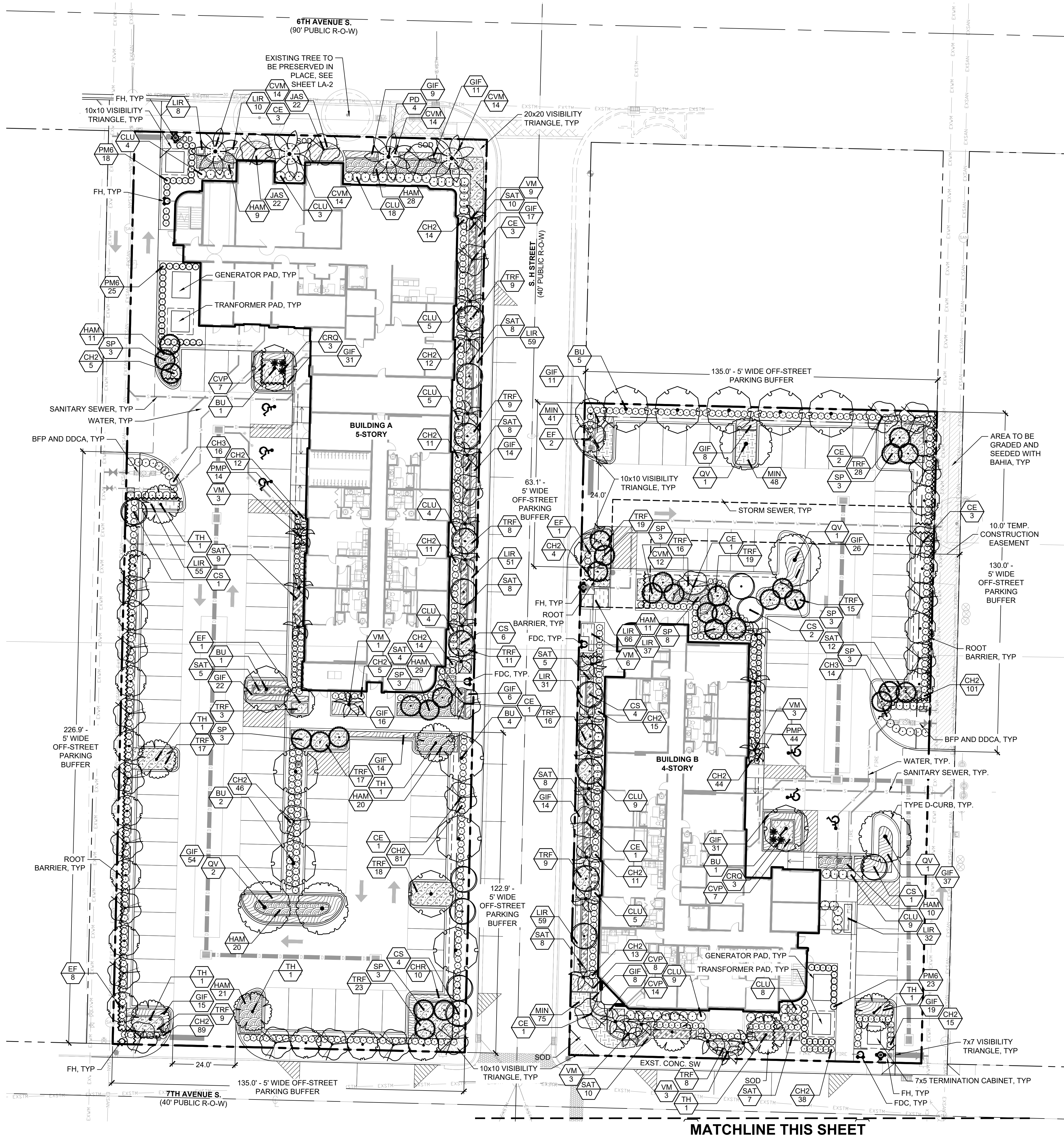
Pinnacle on Sixth

Lake Worth Beach, FL
Tree Disposition Plan

Date: 03/31/26
 Project No.: 24-043.000
 Designed By: RD/JS
 Drawn By: RD/JS
 Checked By: RD

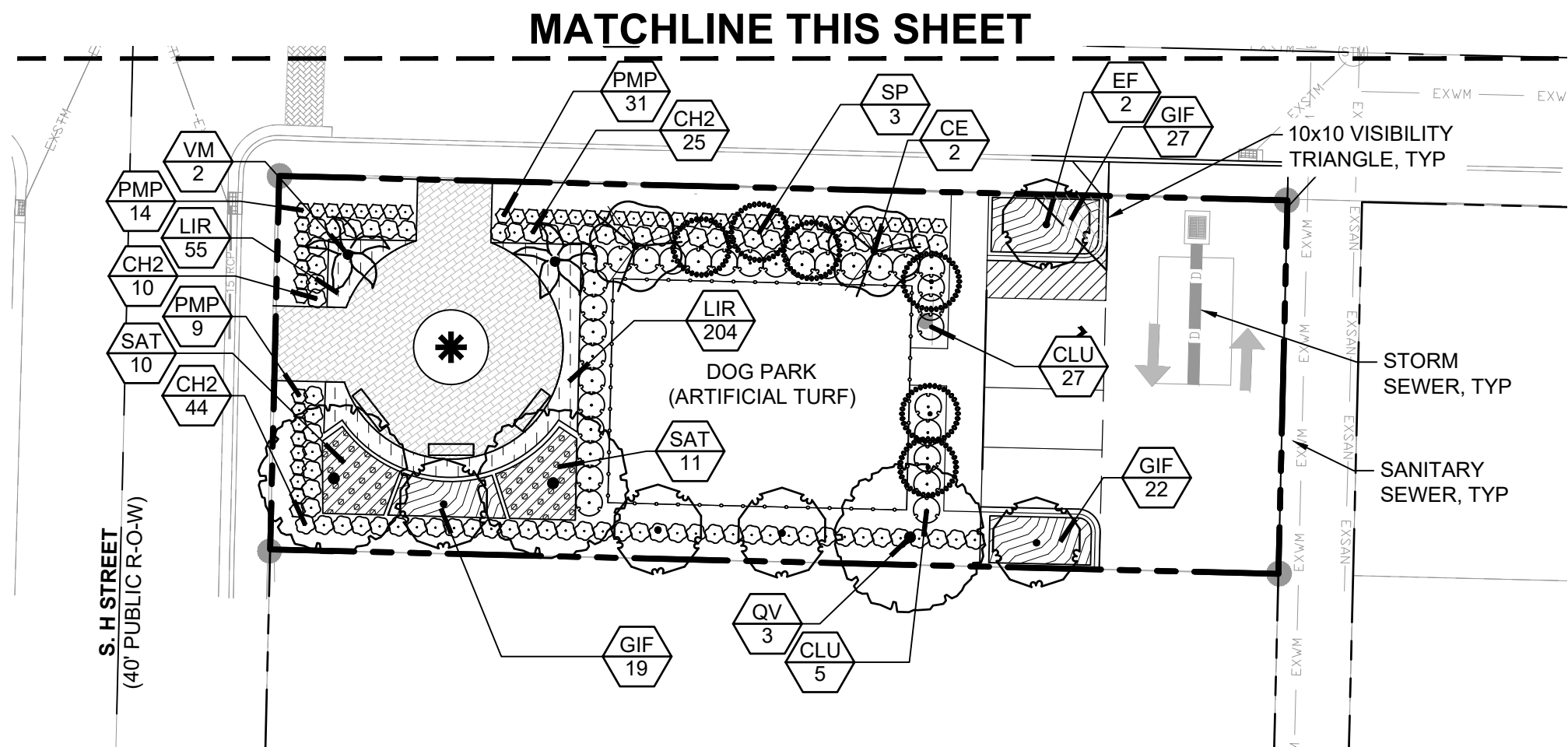
Revision Dates:
 06/12/2026 RESUBMITTAL
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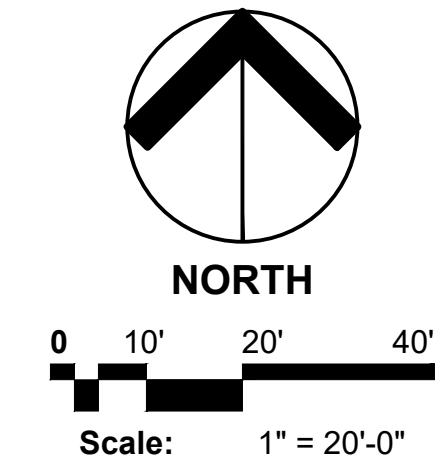
PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME
LARGE TREES		
	BU	Bursera simaruba / Gumbo Limbo Florida #1, 10' Ht. x 4" Spr., 2.5" Cal., Single Straight Trunk, Full Canopy
	QV	Quercus virginiana / Southern Live Oak Florida #1, 18' Ht. x 8" Spr., 6" Cal., Single Straight Trunk, Full and Even Canopy, No Low Crooks
MEDIUM TREES		
	TH	Tabebuia heterophylla / Pink Tabebuia Florida #1, 10' Ht. x 5" Spr., 2.5" Cal., Single Straight Trunk, Full Canopy
PALM TREES		
	PD	Phoenix dactylifera 'Zahidi' / Zahidi Date Palm Florida #1, 12' Cl., 18" O.A. Ht., Min. 9 Fronds, Single Trunk, Full Head, No Scars on Trunk
	SP	Sabal palmetto / Cabbage Palm Florida #1, 10-18' c.t., hurricane cut
	VM	Veitchia montgomeryana / Montgomery Palm - Single Florida #1, 12' Greywood, Single Trunk, Min. 18" O.A. Ht., Single Trunk, Full Head, No Scars on Trunk
SMALL TREES		
	CE	Conocarpus erectus 'sericeus' / Silver Buttonwood Florida #1, 8' Ht. x 3" Spr., 1.5" Cal., Single straight trunk, Full crown
	CS	Cordia sebestena / Orange Geiger Tree Florida #1, 8' Ht. x 3" Spr., 1.5" Cal. Single Straight Trunk, Full Canopy
	EF	Eugenia foetida / Spanish Stopper Min. 8' Ht. x 3" Spr. x 2.5" Cal., 5" Clear Trunk, Single Straight Trunk, Full Canopy
SHRUBS		
	CH2	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum Min. 24" Ht. x 18" Spr., Florida #1, Full to base plants, Unsheared, 24" o.c.
	CH3	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum 60" Ht. x 36" Spr., Florida #1, Full to base plants, Unsheared, 36" o.c.
	CLU	Cusia guttata / Small Leaf Cusia 24" Ht. x 24" Spr., 4" O.C., Full to base plants, Unsheared
	CRO	Citrus augustum 'Queen Emma' / Queen Emma Citrus 15 Gal., 30" Ht. x 30" Spr., Full and Even Foliage, No Scars on Foliage
	PM6	Podocarpus macrophyllus / Southern Yew Florida #1, 6' Ht. x 30" Spr., Full to base and dense.
	PMP	Podocarpus macrophyllus 'Pringles' / Dwarf Podocarpus 16" Ht. x 12" Spr., 24" o.c., Full and Dense Shrub, Full to Base
SHRUB AREAS		
	CHR	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum 24" Ht. x 18" Spr., Florida #1, Full to base plants, Unsheared, 36" o.c.
	CVM	Codiaeum variegatum 'Mammy' / Mammy Croton 24" Ht. x 24" Spr., 24" O.C. Full and Dense Shrub, Full to Base
	CVP	Codiaeum variegatum 'Petra' / Petra Croton 24" Ht. x 24" Spr., 36" O.C. Full and Dense Shrub, Full to Base
	GIF	Ficus microcarpa 'Green Island' / Green Island Ficus Min. 12" Ht. x 12" Spr., 18" O.C.,
	HAM	Hamelia patens 'compacta' / Dwarf Firebush Full even plants, unsheared, 18" Ht. x 18" Spr., 30" o.c.
	JAS	Jasminum volubile / Wax Jasmine Min. 12" Ht. x 18" Spr., 24" O.C. Full and Dense Shrub, Full to Base
	SAT	Schefflera arboricola 'Trinette' / Trinette Dwarf Schefflera Florida #1, Full even plants, unsheared, 18" Ht. x 18" Spr., 36" o.c.
	TRF	Trapa dactyloides / Fakahatchee Grass Florida #1, 36" Ht. x 24" Spr., Fully Dense and Rooted 36" o.c.
GROUND COVERS		
	LIR	Liriope muscari 'Evergreen Giant' / Evergreen Giant Lily Turf 12" Ht. x 12" Spr., 12" O.C., Full to Edge of Pot.
	MIN	Trachypogon asiaticum 'Minima' / Asiatic Jasmine 'Minima' Florida #1, Min. 4" Ht. x Min. 12" Spr., @ 18" o.c., Min. 6 plants per pot. Fully rooted & dense
TURF		
	SOD	Stenotaphrum secundatum 'Floritan' / Floritan St. Augustine Sod Laid flat, No Caps, Rolled and Sanded to create a uniform flat mowing surface, Weed and Disease Free, Laid tight, Staggered joints



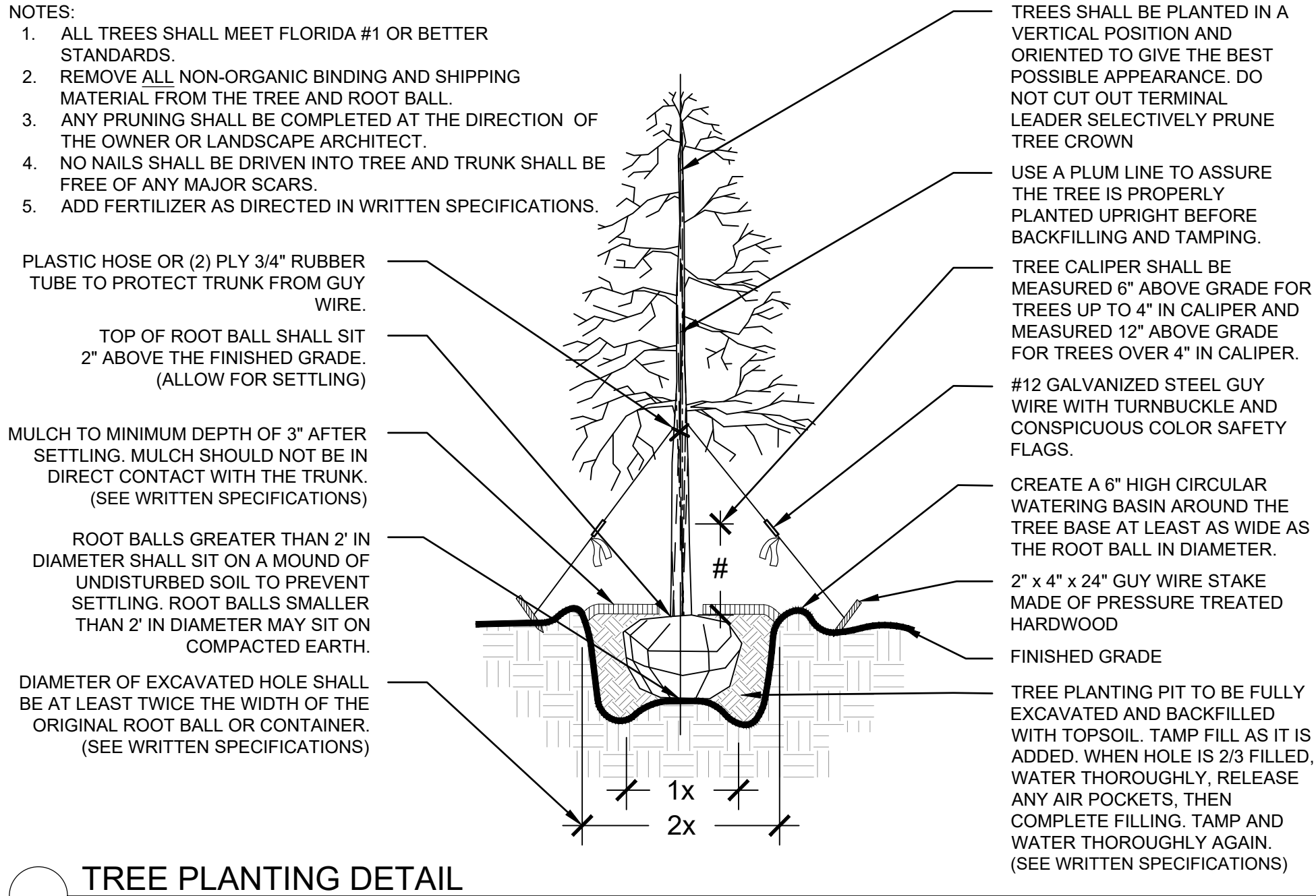
Pinnacle on Sixth

Lake Worth Beach, FL
Landscape Plan

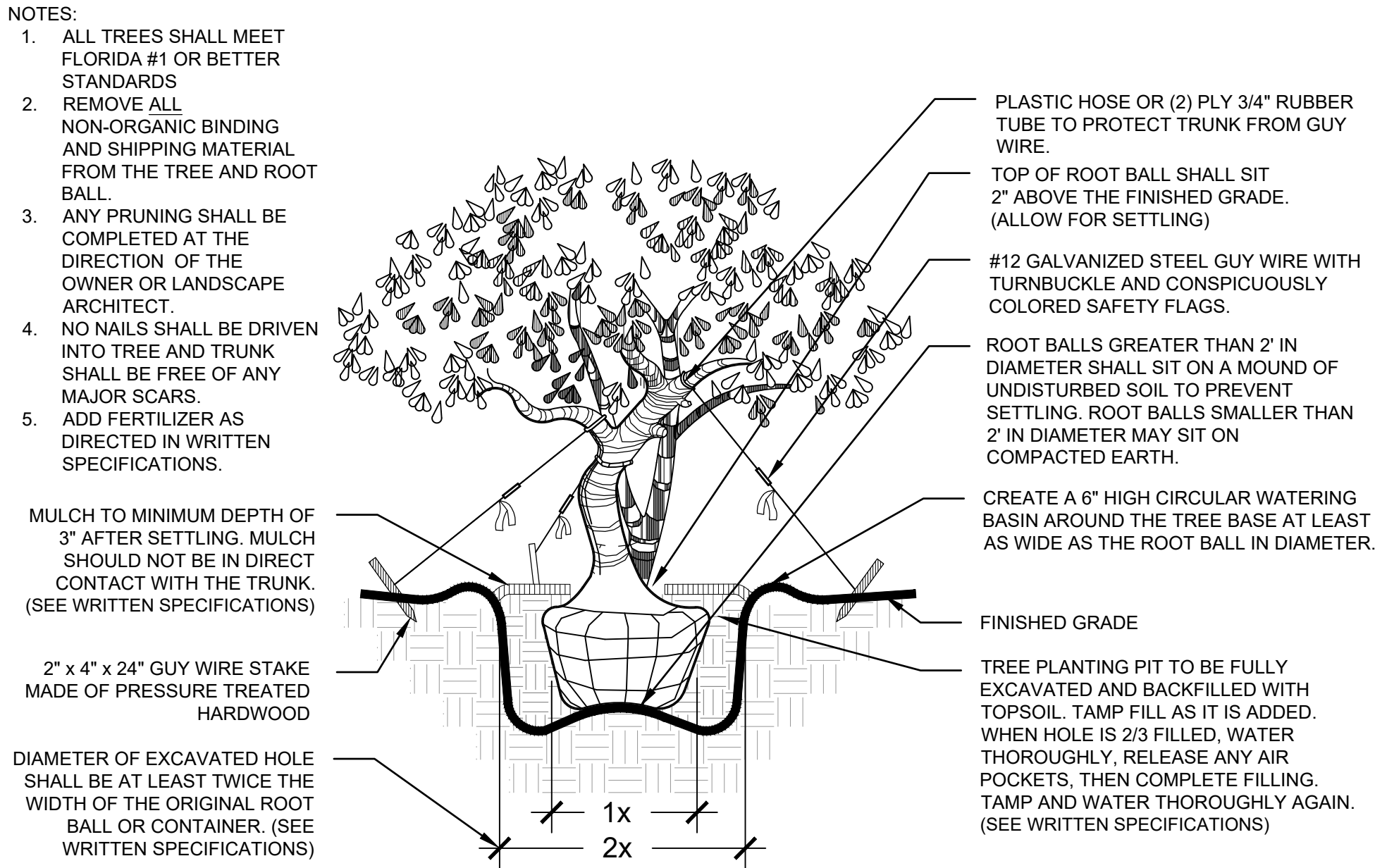


Date: 03/31/26
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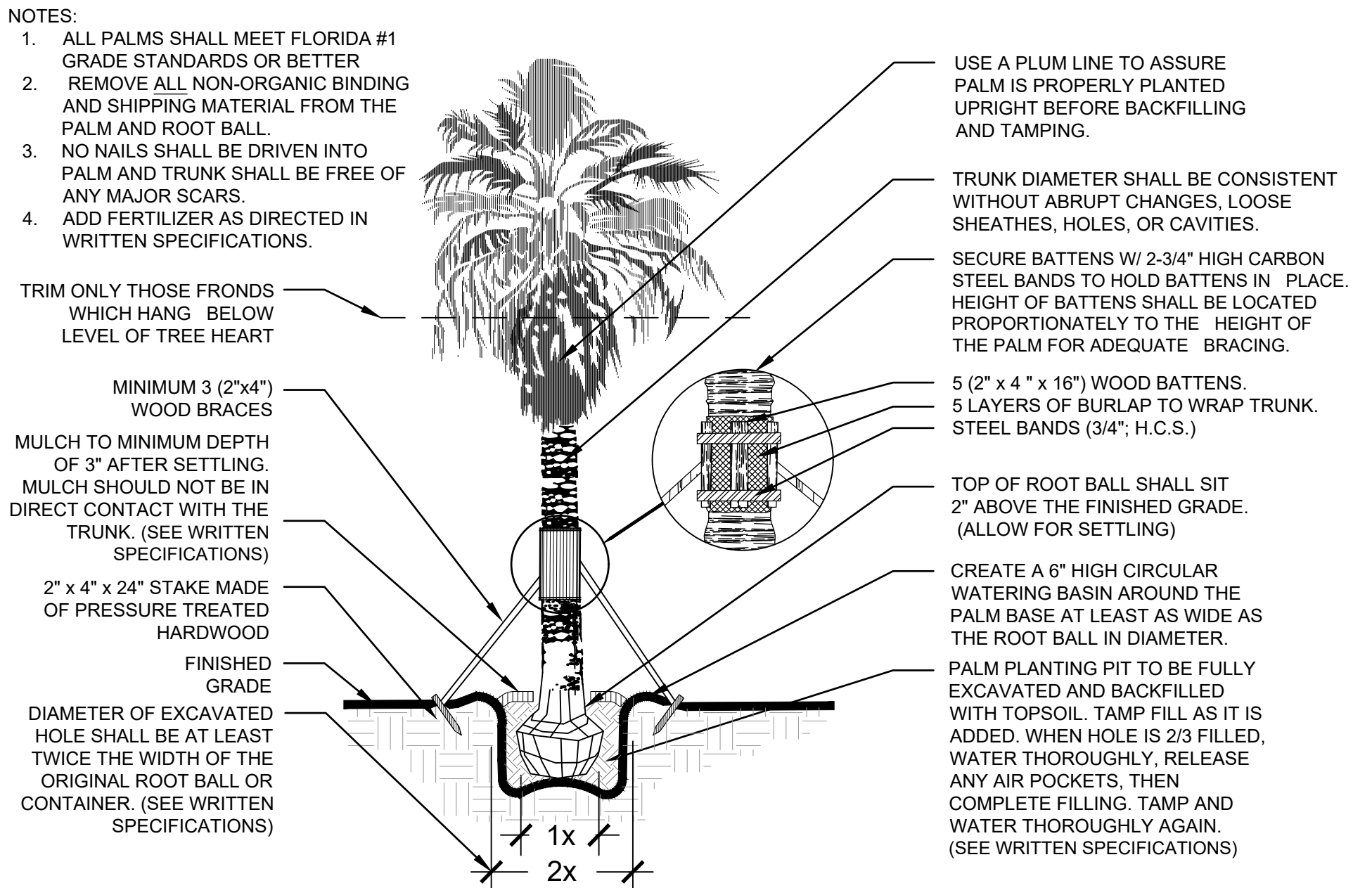
Revision Dates:
06/12/2026 RESUBMITTAL
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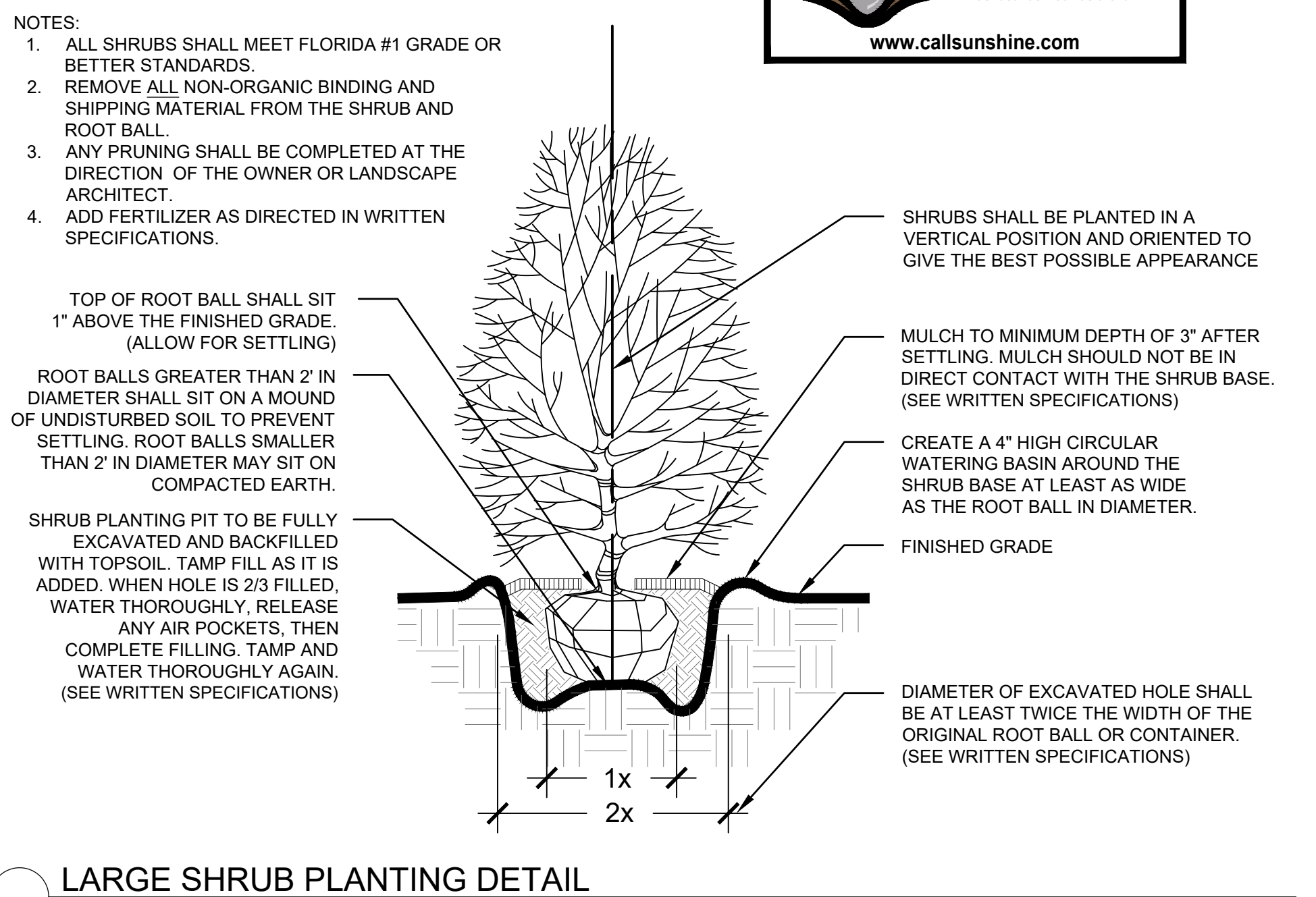
TREE PLANTING DETAIL
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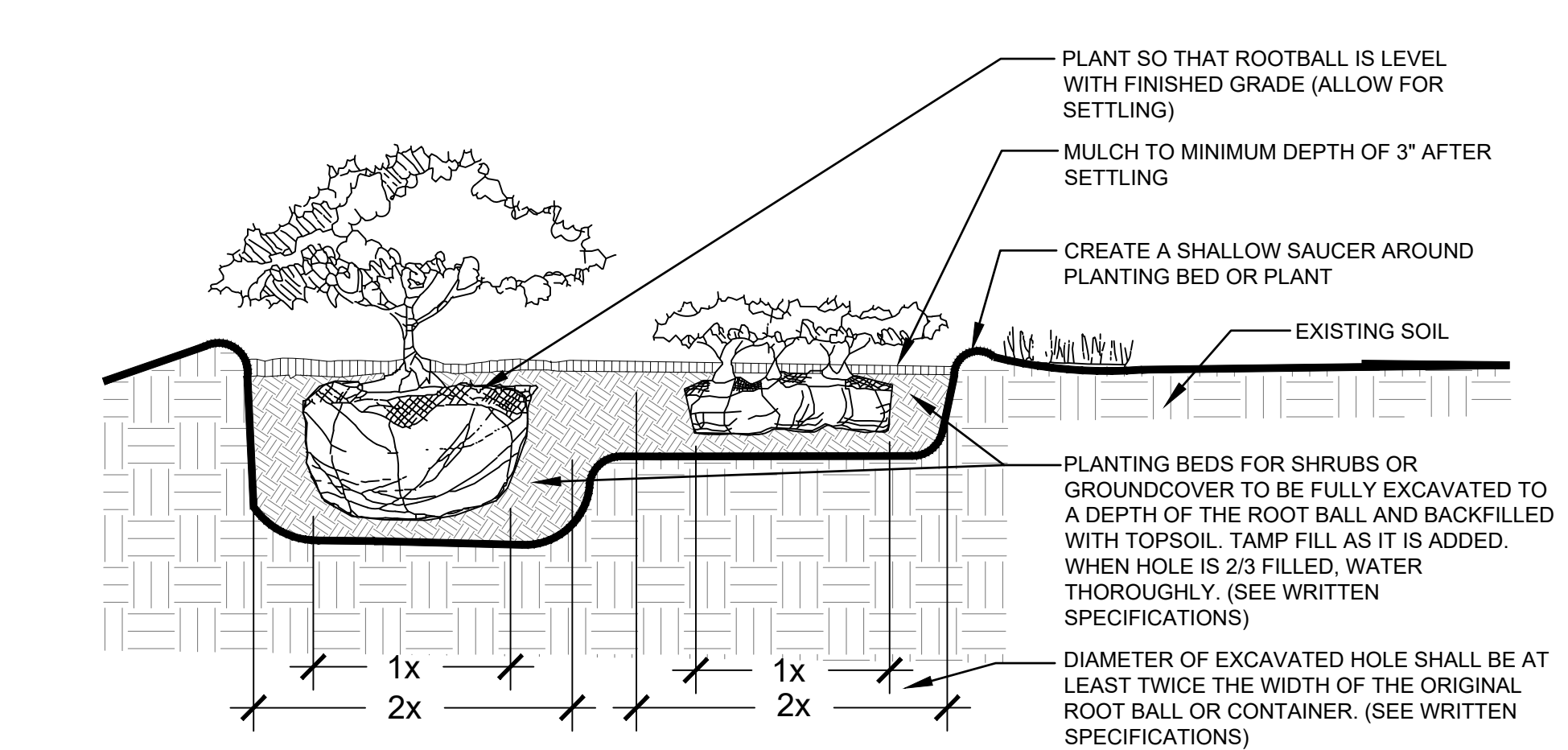
IRREGULAR & MULTI-STEM TREE PLANTING DETAIL
NOT TO SCALE



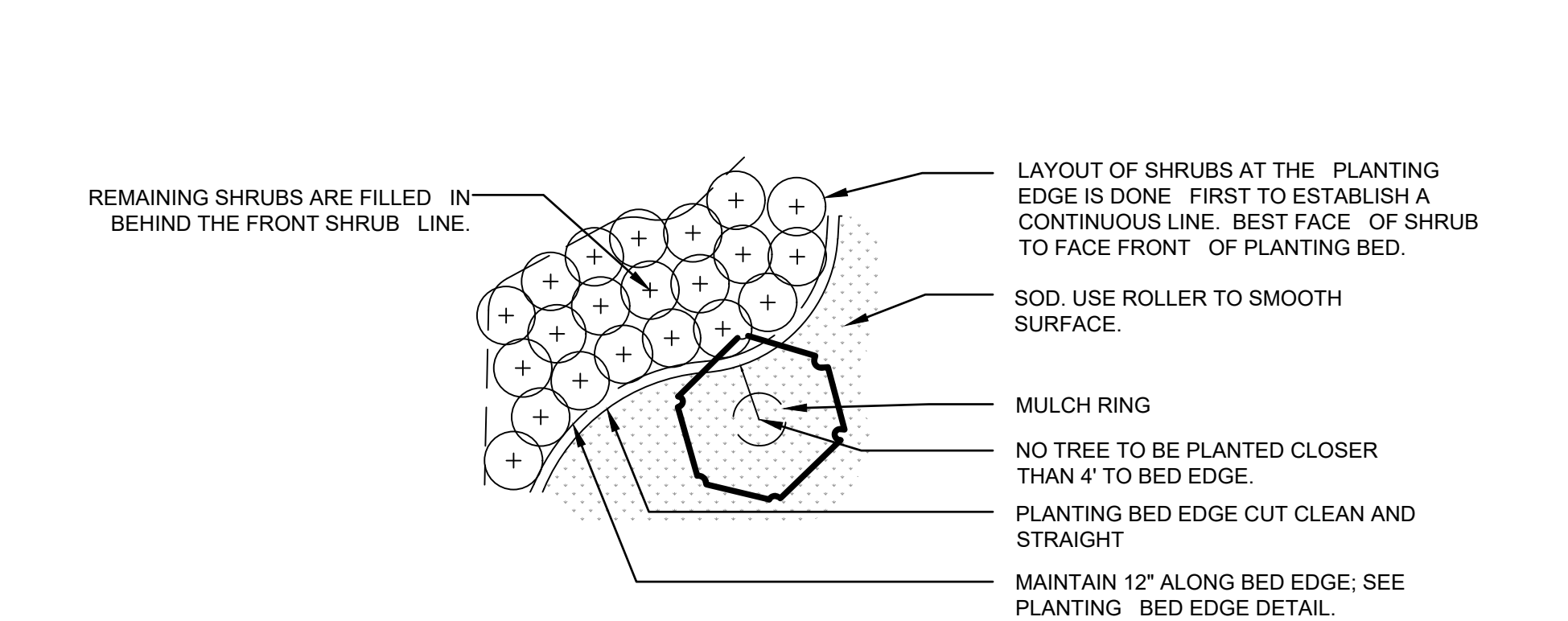
PALM PLANTING DETAIL
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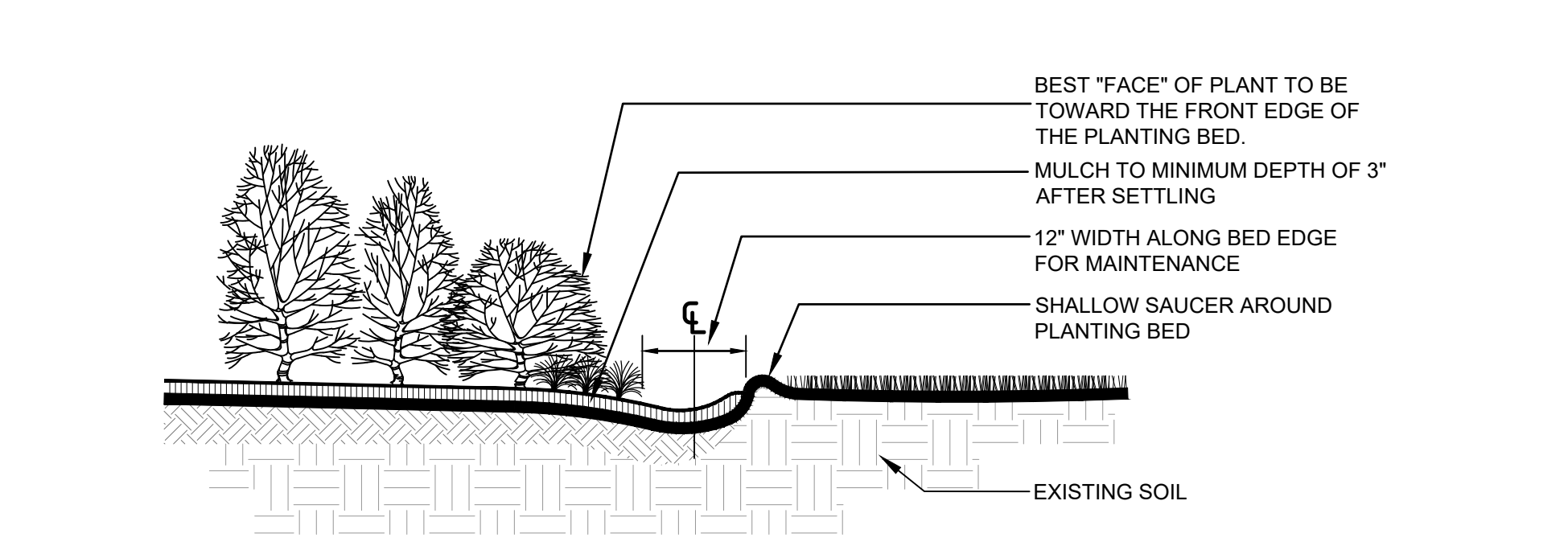
LARGE SHRUB PLANTING DETAIL
NOT TO SCALE



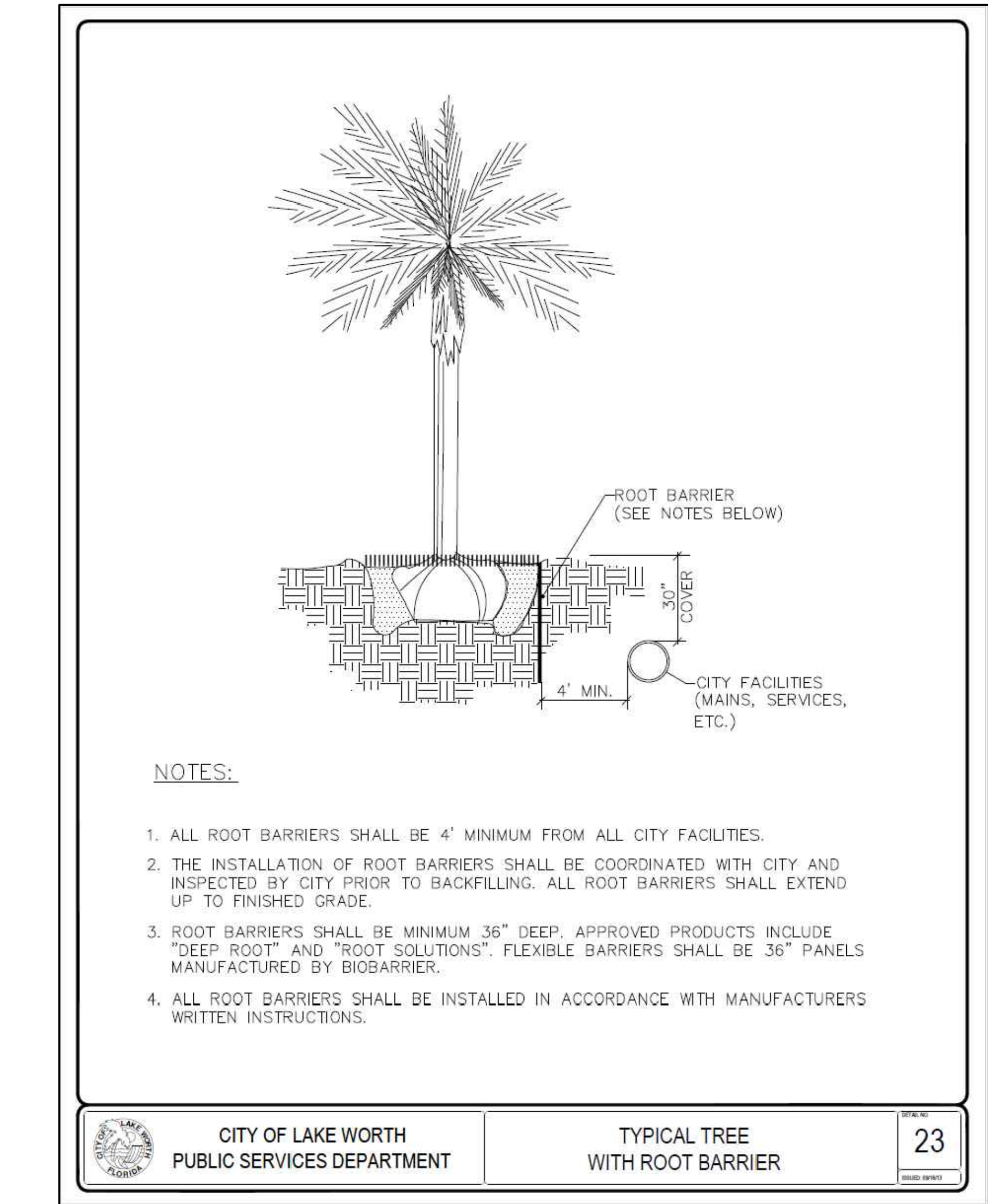
SHRUB AND GROUND COVER PLANTING DETAIL
NOT TO SCALE



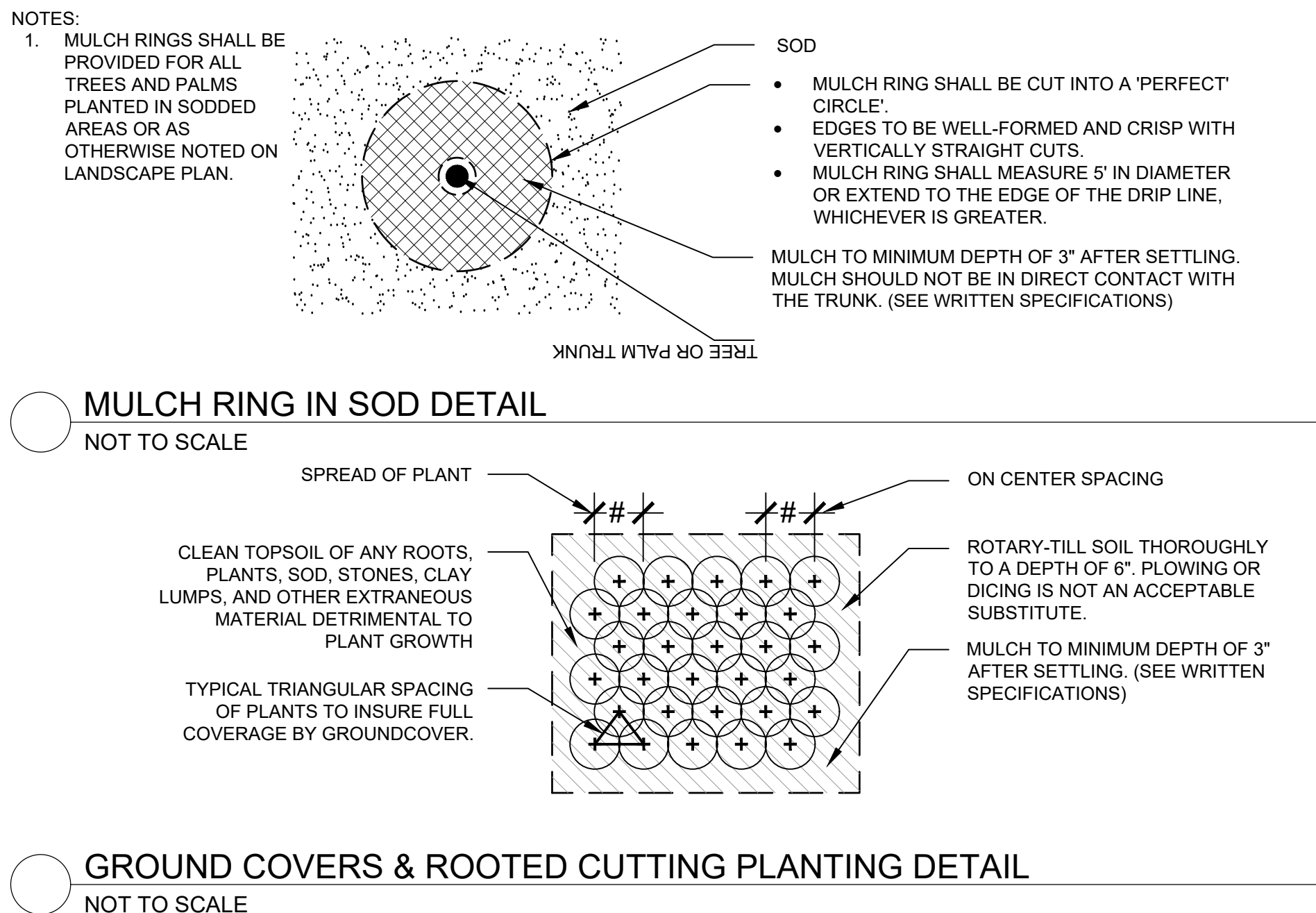
SHRUB & GROUND COVER LAYOUT DETAIL
NOT TO SCALE



PLANTING BED EDGE DETAIL
NOT TO SCALE



MULCH RING IN SOD DETAIL
NOT TO SCALE



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Pinnacle on Sixth

Lake Worth Beach, FL
Landscape Details

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Date: 03/31/26
Project No.: 24-043.000
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Drawn By: RD/JS
Checked By: RD

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SECTION 02950

TREES, SHRUBS AND GROUND COVER

PART I - GENERAL

By bidding on this project and/or signing a contract for landscape work, the Contractor acknowledges that he/she has read and understood these specifications in their entirety, that he/she has inspected the site, and that he/she will abide by all plans, specifications, and conditions found herein. Any perceived conflicts or concerns within the specifications or on the plant list, including unavailability of materials, are to be brought to the attention of the Landscape Architect prior to bid submission.

1.01 WORK INCLUDED

- Contractor shall obtain or ensure that all necessary permits have been granted to the Owner for work on the Owner's properties or in any adjacent easements prior to commencement of work.
- All planting and construction work shall be executed as shown on the provided drawings, schedules, and specifications.
- Any additional work or materials required to install landscape elements as called for on the plans, specifications or plant list shall be provided and installed by the Contractor.
- Finish Grade Elevations: 2 inch below top of pathway edging.
- The Contractor shall be entirely responsible for all work until final acceptance by the Owner. The Contractor shall protect all materials and work against injury and shall provide and maintain all necessary guards for the protection of the public. He shall be held responsible for any negligence during the execution of the work.

1.02 QUALITY ASSURANCE

- All work specified herein shall be performed by a single firm specializing in landscape work. The Landscape Architect and the Owner retain the right to approve any proposed subcontractors prior to awarding the contract.
- Ship landscape materials with certificates of inspection required by governing authorities. Comply with all regulations applicable to landscape materials.
- Package standard products with manufacturers certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agricultural Chemists, wherever applicable.
- Provide trees, palms, shrubs and groundcover grown in a recognized nursery in accordance with good horticultural practice. Materials must be healthy and vigorous, free of disease, insects, eggs, larvae, and defects such as decay, rot, knots, sun scald, injuries, abrasions, marring, or unusual form. No collected material will be permitted unless specific written approval is granted.
- Do not make substitutions. If specified landscape material is not available at time of planting, submit proof of non-availability and provide a list of proposed equivalent material. Once authorized, adjustments to the contract will be made. Owner is not financially responsible for unauthorized substitutions.
- Plant materials of larger size than specified may be used if acceptable to Landscape Architect and if sizes of root balls are increased proportionately. Installation of larger sizes will not increase contract amount unless specifically authorized by Owner.
- Owner and Landscape Architect reserve the right to inspect, approve or reject at any time plant materials or work either at the nursery or at the site which does not meet the condition in the plans, plant list or specifications.
- The Contractor shall be responsible for planting the landscape in complete accordance with all applicable codes, ordinances, and laws. Any modification made to conform with said codes, laws and ordinances, after the bid is awarded, shall be completed at the Contractor's expense at no additional cost to the Owner.

1.03 SUBMITTALS

- Certification: Submit certificates of inspections as required by governmental authorities, and manufacturers or vendor's certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
- Submit seed analysis, certified statements of seed mixture required, stating botanical and common name, percentage by weight, and percentage of purity, germination, and weed seed for each grass seed species.
- Planting Schedule: Submit planting schedule showing schedule dates for each type of planting in each area of site.
- Maintenance Schedule: Submit typewritten procedures for maintenance of landscape work, through final acceptance.

1.04 DELIVERY, STORAGE AND HANDLING

- Packaged Materials: Deliver packaged materials in original containers showing manufacturer's guaranteed name and name of manufacturer. Protect materials from damage and deterioration during delivery and storage.
- Trees, shrubs, and ground covers: Provide freshly dug trees, palms, and shrubs. Do not prune prior to delivery. All plants shall be handled and stored so that they are adequately protected from drying out, from sun or wind burn, and from any other injury at all times. Any plant determined to be wilted or burned may be rejected at any time, whether in the ground or not. Plants shall be handled only by their containers or root balls, not by stems or trunks. Trees that are scraped or scarred during delivery, storage, or planting will be rejected. The on-site storage area shall be approved prior to the delivery of any plant materials. Do not bend or bind plants in such a manner as to damage bark, break branches, or destroy natural shape. Provide protective covering during delivery.
- Deliver plant materials in good preparation for planting are complete, and plant immediately. Roots or balls of all plants shall be adequately protected at all times from sun and/or wind. Balled and burlapped (B&B) plants that cannot be planted immediately upon delivery shall be set on the ground and protected by having soil, wet peat, or other acceptable material covering the roots or balls keeping them moist.
- Do not remove container-grown stock from containers until planting time.
- Label at least one tree, one palm and one shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name, if requested by Owner.
- Fod: Soil: Time delivery so that sod will be placed within 24 hours after stripping. Protect sod against drying and breaking of rolled strips.

1.05 JOB CONDITIONS

- Proceed with and complete landscape work as rapidly as portions of site become available.
- Utilities: Determine location of overhead and underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Forty eight (48) hours prior to digging, call the appropriate Utility Authority to have all utilities identified and marked in order to avoid conflicts.
- Protection of Existing Structures: All existing buildings, walks, walls, paving, piping, and other items of construction and planting already completed or established shall be protected from damage. All damage resulting from negligence shall be repaired or replaced, including but not limited to marks on pavers and cracks within existing walkways caused by the Contractor. The Owner may, at his discretion have any damage repaired by others and subsequently costs back-charged to the Contractor.
- Protection of Existing Plant Material: The Contractor shall be responsible for all unauthorized cutting or damage to existing trees or shrubs caused by careless operation of equipment, stumping of materials, etc. This shall include compaction by driving or parking inside the drip-line of any tree, or spilling of oil, gasoline, or other deleterious materials within the drip-line of any tree. No materials shall be burned.
- Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Landscape Architect before planting.

PART II - PRODUCTS

2.01 TOPSOIL

- The Contractor is required to obtain a soil sample and perform a soil analysis test to determine the existing soil composition and conclude whether it complies with the composition criteria below.
- Where topsoil does not meet the specified limits within the project site, it shall be furnished. Throughout all parts of site where finish grades and contour lines differ from existing contour lines, bring to finish grade contours shown on "Grading Plan."
- Topsoil shall be friable, fertile soil with representative characteristics of local soils. It shall be free of heavy clay, marl, stone, extreme lime, plant roots, refuse and/or solid waste, sticks, brush, construction demolition debris, and any other deleterious materials. There shall be no noxious weeds or weed seeds (i.e., nut grass, Bermuda grass and the like). In no case shall there be more than five percent (5%) by dry weight of clay lumps or stones larger than 1". It shall test in the pH range of 6.0 to 7.2 and shall contain no substance that will impede plant growth. The Contractor shall have topsoil laboratory tested at his expense and approved by Landscape Architect or Owner prior to material delivery.

Topsoil shall conform to the following specifications:

COMPONENTS	DRY WEIGHT MEASURE	PARTICLE SIZE
Organic Matter	2% - 7%	
Silt/Clay	2% - 10%	< 0.074 mm
Sand	85% - 98%	0.075 - 3.00 mm
Gravel	0% - 5%	4.75 mm - 1 inch
The analysis shall also show the following ranges:		
Soluble salt	2 - 1.0mmhos/cm	
Nitrogen	25-150 PPM	
Phosphorus	26 - 39 PPM	
Potassium	50 - 250 PPM	
Calcium	500 - 2500 PPM	
Magnesium	50 - 500 PPM	
Iron	2.5 - 25 PPM	
Manganese	2.5 - 25 PPM	
Zinc	2.5 - 25 PPM	
Copper	1.3 - 5 PPM	
Boron	0.5 - 1.5 PPM	
Sulphur	15 - 200 PPM	
Chlorine	less than 100 PPM	
Sodium	less than 10	
Nematodes	none	

2.02 SOIL AMENDMENTS AND FERTILIZERS

- Peat Moss: Peat moss shall be a commercial, baled sphagnum material, free of woody material, minerals, or foreign matter, with a pH range of 3.0 - 5.5.
- Sand: Sand shall be clean, sharp, and free of all deleterious material.
- Lime: Natural limestone (Dolomite) containing not less than 85% of total carbonates, ground so that not less than 90% passes a 10-mesh sieve and not less than 50% passes a 100-mesh sieve.
- Humus Soil Conditioner: Consisting of yard trimmings and biosolids co-compost.
- Fertilizer: Fertilizer shall be a commercial grade, granular, slow release "pre-plant" type fertilizer.
 - Fertilizer shall be delivered to the site in the original unopened container, bearing the manufacturer's guaranteed analysis. Any opened, caked, or damaged fertilizer will be rejected.
 - Tree, palm, shrub and grass fertilizer shall be "UF (University of Florida) Formulated" product 8-2-12 or 8-2-13 with minor elements as an all-purpose fertilizer, or equal, and applied according to the manufacturer's direction.
 - Application of fertilizer shall be consistent with the current recommendations of the Green Industries - Best Management Practices.
 - Fertilizer shall be applied by an individual who has successfully completed the GI-BMP program and holds a current Urban Fertilizer License or as required by the State and Local Ordinances.

2.03 WATER

- All water necessary for planting and maintenance shall be of satisfactory quality to sustain adequate growth of plants and shall not contain harmful, natural or man-made elements detrimental to plants.

2.04 OTHER LANDSCAPE PRODUCTS

- Mulch: Mulch shall be shredded Melaleuca, Eucalyptus, Grade "A" Pine Bark Nuggets, or approved equal, free of foreign materials and weed seeds. Minimum depth after settling shall be 3".
- Guying and Bracing: Tree guying and bracing shall be the responsibility of the Contractor in accordance with the planting details to insure stability and maintain plants in an upright position.
- Anti-desiccant: Anti-desiccant shall be "Wiltpro" or equal, if specified on plans.
- Tree Wound Paint: Tree wound paint shall be an asphaltic base paint containing an antibacterial agent, specially prepared for tree surgery work.
- Super Absorbent Polymer: Terra Sorb® or approved equal as packaged in 3 oz. Handy Pac composed of synthetic acrilamide copolymer, potassium, acrylate. Particle size of 1.0 mm to 3.0 mm and absorption rate of 300 times its weight in water, if specified on plans.

Apply dry, using the following amounts:

- For trees and palms up to 36" diameter root ball, use one 3 oz. Handy Pac.
- For trees and palms over 36" diameter root ball use two 3 oz.
- Handy Pacs: Broadcast throughout planting hole and backfill as per manufacturers specifications.

For container grown plants:

Container Size	Application Rate
1 Gallon	1 Handy Pac / 9 Containers
3 Gallons	1 Handy Pac / 4 Containers
7-10 Gallons	1 Handy Pac / 2 Containers
20 Gallons	1 Handy Pac / 1 Container

2.05 PLANT MATERIAL

- Plant list is part of this specification section. The Contractor shall be responsible for furnishing and installing all plant materials shown on the drawings and plant list. In case of conflict between the two documents, the drawings shall rule.
- Quality: Trees, palms, shrubs, and other plants shall be Florida #1 or better as defined in the latest edition of Grades and Standards for Nursery Plants, Florida Department of Agriculture and Consumer Services. Multi-trunked trees will not be accepted unless they are specifically specified in the planting plans. All plants shall have a normal habit of growth and shall be sound, healthy, and vigorous. Trees shall have normal well-developed branching structures and vigorous root systems that are not root or container bound.
 - Balled and burlapped plants (BB or b&b) shall be dug with firm, natural balls of earth, of sufficient depth and diameter to include the fibrous and feeding roots. Plants with cracked, dry, or broken balls will not be accepted, nor will plants with root balls of insufficient size.
 - All plants, other than those collected on site, shall be nursery grown in accordance with good horticultural practices and under climatic conditions similar to the site for at least two years. Transplanting or root pruning shall have taken place during growth.
- Size: Plant sizes shown in the plant list are minimums. When a plant size is given by height and spread or by container size, all specifications are minimums to be met or exceeded. All trees and shrubs shall be measured when their branches are in a normal position. Spread dimensions specified refer to the main body of the plant and not from extreme branch tip to tip. Height is measured from the ground line to the average height of the canopy. Measurement does not include any terminal growth; the container or root ball is also not included.

Unless otherwise specified, the determining measurement for trees shall be caliper, which shall be measured 6" above the ground for trees up to 4" in caliper, and 12" above the ground for trees over 4" caliper.

2.06 GRASS MATERIALS

- Types: Sod type shall be as specified on the provided landscape plan and associated plant schedule.
- Dimensions: The sod shall be taken up in commercial size rectangles, preferably 12-inch x 24-inch.
- Measurement: Sod shall be measured on the basis of square footage. Contractor shall be responsible for complete coverage based on the square footage shown on plans; therefore, Contractor shall factor in cutting and shrinkage of materials.
- The sod shall be sufficiently thick to provide a dense stand of live grass. The sod shall be live, mature and uniformed, at the time of planting. It shall be a soil mat of sufficient thickness, at least 2" thick, adhering firmly to the roots to withstand all necessary handling. It shall be free of weeds and other grasses. It shall be planted as soon as possible after being dug, and shall be shaded and kept moist from the time it is dug until it is planted. After approval, the area from which the sod is to be harvested shall be closely mowed and raked as necessary to remove excessive top growth and debris.

2.07 REJECTION, SUBSTITUTION, AND RELOCATION

- All plants not conforming to the requirements herein specified shall be considered defective and such plants shall be marked as rejected and removed from the site whether in the ground or not, at the Contractor's expense. Such removal shall take place immediately and new plants shall be brought in as replacements. The plant materials must meet all applicable inspections required by law.
- The Owner or Landscape Architect also reserves the right to require that plants be relocated after installation, if their initial installation does not conform to the plans or the intent of the plans, or if the original location poses an unforeseen threat to other facilities, human life, health, or safety, or to site utilities. Such relocation shall be at the Contractor's expense.

PART III - EXECUTION

3.01 GENERAL

- Proceed with and complete landscape work as rapidly as portions of the site become available.
- No planting shall be done until all operations in conjunction with the installation of the sprinkler system have been completed, final grades have been established, planting areas have been properly graded and prepared.
- Adverse Conditions: When conditions potentially detrimental to plant growth are encountered during work, such as rubble or refuse fill, adverse drainage conditions, or obstructions, notify Owner or Landscape Architect before planting.
- Work Scheduling: Work is to be scheduled to establish a logical sequence of steps for completion of each type and phase of landscape work, in such a way as to correspond with, and avoid damage and conflict with, other disciplines on site.
- Establishment: Planting of trees, palms, shrubs and other plants only after final grades are established, and prior to sodding or lawn establishment. If such planting must be done after lawn work, protect lawn/sod areas during planting and promptly repair any resulting damage.
- Timing:
 - Planting work shall not be started until the final subgrade has been established, berms have been constructed and final finished grading completed.
 - Under no conditions shall work be done if weather or soil conditions are not satisfactory.
- Clear-up:
 - At all times during the construction and installation, the site shall be maintained in a clean, orderly and safe condition. Streets and pavements shall be kept clean. Materials and equipment for planting work shall be limited to the quantity required for the particular phase of work currently underway on the job site.
 - Protect landscape work and materials from damage due to landscape installation and maintenance operations, operations by other contractors and trades, and trespassers. Maintain protection during installation, Maintenance and Establishment periods. Treat, repair or replace damaged landscape work as directed.

3.02 SOIL PREPARATION

- Grading and soil preparation work shall be performed only during periods when best results can be obtained. If the moisture content of the soil is high enough that work would damage soil structure, grading and tilling operations shall be suspended.
- Before mixing in soil amendments, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth. Apply herbicide for weed control as needed.
- Mix specified soil amendments and fertilizers with topsoil at rates specified. Delay mixing of fertilizer if planting will not follow placing of planting soil within a few days.

- For planting beds, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.

- Mix lime with dry soil prior to mixing of fertilizer.
- Prevent lime from contacting roots of acid-loving plants.

- Unless drawings indicate otherwise, berms shall not exceed a 3:1 slope. Berms near buildings or in potentially troublesome drainage situations shall be checked for correct drainage by the project Engineer or Owner prior to planting.
- Free and shrub planting beds which fall within or near parking lot areas shall be completely trenched and back-filled with topsoil. All shell-rock or other base materials and all subsoil and debris, shall be completely removed from beneath such planting areas, to a minimum depth of 24".
- All tree and/or shrub planting areas within 36" of building foundations, and any other planting areas where significant buried construction debris is encountered, shall be excavated to a minimum depth of 24" and backfilled with topsoil as specified elsewhere in these specifications.

3.03 TILLING

- Before mixing, clean soil of roots, plants, clay lumps, stones in excess of 1" in diameter, and other extraneous or potentially harmful materials.
- After all soil conditioning (and topsoil if called for on plans) has been spread at specified rates, the areas to be planted should be thoroughly rotary-tilled to a depth of six (6) inches. Plowing or dicing is not an acceptable substitute for rotary-tilling.

- If the sprinkler system is installed after grading and tilling is completed, the backfill shall be retilled in the affected areas.
- When the subsoil, grading, topsoil addition, soil conditioning, and tilling have been accomplished, all areas so treated shall be compacted and settled by application of heavy irrigation to a minimum depth of twelve (12) inches. Erosion scars shall be repaired.

3.04 FINE FINISH GRADING

- When preliminary grading has been completed and the soil has dried sufficiently to be readily worked, all lawn and planting areas shall be graded to the elevations indicated on the Engineering Plans. The top four (4) inches shall be completely free of stones larger than one (1) inch. Grading for individual plants shall be uniform levels or slopes between points where elevations are given. Positive drainage away from buildings shall always be maintained. Surface drainage shall be directed as indicated on the drawings by remodeling surfaces to facilitate the natural run-off of water. All depressions where water will stand, all voids, erosion, settled trenches and excavations, and all ridges and rises shall be amended and/or removed leaving a smooth, even finish grade. If additional amended topsoil is required to accomplish the intent of this specification, it shall be according to the foregoing specifications for topsoil.
 - All area shall be graded so that the final grades are 2" below adjacent paved areas, sidewalks, valve boxes, mowing strips, clean-outs, drains, etc., with appropriate adjustments in varying soil thicknesses. The intent is for water always to drain away from paving into lawn/sod areas.
 - Eliminating all erosion scars prior to beginning planting.
 - The Owner and/or his representative shall approve all final finish grades prior to planting.

- Prior to fine grading or the installation of plant material the Contractor shall obtain certification that the project area is at the grade levels proposed by the Civil Engineer or Landscape Architect from a licensed Surveyor. The Contractor shall fine grade the lawn and planting areas to bring the rough grade up to final finished grade allowing for thickness of sod and/or mulch depth.

3.05 PLANTING TREES AND PALMS

- Layout individual tree locations and areas for multiple plantings. Stake all locations and outline areas, then secure Landscape Architect's acceptance before the start of planting work.
- Prior to preparation of tree pits, ascertain the location of all electrical cables, all conduits, all utility lines, oil tanks and supply lines, so that proper precautions may be taken not to disturb or damage existing and proposed utilities. Properly maintain and protect existing utilities. Should such underground or overhead obstructions be encountered that interfere with planting, the Contractor will inform the Landscape Architect or Owner's representative and shall be consulted as to the adjustment of the location of plants to clear such obstruction or the relocation of the obstruction.
- Tree pit locations shall be staked by the Contractor and approved by the Owner or Landscape Architect before digging. Pits shall be excavated to the depth and width indicated and all subsoil removed.
- Protect all areas from excessive compaction by foot traffic or machinery when bringing trees to the planting area.
- All excavated tree pits shall have vertical sides with roughened surfaces and shall be of a size that is at least twice the width of the original plant container or ball. In all cases the holes shall be large enough to permit handling and planting without damage to the roots or root ball.
- Excess soil shall be removed or utilized as directed by Owner or the Owner's representative. If the excess soil will not be used, it is the responsibility of the Contractor to remove and dispose of the discarded soil off site in an acceptable manner.
- Tree pits shall be backfilled with a topsoil mixture as specified elsewhere in these specifications. Palm tree pits will be backfilled with a mixture of up to 95% sand and 5% organic material.
- Add fertilizer to tree pits as specified elsewhere in these specifications.
 - Set balled and burlapped stock on a layer of 50% native soil and 50% topsoil compacted to a 6" depth. Loosen burlap from top of sides of the ball but no burlap shall be pulled from underneath. Remove non-organic binding material (if any) from tree ball. Immediately cut any damaged roots with clean shears. Using a plumb to assure that the tree is properly upright, begin filling the hole and tamping the fill material. When the hole is 2/3 filled, water thoroughly and probe with a stick to be sure that no air pockets remain. Re-plumb, complete filling the hole, re-slope, and water again.
 - Set container-grown stock as above, taking care not to damage roots when removing the container
- During planting, do not cover the top of the root ball with the soil mixture. All rope, wires, burlap mesh etc., shall be removed from the root ball. No synthetic burlap is allowed on any plant material, as required. Forty eight (48) hours prior to planting, the tree shall be planted so that the top of the root ball is 2" above final grade. Allow for settling. Any trees resting deeper or higher must be either reset or replaced at the discretion of the Owner or Landscape Architect; such work shall be at the Contractor's expense.
- Create a watering basin around each tree at least as wide as the root ball in diameter formed by a circular curb or raised edge of 6" high.
- Each planting basin shall be mulched to a minimum depth of 3" (after settling). Mulch shall not be applied until the tree has been thoroughly watered and two days have elapsed. Mulch should be placed so that it is not in direct contact with trunks.
- All trees are to be staked or guyed per these specifications. All stakes shall be painted a conspicuous color or shall be flagged for visibility and public safety; guy wires shall be flagged.
- Palms shall be planted per above specifications.

3.06 PLANTING SHRUBS, VINES, AND GROUND COVERS

- The location of all plants, bed outlines and all other areas to be planted shall be clearly marked with agricultural gypsum or landscape marking paint then approved by the Owner or Landscape Architect before any holes are dug.
- No planting shall be done until the area concerned has been satisfactorily prepared in accordance with these specifications.
- No more plants shall be distributed in the planting area on any work day than can be planted and watered in that day.
- Unless otherwise indicated, all plants shall be planted in pits, centered as called for on the plant list, and set in 24" depth of topsoil as specified elsewhere in these specifications to such depth that the soil line of the plants will match the surrounding grade after settling. Plants shall be planted in a vertical position and oriented to give the best possible appearance or relationship to adjacent structures or features. Remove all inorganic containers or binding. All damaged roots shall be cut away cleanly. Planting soil shall be placed and compacted carefully to fill all voids and avoid root injury. When the hole is 2/3 filled, water thoroughly. The hole shall then be filled to finish grade and a shallow saucer shall be formed around each bed. After settling, soil shall be added as needed to bring the hole to grade level.
- Establishment: Planting of trees, palms, shrubs and other plants only after final grades are established, and prior to sodding or lawn establishment. If such planting must be done after lawn work, protect lawn/sod areas during planting and promptly repair any resulting damage.
- Timing:
 - Planting work shall not be started until the final subgrade has been established, berms have been constructed and final finished grading completed.
 - Under no conditions shall work be done if weather or soil conditions are not satisfactory.
- Glean-up:
 - At all times during the construction and installation, the site shall be maintained in a clean, orderly and safe condition. Streets and pavements shall be kept clean. Materials and equipment for planting work shall be limited to the quantity required for the particular phase of work currently underway on the job site.
 - Protect landscape work and materials from damage due to landscape installation and maintenance operations, operations by other contractors and trades, and trespassers. Maintain protection during installation, Maintenance and Establishment periods. Treat, repair or replace damaged landscape work as directed.

3.02 SOIL PREPARATION

- Grading and soil preparation work shall be performed only during periods when best results can be obtained. If the moisture content of the soil is high enough that work would damage soil structure, grading and tilling operations shall be suspended.
- Before mixing in soil amendments, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful or toxic to plant growth. Apply herbicide for weed control as needed.
- Mix specified soil amendments and fertilizers with topsoil at rates specified. Delay mixing of fertilizer if planting will not follow placing of planting soil within a few days.

3.08 PRUNING

- All pruning shall be done in the presence of, and with the approval of, the Owner or

Landscape Architect. Only clean, sharp tools designed for the purpose shall be used. The goal of pruning is always to preserve and enhance the natural character of the plant. Pruning shall be done per modern horticultural practice (see National Arborist Standards, latest edition).

- Pruning shall be limited to the minimum necessary to remove injured twigs, branches, and limbs to compensate for root loss suffered during digging and transplanting, and to thin and shape shrubs and trees. In no case shall more than 1/3 of the branching structure be removed. Damaged, scarred, frayed, split, or skinned twigs, branches, or limbs shall be pruned back to the next sound outside lateral bud, branch or limb. The terminal bud or leader shall never be removed.
- Pruned trees and shrubs to retain required height and spread. Remove the minimal amount of wood necessary on flowering trees and shrubs. Remove only dead or dying fronds from palms. Cuts over 3/4" in diameter shall be treated with tree wound paint; all exposed living tissue shall be covered.
- Existing Trees: If indicated on drawings, Contractor shall prune and thin existing trees on site. The use of climbing spurs is prohibited. All diseased, dead branches and those interfering with healthy plant growth shall be removed. Also, remove root suckers, low branches, and others as directed by the Owner or Landscape Architect. Cuts shall be flush with the trunk or limb and shall be painted with tree paint. Remove any nails, wires, etc. fastened to the tree.

3.09 PLANTERS - DECORATIVE OR STRUCTURAL

- If specified, landscaping in planters shall be installed using the following method:

- Install 4" deep layer of fine crushed stone in bottom of planter.
- Install filter fabric over stone layer. Turn up edges of fabric all around.
- Install planting soil mix over filter fabric to within 3/32" of top for planter. Do not compact the soil.
- Install plant material as specified elsewhere in these specifications.
- Install 3" of mulch over planting soil.

3.10 SODDING NEW LAWNS

- The Contractor shall add all areas indicated and noted on the drawings. No sodding shall occur until areas to be sodded are cleared of any rough grass, weeds and debris, the ground brought to an even grade and specified amendments have been added. See details for specific amendments as per sod type.
- Whenever a suitable area has been graded and is ready for sodding the Contractor shall, when directed by the Landscape Architect, proceed with the sodding of the available areas. Sodding shall be incorporated into the project at the earliest practical time in the life of the contract. No sod which has been cut for more than seventy two (72) hours shall be used unless specifically authorized by the Landscape Architect or Owner after his careful inspection thereof. Any sod which is not planted within twenty four (24) hours after cutting shall be stacked in an approved manner and maintained properly moistened.
- The sod shall be placed on the prepared surface, with edges in close contact, and shall be firmly and smoothly embedded by light tamping with appropriate tools. Sod shall be rolled with 1,000 lbs. roller unless waived by the Landscape Architect or Owner.
- Where sodding is used in drainage ditches, sod panels shall be set in a staggered pattern, such as to avoid a continuous seam along the line or curb. Offsets of individual strips shall not exceed six (6) inches. At the inside of the curbs, sod shall be laid squarely and evenly.
- On areas where the sod may slide, due to height and slope, the Landscape Architect or Owner may direct that the sod be pegged, with pegs driven through the sod blocks into firm earth, at suitable intervals.
- Any pieces of sod which, after placing, show an appearance of extreme dryness shall be removed from the work.
- Where placement of new sod abuts existing sodded areas, new sod must be placed in such a manner as to produce an even transition to existing sodded areas.
- It shall be the responsibility of the Contractor to bring the sod edge in a neat, clean manner to the edge of all paving and shrub areas.

PART IV MAINTENANCE, ESTABLISHMENT AND WARRANTY PERIODS

4.01 MAINTENANCE AND ESTABLISHMENT PERIOD

- The Maintenance Period shall begin immediately after each plant is planted, and the Contractor shall continuously maintain all areas involved in this contract during the progress of the project.
- The Establishment Period shall begin on the first day after all planting and installation of all landscape elements is completed and initially accepted. The Contractor shall continuously maintain all areas from initial acceptance until final acceptance by the Owner. The Establishment Period shall continue for not less than ninety (90) continuous calendar days. The Establishment Period shall have an Establishment Period of not less than nine hundred and eighty (180) continuous calendar days. The Establishment Period will end at the time the project is given final acceptance. An inspection shall be made by the Owner or Landscape Architect to accept the completed work and issue a determination of substantial completion. Inspections may be performed on all or partially completed phased work under the Contract, as directed by the Owner.
- Maintenance of new plantings shall consist of, but not necessarily be limited to, pruning, watering, cultivating, weeding, mulching, tightening or replacing guys and stakes, resetting plants to proper grades or upright positions, furnishing and applying sprays as necessary to combat insects and disease, litter control, rolling, fertilizing and replanting.
- Planting areas and plants shall be protected at all times against damage of any kind for the duration of the maintenance and establishment period. If any plants are injured or damaged, they shall be treated or replaced as directed by the Owner or Landscape Architect at no additional cost. The Contractor is responsible for acts of vandalism or theft during the maintenance and establishment period unless this responsibility is assumed in writing by another party.
- Restrict and vehicular traffic from all lawn and planting areas after seeding and planting operations. Erect signs and barriers if required and remove when lawn and plantings are well established and accepted by Owner.
- The Contractor shall be responsible for maintaining adequate protection of the site. Areas damaged by the Landscape Architect's men or equipment, or the men or equipment of his Subcontractor's, shall be repaired at the Landscape Contractor's expense.
- The Contractor is responsible for keeping all plant materials adequately watered after installation even if the irrigation system is not operational. Plants shall receive a thorough watering immediately after planting. Afterwards, plants shall be watered during the maintenance and establishment periods per the requirements set forth in "Water Requirements for Planting" and "Watering Program" sections. Shrubs and Trees in Florida", distributed by South Florida Water Management District. In those areas where a permanent irrigation system will not be provided, the Contractor is responsible for implementing the Watering Program identified in the Landscape Plans.
- The Landscape Contractor is responsible for keeping all plant materials adequately fertilized throughout the maintenance and Establishment Periods. Fertilizer shall be applied at a rate to keep plant materials healthy. All fertilizer shall be done under the direction of a licensed fertilizer operator.
- The Landscape Contractor shall control disease and pest infestations in the planting area. Upon approval, the Contractor shall implement the control measures, exercising extreme caution in using hazardous materials and taking all necessary steps to protect others on and near the job site. All disease and pest control shall be done under the direction of a licensed disease and pest control operator.
- Herbicide Weed Control: All landscape areas shall be free of nut grass, torpedo grass, and other noxious weeds until final acceptance of work.

- "Round-up" shall be applied to all planting areas as needed and determined on-site by the Owner for weed control. Apply per manufacturers specifications.
- "Ronstar" pre-emergent or OWNER - approved equal, shall be applied 2 weeks before planting. Apply per manufacturers specifications.
- Apply "Fusilade" in all areas where torpedo grass has emerged. Apply per manufacturers specifications.
- Apply "Basagran" or "Marage" in all areas where nutgrass has emerged. Apply per manufacturers specifications.

- Mowing of turf will commence ten (10) days after installation. The height of cut will be 3". After the first cut, the Contractor shall adjust the frequency of mowing so that at each operation no more than 1/3 of the grass blade is removed per cutting.
- If the lawn surface becomes uneven or develops any low spots or cups in the sod at any time during the maintenance or establishment periods, contractor to provide clean sand to fill all low spots and gaps to level the lawn surface. Roll the lawn immediately afterwards with a 1,000-lb. roller. Low spots and other irregularities shall be corrected by leveling the lawn again, using the same procedure until a uniform level lawn surface is provided. Between the 15th and 20th day of the Establishment Period, the Contractor shall re-sod all spots or areas within the lawn where normal turf growth is not evident. Turf must be well established and free of bare spots and weeds to the satisfaction of the OWNER or Landscape Architect prior to final acceptance. All planted areas other than lawn shall be weeded at intervals of not more than ten (10) days.
- Application of fertilizer to be done between the fortieth (40) and fiftieth (50) day of the establishment period. Landscape Architect or Owner are to be notified a minimum of forty eight (48) hours in advance.
- Improper maintenance or poor condition of any planting at the time of the termination of the scheduled Establishment Period may cause postponement of the final acceptance of the contract. Any material found to be dead, missing, or in poor condition during the establishment period shall be replaced immediately. Maintenance shall be continued by the Contractor until the work is acceptable.
- Inspection and Final Acceptance:

- In all cases the Landscape Architect will perform an initial and final inspection at the beginning and end of the Establishment Period, respectively. It is the responsibility of the Contractor to notify the Owner or Landscape Architect of the beginning and end of this period and to submit a written request for an inspection ten (10) days in advance.
- Following inspection(s), Landscape Architect will prepare a listing of outstanding items to be addressed prior to final acceptance. Final acceptance will be given once the listed outstanding items are completed, and the work performed to the satisfaction of the Landscape Architect and OWNER.
- Any material that is 25% or more dying shall be considered dead and must be replaced at no charge. A tree shall be considered dead when the main leader has died or when 25% of the crown is dead. A tree that has suffered significant leaf drop but shows signs

of life may be left for later re-inspection. Such trees shall be subject to removal and replacement at any time up to and including the first re-inspection, as requested by the Owner or Landscape Architect. The Warranty Period for such trees shall not begin until after the second re-inspection.

4.02 WARRANTY PERIOD

- Under a different agreement is reached in writing between the Owner and the Contractor, all trees and other plant material, including ground covers, installed under this agreement shall be guaranteed to live and grow, and shall be warranted against defects, death and unsatisfactory growth for a period of one (1) year from the day of final acceptance of contract work.
- Noting landscape elements shall also carry a one (1) year guarantee on materials, labor, and workmanship.
- Material found to be dead or in poor condition within the Warranty Period shall be replaced by the Contractor within fifteen (15) days of written notification by the Owner's representative. The Owner or Landscape Architect shall be the sole judges as to the condition of the material.
- Materials and labor involved in the replacing of materials shall be supplied by the Contractor at no additional cost to the Owner.
- Soil Testing: Should plant materials show yellowing or other signs of soil and/or nutritional problems, the Owner or Landscape Architect may request soil testing and analysis. Such testing will be at the expense of the Contractor.
 - Soil problems (as revealed by testing) shall be corrected by application of corrective chemicals and nutrients, removal of soil, or other measures as agreed upon by all parties. All such measures shall be at the Contractor's expense unless clear evidence establishes that the soil problem is not pre-existing and is caused by factors beyond the Contractor's control.
 - Replacement and Conditions:
 - Materials will be replaced as many times as

Tree Protection Plan

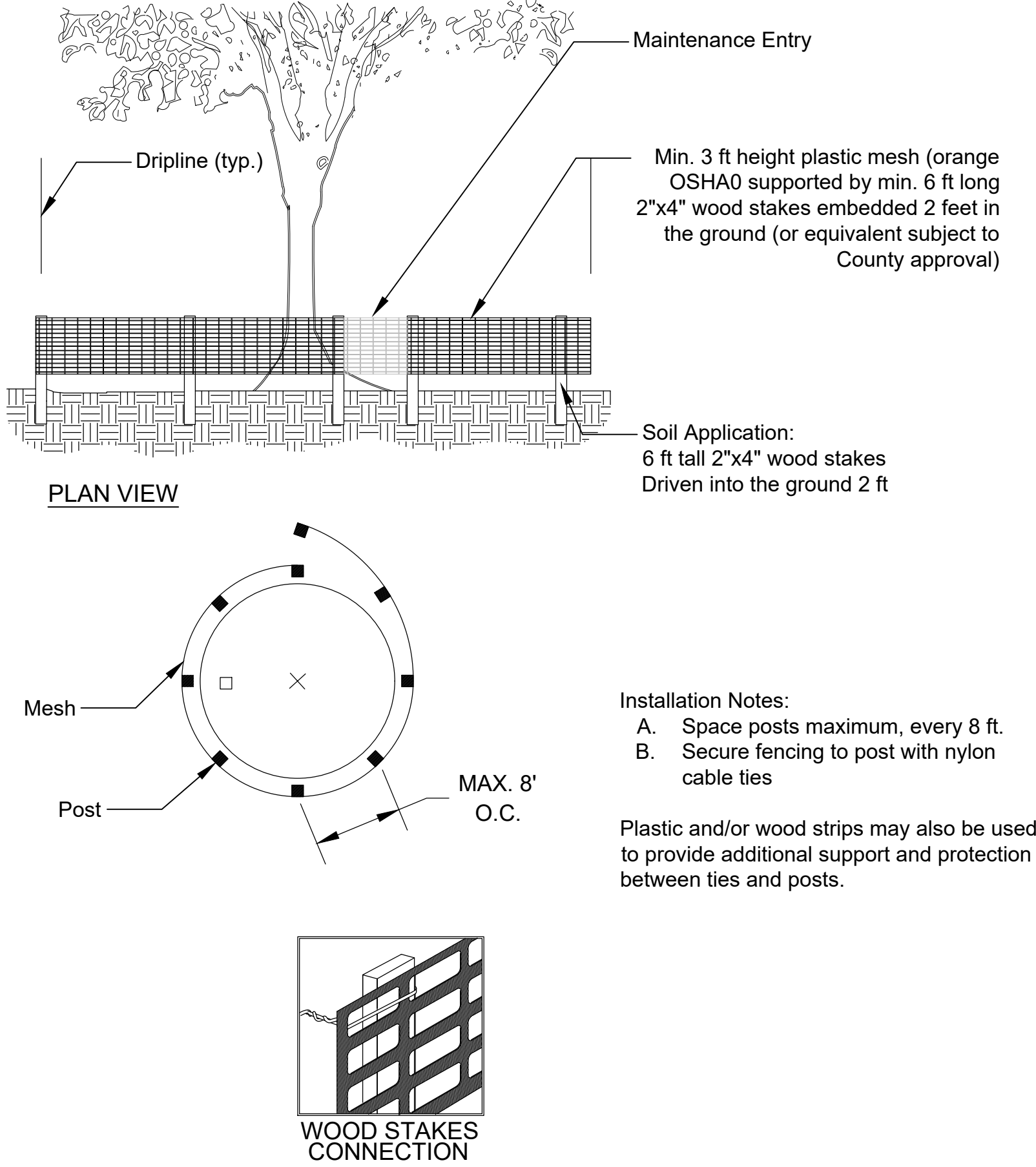
Prior to clearing any of the property for development, the contractor will do the following items:

Clearly identify and tag all trees using either plastic ribbon tied around the tree trunk or a tag that is attached to the tree trunk. The numbers shown on each tag shall correspond to the number identified on the Tree Disposition Tabular and/or the Tree Survey.

Prior to site clearing and tree removal, trees to be preserved, mitigate, relocated on-site, relocated off-site, or removed shall be identified using different color plastic ribbon or tag.

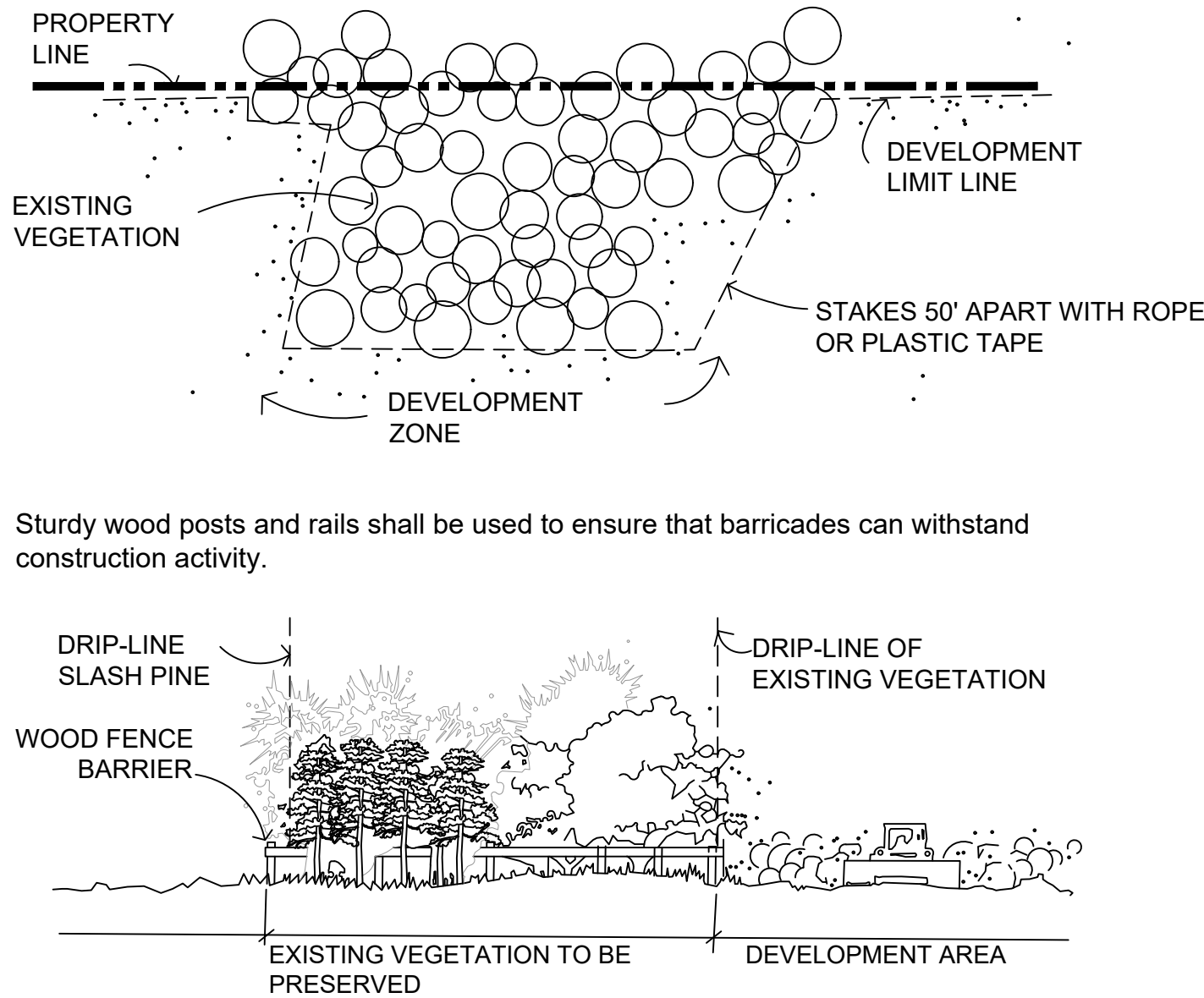
Place barricades to protect the root zones of the native vegetation to be preserved. All barricades are to remain in place until all construction activities are complete.

Trees to be preserved shall be barricaded with a minimum 3-foot high plastic mesh (orange OSHA0 supported by 6-foot length 2"x4" wood stakes embedded a 2 feet in the ground or equivalent as approved in conjunction with the Final Site Plan or Final Subdivision Plan.



TREE PROTECTION BARRIER DETAIL

Unless conditioned in the vegetation removal permit, groups of trees or areas of vegetation to be preserved shall not require protective barriers. These areas will be marked by stakes installed at a maximum of 50' apart with rope or plastic tape attached to said stakes around the perimeter of the protected area.



Sturdy wood posts and rails shall be used to ensure that barricades can withstand construction activity.

Protective barriers or markings shall remain in place until they are authorized to be removed by staff or receipt of a CO.

There shall be limited development within tree preservation areas:

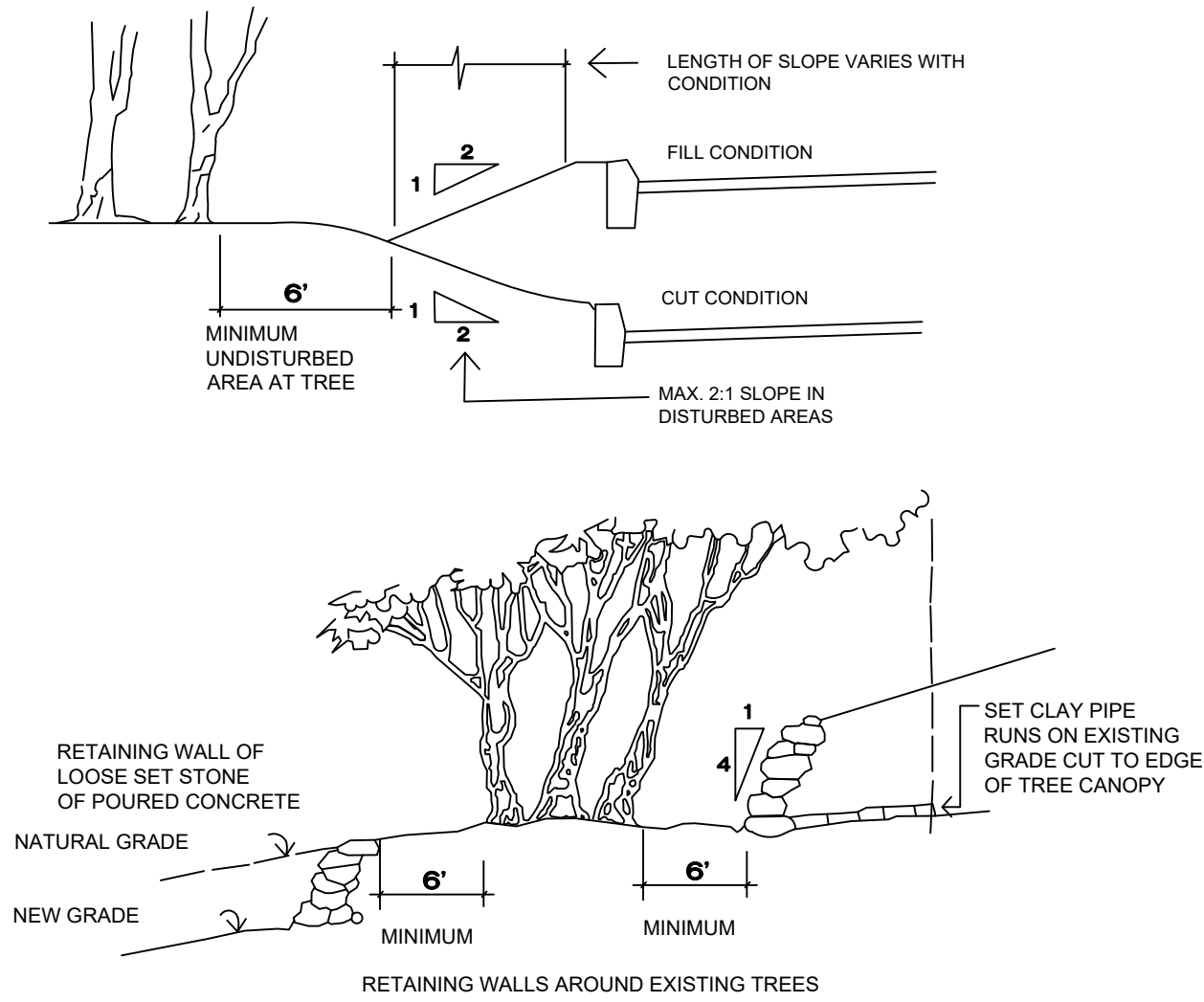
- maintained in its natural state
- provide permeable landscape natural. i.e., grass, mulch
- conform to governing landscape code.

There will be no attachment of signs, etc. to vegetation unless of a non-damaging character.

Light machinery or hand-labor is to be used if vegetation is to be installed in preservation areas.

No grade changes shall be made within tree preservation areas, which require trenching or cutting of roots unless conditioned. Utility lines shall be installed to protect root systems as much as possible.

No removal of soil or fill in tree preservation areas shall occur.



No clearing shall commence until all protection devices are installed , inspected and approved by the Zoning Division and Environmental Resource Management Department.

TREE RELOCATION PROGRAM

Plant Species Requirements

Live Oaks - Best time to move is in their dormant season. Worst time to move is in the spring because of their flush of new growth and lack of precipitation. They should be root pruned at least two weeks in advance of the move and need to be watered in heavily the first two weeks after transplanting.

Root Pruning and Transplanting

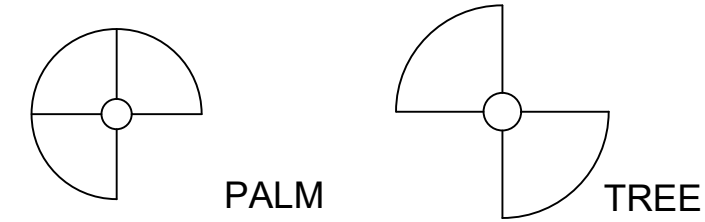
When it is determined that a tree or palm needs to be transplanted, it is beneficial and sometimes required that the plant be root pruned. Root pruning is done to reduce the size of an existing root ball in preparation for transplanting. The root ball is reduced to create a new root system large enough to sustain life in the tree/palm while making its move more effective for transportation. The time it takes for the root system to develop before transplanting will vary from tree to tree, depending on soil moisture content. An estimated wait time follows in the schedule listed below.

- Clear the area around the tree that has been selected.
- Determine the size of the root ball that is being prepared.

Tree Caliper	Root Ball
2-4"	36-42"
4-6"	42-48"
6-8"	48-60"
8-10"	72-84"
12-14"	84-96"
14-16"	96-108"
16-18"	108-120"
18-20"	120-132"
20-24"	132-144"
24-28"	144-156"
28-32"	156-168"
32-36"	168-180"
Sabal Palms	4' Root Ball
Coconut Palms	4-5' Root Ball
Queen Palms	4' Root Ball
Canary Island Date Palms	5-6' Root Ball
Reclinata Palms	6-8' Root Ball
Paurotis Palms	6-8' Root Ball
Sago Palms	3-4' Root Ball
Royal Palms	5-6' Root Ball

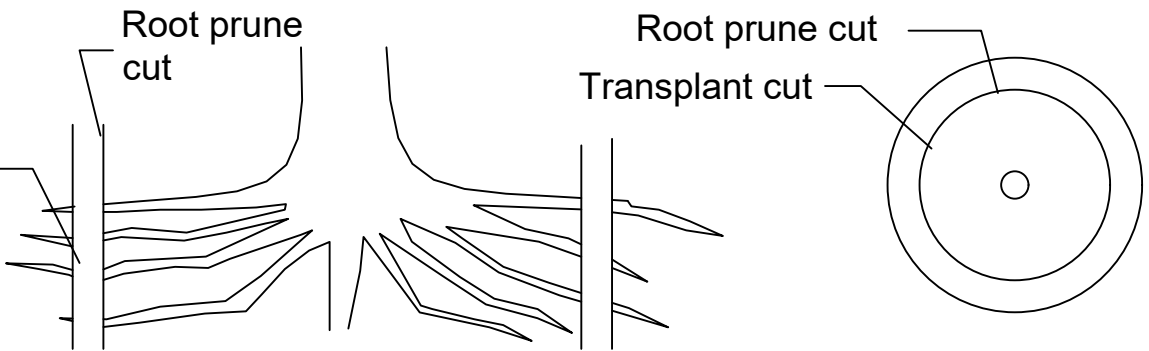
- Palms may be cut on three sizes leaving the open side toward the strongest northeast winds.

- Broadleaf trees should be cut on two sides initially opposite each other.



Transplant cut

- Once the ball size has been determined, mark the spot around the ball and prepare for a 1' trench around the tree. Use sharp spades for root pruning and do not cut under the root ball. Leave old cut roots on top of root ball.



- Fill trench with existing soil with 1/3 peat humus mixed in. Leave a depression to hold water.
- Irrigate with a mist head at root ball to help promote feeder roots and maintain watering.
- Wait time after root pruning until transplanting per individual specifications, for differing types of plant material.

Ficus Trees	6 weeks to 90 days
Palms	6 weeks to 90 days
Oaks, 6" and under	6 weeks to 90 days
Oaks, 6" - 12"	90 days to 6 months
Oaks, 12" and above	6 months to 1 year

- Fertilize top of ball with milorganite after root pruning.
- Some bracing may be required after root pruning.

- A full top will encourage feeder root growth. Previous to transplanting, remove enough top growth to balance the smaller root system. Thin out and trim back unwanted foliage and branches.

- Cut trench for transplanting outside of root pruned trench to allow for feeder roots.

- Lift tree from one side to break suction and peel off root ball. If it doesn't break then dig under to sever roots.

Specifications:

- Contractor shall be responsible for locating any and all underground utilities or obstructions prior to commencing work. In case of conflict with proposed work, notify landscape architect prior to commencement of work.
- Contractor shall provide adequate irrigation to assure the healthy establishment of relocated trees.
- Pruning of limbs shall occur only as necessary to facilitate relocation and shall maintain the natural shape and charracter of tree.
- Finish grade for top of tree plug shall meet the proposed finsh grade after relocation.
- All plant materials shall be relocated to freshly dug holes with similar size and type of tree moving equipment. The holes should be filled 1/3 with water, place tree, back fill and water in thoroughly, being sure to avoid air pockets. Provide 4"-6" dish around newly dug plant material to retain water. Water thoroughly after planting as specified.
- All trees exhibiting shallow root systems shall be staked as required.
- Prune, thin out and shape relocated trees, shrubs and understory in accordance with desired effect of the landscape architect and to retain natural character. Remove all vines and exotic vegetation. Maintain relocated plant materials for a period of not less than 90 days. Maintain by watering, removing of exotic vegetation or weeds, providing insecticide applications and mulching.
- The contractor shall protect trees during relocation procedures from scrapes, scars and undue breakage. Understory plant material moved with primary species shall be protected against damage.
- Landscaping contractor shall provide a one (1) year warranty on all relocated material.

urban design studio

Urban Design Land Planning Landscape Architecture

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Pinnacle on Sixth

Lake Worth Beach, FL Tree Protection and Relocation Details

Date: 03/31/26 Project No.: 24-043.000 Designed By: RD/JS Drawn By: RD/JS Checked By: RD

Revision Dates:

06/12/2026 RESUBMITTAL 07/17/2026 RESUBMITTAL

LA-6 of 6

ATTACHMENT 2

Photo Documentation Log



Photo 1. Overview of Tree 105, a ficus tree conforming with a banyan fig (*Ficus benghalensis*), facing southwest.



Photo 2. Overview of Tree 105, facing north.



Photo 3. View of diameter at breast height (DBH) measurement showing 78 inches.



Photo 4. Overview of trunk damage on the south side of Tree 105. Note the presence of new aerial roots forming near the wounded portions of trunk.



Photo 5. View of trunk wound associated with previous branch removal on the southeast side of Tree 105. Note the presence of visible decay and woody aerial root development around the afflicted area.



Photo 6. View of the root flare on the southeast side of Tree 105. Note the presence of root and root flare damage.



Photo 7. View of trunk damage on the north side of Tree 105. Sounding indicated major internal decay is likely. Note the presence of new woody growth over the existing wound.



Photo 8. View of trunk damage on the north side of Tree 105, facing north. Note that this wound is towards the inside of the trunk; the outer portion of the trunk (which provides a greater influence on structural integrity in comparison to the inner portion) remains intact.

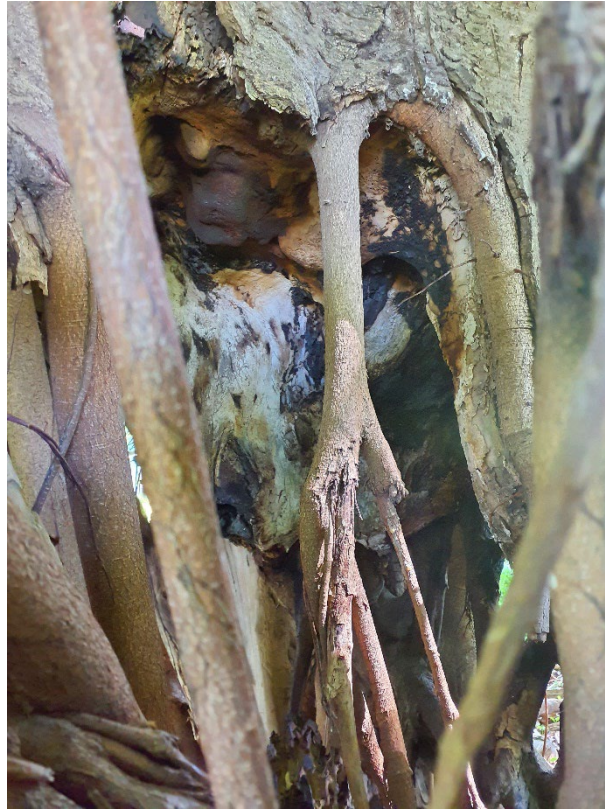


Photo 9. View of trunk damage on the north side of Tree 105. Note the presence of fungal fruiting bodies within the trunk wound.

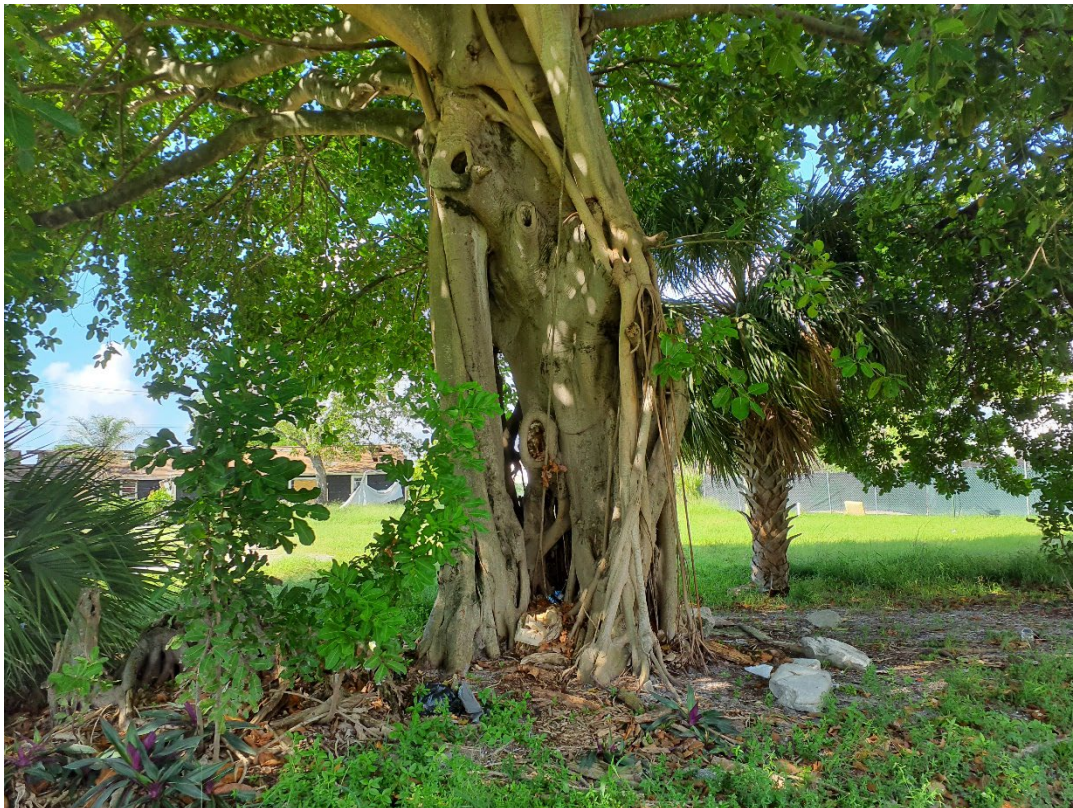


Photo 10. Overview of the north side of Tree 105, facing southwest. Note the presence of cavities previous pruning wounds with good wound wood development.



Photo 11. Overview of large wound with cavity at a main branch union, facing south.

ATTACHMENT 3

Opinion of Probable Cost

Item No.	Description	Amount	Notes	Unit Price	Total Price
1	Root Pruning Work	4 Events at 6 hr/Event	This work should be performed by an ISA Certified Arborist or equivalent.	\$ 3,600.00	\$ 14,400.00
2	Irrigation Pre/Post Root Pruning	Minumum of 2 weeks prior to root pruning Minimum of 6 months after root pruning	This cost may reduce the future cost of installing irrigation at the proposed development site.	\$ 10,000.00	\$ 10,000.00
3	50/100 Ton Crane for Relocation	3 Cranes for 1 day	Operator and supplemental equipment included.	\$ 7,000.00	\$ 21,000.00
4	Arborist - Climbing (Reduction Pruning)	6 hr	This work should be performed by an ISA Certified Arborist or equivalent. Cost is based on a crew with climbers, ground assistance, and equipment.	\$ 600.00	\$ 3,600.00
5	Excavation of Planting Hole	4 hr	This cost covers labor and equipment.	\$ 300.00	\$ 1,200.00
6	Arborist - Climbing (Relocation)	4 hr	This work should be performed by an ISA Certified Arborist or equivalent. Cost is based on one climber with required gear.	\$ 200.00	\$ 800.00
7	Irrigation Post Transplant	Approximately 2 years (until established)	This cost is based on the recipient site having an existing irrigation system (modification of system).	\$ 4,000.00	\$ 4,000.00
8	Bracing Post Transplant	N/A	Estimated cost of materials.	\$ 1,000.00	\$ 1,000.00
9	MOT Contingency	N/A	This line item accounts for potential coordination and modification of existing utilities within the transportation path, including but not limited to traffic lights, utility lines, or railroad crossing bars.	\$ 2,240.00	\$ 2,240.00
Total (without MOT Contingency)				\$	56,000.00
Total (with 25% MOT Contingency)				\$	58,240.00

Weight Estimation				
Item	Calculations			
Trunk Weight Estimate*	lb/ft ³	Trunk (ft ³)	Trunk Weight (lbs)	Trunk Weight (tons)
	48	398	19113	10
Soil Weight Estimate**	lb/ft ³	Root Ball (ft ³)	Soil Weight (lbs)	Soil Weight (tons)
	100	4878	487791	244

Notes

*Green Log Weight of Banyan was determined using the Tree Care Industry Association's *Green Log Weight Chart* .

**A depth of 3-feet was used for root ball weight calculations.