

RESOLUTION 61-09-24

A RESOLUTION OF THE TOWN COMMISSION OF THE TOWN OF LAKE PARK, FLORIDA, AUTHORIZING THE MAYOR TO SIGN A RIGHT-OF-WAY IMPROVEMENT AND MAINTENANCE AGREEMENT BETWEEN THE TOWN OF LAKE PARK AND NAUTILUS 220 CONDOMINIUM ASSOCIATION, INC. PURSUANT TO EXHIBIT 'A'; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town Commission is the governing body of the Town and has authority over the Town's roads, alleys and rights-of-way within the Town street system; and

WHEREAS, the Town generally maintains the Town rights-of-way platted or dedicated to it for public use; and

WHEREAS, Forest Development LLC (the "**Developer**") is developing a mixed-use condominium project known as "Nautilus 220", located at 220 Lake Shore Drive, Lake Park, Florida 33403 (the "**Project**"); and

WHEREAS, the Project features specialized landscaping, hardscape, lighting, and streetscape furniture, some of which will encroach upon a public right-of-way as set forth in the applicable plans approved by the Town (the "**Approved Plans**"); and

WHEREAS, the Town has entered into an agreement with the Florida Department of Transportation ("**FDOT**") whereby the Town is responsible for the costs of installation and maintenance of the landscaping and improvements to SR 5 / North Federal Highway (U.S. 1), at the request and for the benefit of the Association; and

WHEREAS, the Developer is constructing the Project and all of the landscaping and improvements set forth in the Approved Plan and further authorized herein; and

WHEREAS, Association, and **not** the Town, shall have the sole responsibility of maintaining any and all landscape improvements within the Maintenance Area (as defined herein as **Exhibit 'A'**); and

WHEREAS, the Town Commission has previously reviewed the Approved Plans and finds that the aesthetics and specialty features planned for the right-of-way will enhance the streetscape to the benefit of the public; and

WHEREAS, the Town and the Association mutually recognize the need for entering into this Agreement designating and setting forth the responsibilities of each party with respect to the improvements in the right of way, as defined below and more fully described herein.

NOW, THEREFORE, BE IT RESOLVED, THAT THE TOWN OF LAKE PARK HEREBY APPROVES THE RIGHT-OF-WAY IMPROVEMENT AND MAINTENANCE AGREEMENT PURSUANT TO EXHIBIT 'A'.

The foregoing Resolution was offered by Vice-Mayor Giles-Castro, who moved its adoption. The motion was seconded by Commissioner Taylor, and upon being put to a roll call vote, the vote was as follows:

	AYE	NAY
MAYOR ROGER D. MICHAUD	<u>✓</u>	___
VICE-MAYOR KIMBERLY GLAS-CASTRO	<u>✓</u>	___
COMMISSIONER MICHAEL HENSLEY	<u>✓</u>	___
COMMISSIONER MARY BETH TAYLOR	<u>✓</u>	___
COMMISSIONER JUDITH E. THOMAS	<u>✓</u>	___

The Town Commission thereupon declared the foregoing Resolution 01-09-24 duly passed and adopted this 4th day of September, 2024.

TOWN OF LAKE PARK, FLORIDA

BY: [Signature]
ROGER D. MICHAUD
MAYOR

ATTEST:

[Signature]
VIVIAN MENDEZ
TOWN CLERK



Approved as to form and legal sufficiency:

BY: [Signature]
THOMAS J. BAIRD
TOWN ATTORNEY

EXHIBIT 'A' AND EXHIBIT 'B'
Maintenance Area and FDOT Agreement

SECTION: 93020000
PERMIT: 2022-L-496-00005
COUNTY: Palm Beach
STATE RD: 5

**FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT FOUR
LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT**

THIS AGREEMENT, made and entered into this 4th day of September 2024, by and between the **FLORIDA DEPARTMENT OF TRANSPORTATION**, a component agency of the State of Florida, hereinafter called the **DEPARTMENT** and the **TOWN OF LAKE PARK**, a municipal corporation, existing under the Laws of Florida, hereinafter called the **AGENCY**.

W I T N E S S E T H:

WHEREAS, the DEPARTMENT has jurisdiction over **State Road 5 (North Federal Highway / US1)** as part of the State Highway System; and

WHEREAS, as part of the continual updating of the State Highway System, the DEPARTMENT, for the purpose of safety, protection of the investment and other reasons, has constructed and does maintain the highway facility as described in **Exhibit "A"**, within the corporate limits of the AGENCY; and

WHEREAS, the AGENCY seeks to install by permit and maintain certain landscape improvements within the right of way of **State Road 5 (North Federal Highway / US1)** as described in **Exhibit "B"**; and

WHEREAS, the AGENCY is agreeable to maintaining those landscape improvements within the AGENCY'S limits, including plant materials, irrigation systems and/or hardscape, such as specialty surfacing, site furnishings, or other nonstandard items. The AGENCY agrees that such improvements shall be maintained by periodic mowing, fertilizing, weeding, litter pick-up, pruning, necessary replanting, irrigation repair and/or repair/replacement of the specialty surfacing, as needed; and

WHEREAS, it is the intent of the AGENCY and the DEPARTMENT that the AGENCY shall maintain all right of way within the medians, outside the traveled way and improvements made to the traveled way that was made at the request of the AGENCY; and

WHEREAS, the parties hereto mutually recognize the need for entering into an Agreement designating and setting forth the responsibilities of each party; and

WHEREAS, the AGENCY, by Resolution No. 60-09-24, dated 9-4, 2024, attached hereto as **Exhibit "D"** and by this reference made a part hereof, desires to enter into this Agreement and authorizes its officers to do so.

NOW THEREFORE, for and in consideration of the mutual benefits to flow each to the other, the parties covenant and agree as follows:

- (h) All specialty surfacing shall be installed and maintained in strict accordance with the most current edition of the *Florida Accessibility Code for Building Construction* and the *Interlocking Concrete Pavement Institute (ICPI)*.
- (i) All activities, including landscape improvements installation and future maintenance operations performed on State highway right of way, must be in conformity with the most current edition of the *Manual on Uniform Traffic Control (MUTCD)* and *FDOT Standard Plans for Road Construction, 102-XXX series, Maintenance of Traffic*.
- (j) The most current edition of *FDOT Design Manual, Section 212.11 and Exhibits 212.4 through 212.7 regarding clear sight triangles at intersections* must be adhered to.
- (k) Clear Zone Lateral Offset and as specified in the *FDOT Design Manual, Chapter 215* must be adhered to.
- (l) Landscape improvements shall not obstruct roadside signs or permitted outdoor advertising signs, (see Florida Administrative Code [F.A.C.] Rule Chapter 14-10.)
- (m) If there is a need to restrict the normal flow of traffic, it shall be done on non-holiday, weekday, off-peak hours (9 AM to 3 PM), and the party performing such work shall give notice to the local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the landscape improvements. The DEPARTMENT'S Public Information Officer (see telephone number in paragraph (g) for Operation Center) shall also be notified.
- (n) The AGENCY shall be responsible for ensuring no impacts to utilities will occur within the landscape improvement limits before construction commences.
- (o) The AGENCY shall follow the minimum level of maintenance guidelines as set forth in FDOT'S Rule Chapter 14-40 *Highway Beautification and Landscape Management*, in the *FDOT Guide to Roadside Mowing and Maintenance Management System*, and **Exhibit "C"**, the *Maintenance Plan* for maintenance activities for landscape improvements.

3. MAINTENANCE OF FACILITIES

- A. The AGENCY agrees to maintain the landscape improvements, as existing and those to be installed, within the physical limits described in **Exhibit "A"** and as further described in **Exhibit "B"**. The non-standard improvements within and outside the traveled way shall be maintained by the AGENCY regardless if the said improvement was made by the DEPARTMENT, the AGENCY, or others authorized pursuant to Section 7, by periodic mowing, pruning, fertilizing, weeding, curb and sidewalk edging, litter pickup, necessary replanting, irrigation system repair and/ or repair of any median concrete replacement associated with specialty surfacing (if applicable) following the DEPARTMENT'S landscape safety and maintenance guidelines, **Exhibit "C"**, the *Maintenance Plan*. The AGENCY'S responsibility for maintenance shall include all landscaped, turfed and hardscape areas on the sidewalk or within the medians and areas outside the traveled way to the right of way and/or areas within the traveled way containing specialty surfacing. The AGENCY shall be responsible for all maintenance and repairs to FDOT sidewalks directly attributable to tree roots or other AGENCY maintained improvements. It shall be the responsibility of the AGENCY to restore an

- (b) Restore the area with any material meeting Department standards.
- (c) Restore the improvements at the request and funding of the AGENCY.

5. NOTICE OF MAINTENANCE DEFICIENCIES

If at any time after the AGENCY has undertaken the landscape improvements installation and/or maintenance responsibility for the landscape improvements it shall come to the attention of the DEPARTMENT'S District Secretary that the limits, or a part thereof, are not properly maintained pursuant to the terms of this Agreement, said District Secretary, may at his/her option, issue a written notice that a deficiency or deficiencies exist(s), by sending a certified letter to the AGENCY, to place said AGENCY on notice thereof. Thereafter, the AGENCY shall have a period of thirty (30) calendar days in which to correct the cited deficiencies. If said deficiencies are not corrected within this time-period, the DEPARTMENT may, at its option, proceed as follows:

- (a) Maintain the landscape improvements or any part thereof, with the DEPARTMENT or Contractor's personnel and invoice the AGENCY for expenses incurred; and/or
- (b) At the discretion of the DEPARTMENT, terminate the Agreement in accordance with Paragraph 9 of this Agreement and remove, by the DEPARTMENT or Contractor's personnel, all of the landscape improvements installed under this Agreement or any preceding Agreements, except as to trees and palms, and charge the AGENCY the reasonable cost of such removal.

6. FUTURE DEPARTMENT IMPROVEMENTS

It is understood between the parties hereto that the landscape improvements covered by this Agreement may be removed, relocated, or adjusted at any time in the future, as determined to be necessary by the DEPARTMENT, in order that the adjacent state road be widened, altered, or otherwise changed to meet future criteria or planning needs of the DEPARTMENT.

The AGENCY shall be given sixty (60) calendar day notice to remove said landscape improvements at the AGENCY'S expense after which time the DEPARTMENT may remove same. All permits (including tree permits), fees, and any mitigation associated with the removal, relocation or adjustments of these improvements are the AGENCY'S responsibility.

7. FUTURE AGENCY IMPROVEMENTS

The AGENCY may construct additional landscape improvements within the limits of this Agreement, subject to the following conditions:

- (a) Plans for any new landscape improvements shall be subject to approval by the DEPARTMENT. The AGENCY shall not change or deviate from said plans without written approval by the DEPARTMENT.
- (b) All landscape improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.
- (c) The AGENCY agrees to comply with the requirements of this Agreement with regard to any additional landscape improvements it chooses to have installed and there will be no cost to the DEPARTMENT.

DEPARTMENT for its own negligence.

B. In the event that AGENCY contracts with a third party to provide the services set forth herein, any contract with such third party shall include the following provisions:

- (1) AGENCY'S contractor shall at all times during the term of this Agreement keep and maintain in full force and effect, at contractor's sole cost and expense, Comprehensive General Liability with minimum limits of \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability and Worker's Compensation insurance with minimum limits of \$500,000.00 per Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability and Worker's Compensation policy without restrictive endorsements, as filed by the Insurance Services Office. The AGENCY and DEPARTMENT shall be named as additional insured on such policies.
- (2) AGENCY'S contractor shall furnish AGENCY with Certificates of Insurance of Endorsements evidencing the insurance coverage specified herein prior to the beginning performance of work under this Agreement.
- (3) Coverage is not to cease and is to remain in full force and effect (subject to cancellation notice) until all performance required of AGENCY'S contractor is completed. All policies must be endorsed to provide the DEPARTMENT with at least thirty (30) day notice of cancellation and/or restriction. If any of the insurance coverage will expire prior to the completion of work, copies of renewal policies shall be furnished at least (30) days prior to the date of expiration.

12. E-VERIFY REQUIREMENTS

The AGENCY shall:

- (a) Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the AGENCY during the term of the contract; and
- (b) Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

13. SUPERSEDED AGREEMENTS

This writing embodies the entire Agreement and understanding between the parties hereto and there are no other Agreements and understanding, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby.

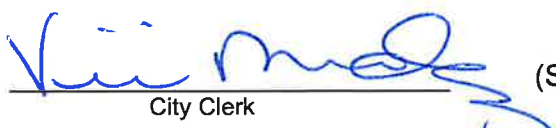
14. FISCAL TERMS

The DEPARTMENT, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal


IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective the day and year first written above.

TOWN OF LAKE PARK

By:  Date: 9.4.24
Chairperson / Mayor / Manager

Attest:  (SEAL)
City Clerk



Legal Approval: 
Thomas J. Baird
Town Attorney

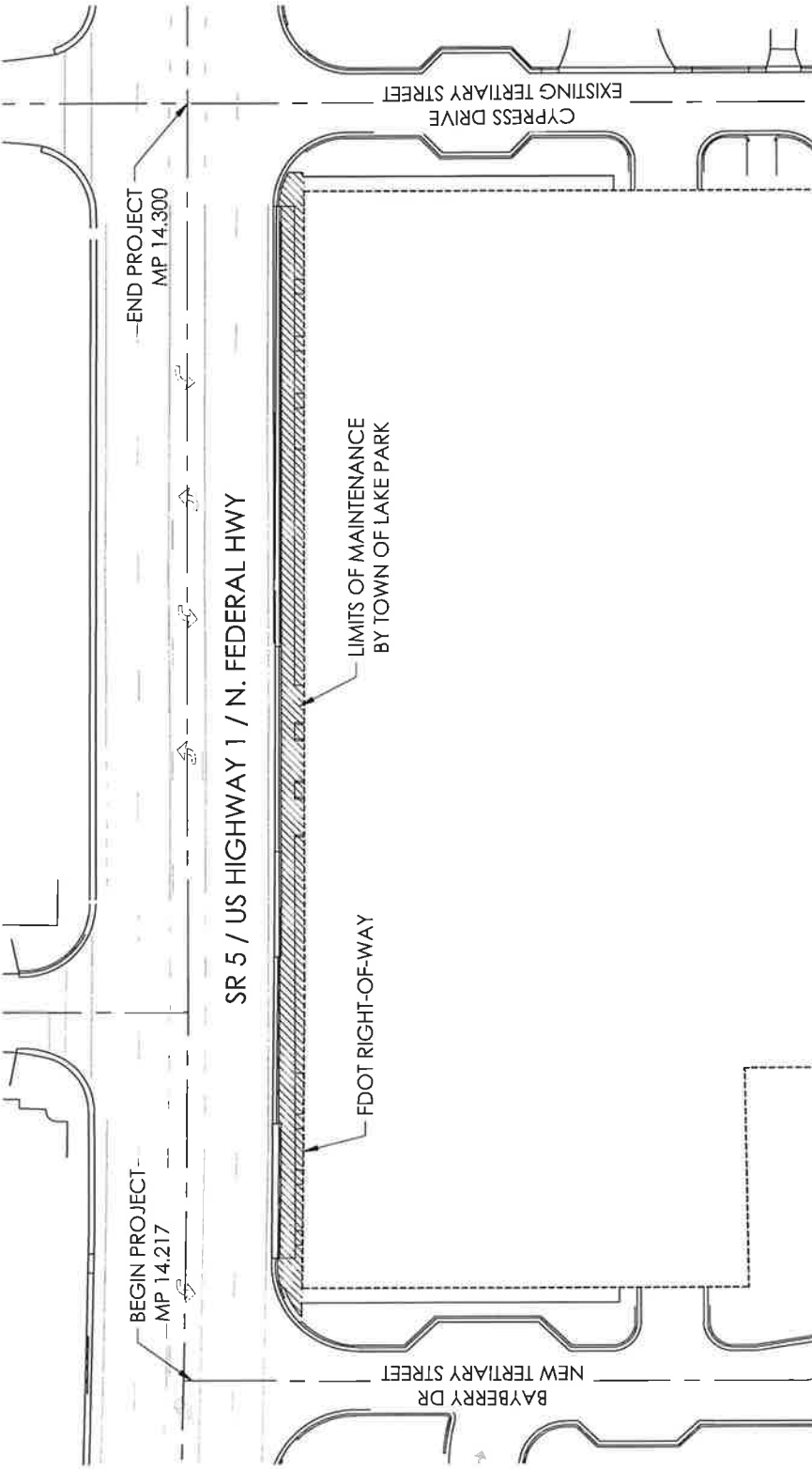
**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

By: _____ Date: _____
Transportation Development Director

Attest: _____ (SEAL)
Executive Secretary

Legal Review: _____
Office of the District General Counsel

Revisions:



**LANDSCAPE IMPROVEMENT
 MAINTENANCE BOUNDARY MAP
 TOWN OF LAKE PARK**

GRAPHIC SCALE

0 20' 40' 80'
 SCALE: 1" = 40'-0"

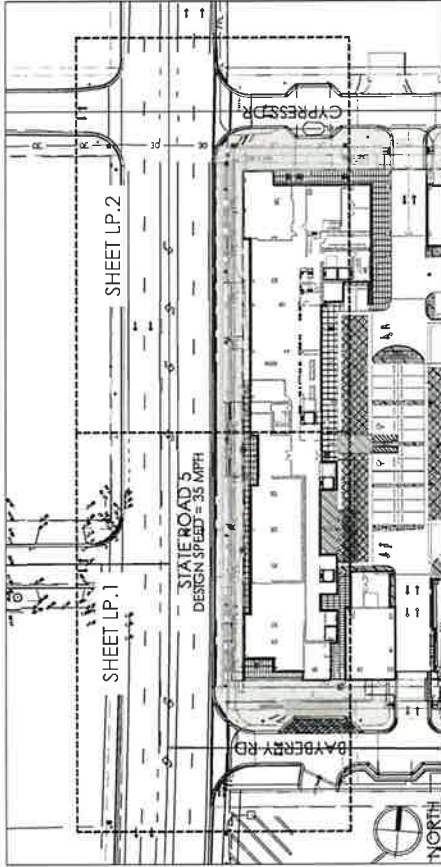
FDOT LANDSCAPE PERMIT #: 2022-L-496-00005

NAUTILUS 220 LAKE PARK, FLORIDA

N. FEDERAL HIGHWAY LANDSCAPE PLAN FROM BAYBERRY RD TO CYPRESS DR

SHEET INDEX

SHEET	DESCRIPTION
LP-0	COVER
LP-1	LANDSCAPE PLAN
LP-2	LANDSCAPE PLAN
LP-3	LANDSCAPE DETAILS
LP-4	LANDSCAPE DETAILS
LP-5	LANDSCAPE SPECIFICATIONS
LP-6	LANDSCAPE SPECIFICATIONS
LP-7	LANDSCAPE SPECIFICATIONS
LP-8	LANDSCAPE SPECIFICATIONS
LP-9	LANDSCAPE SPECIFICATIONS
LP-10	LANDSCAPE SPECIFICATIONS
LP-11	LANDSCAPE SPECIFICATIONS
LP-12	IRRIGATION PLANS
IP-1	IRRIGATION PLANS
IP-2	IRRIGATION DETAILS
IP-3	IRRIGATION NOTES
IP-4	IRRIGATION NOTES



SHEET LAYOUT PLAN

SCALE: NTS

FDOT IRRIGATION NOTES:

1. THE IRRIGATION SYSTEM SHALL USE THE LOWEST QUALITY WATER AVAILABLE WHICH ADEQUATELY AND SAFELY MEETS THE WATER NEEDS OF THE SYSTEM. STORM WATER, RECLAIM WATER, OR GREY WATER IRRIGATION SHALL BE USED WHENEVER POSSIBLE.
2. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE WATER SOURCE.
3. CONTRACTOR SHALL PROVIDE FDOT DISTRICT OPERATIONS MANAGER WITH A SET OF "AS-BUILT" IRRIGATION PLANS.

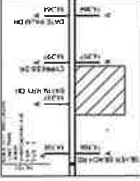
FDOT GENERAL NOTES:

1. GOVERNING STANDARD PLANS: FLORIDA DEPARTMENT OF TRANSPORTATION, FDOT 2022-25 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, JULY 2022 STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE: <https://www.fdot.gov/programmanagement/implemented/specbooks>
2. GOVERNING STANDARD SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, JULY 2022 STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE: <https://www.fdot.gov/programmanagement/implemented/specbooks>
3. CONTRACTOR SHALL REPAIR ALL DAMAGE DONE TO FDOT PROPERTY DURING DEMOLITION, RELOCATION, OR INSTALLATION ACTIVITIES AT HIS SOLE EXPENSE.
4. ANY PLANT MATERIALS SUBMITTED WITHIN OR WITHOUT THE RIGHT OF WAY WHETHER PERMITTED OR NOT, SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN RISK AND WITHOUT GET APPROVAL FROM THE FDOT DISTRICT LANDSCAPE ARCHITECT.
5. OWNERSHIP OF ALL SUITABLE EXCAVATED MATERIALS AS DETERMINED BY THE DEPARTMENT SHALL REMAIN IN THE DEPARTMENT UNTIL A FINAL ACCEPTANCE OF THE PERMITTED PROJECT IS FILED. EXCAVATED MATERIALS SHALL BE HAULED BY THE PERMITEE AT THEIR COST AND EXPENSE FROM THE SITE TO THE FDOT PALM BEACH OPERATIONS CENTER OR STOCKPILED IN THOSE AREAS AS DIRECTED BY THE DEPARTMENT, INCLUDING ASPHALT MILLINGS, ARCHITECTURAL PAPERS, INSTALLATION FOR SIDEWALKS, DRIVEWAYS, OR ROADWAYS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE FDOT DISTRICT OPERATIONS MANAGER WITH CURRENT FDOT STANDARD SPECIFICATION 1026. ONLINE REFERENCE: <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/design/standard-plans/2023/dx/sb9-001.pdf>

LANDSCAPE NOTES:

1. ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, UNLESS OTHERWISE NOTED.
2. ALL PLANTING AND SOIL AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR.
3. ALL PLANTING BEDS/ISLANDS SHALL BE CONSTRUCTED WITH A 6" MINIMUM DEPTH OF CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE. ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.
4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLAN, SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT IMMEDIATELY.
5. ALL UNDERGROUND UTILITIES SHALL BE IDENTIFIED AND LABELED ON THE PLAN WITH FPL RIGHT TREE RIGHT PLACE REQUIREMENTS.
6. CONTRACTOR IS REQUIRED TO CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.

PROJECT LOCATION:
MILE 14.166 (SILVER BEACH RD)-MILE 14.297 (CYPRESS DR)



LOCATION MAP



FDOT LANDSCAPE PERMIT #: 2022-1-496-00005



NORTH

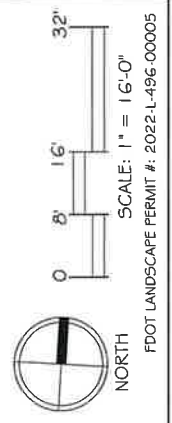
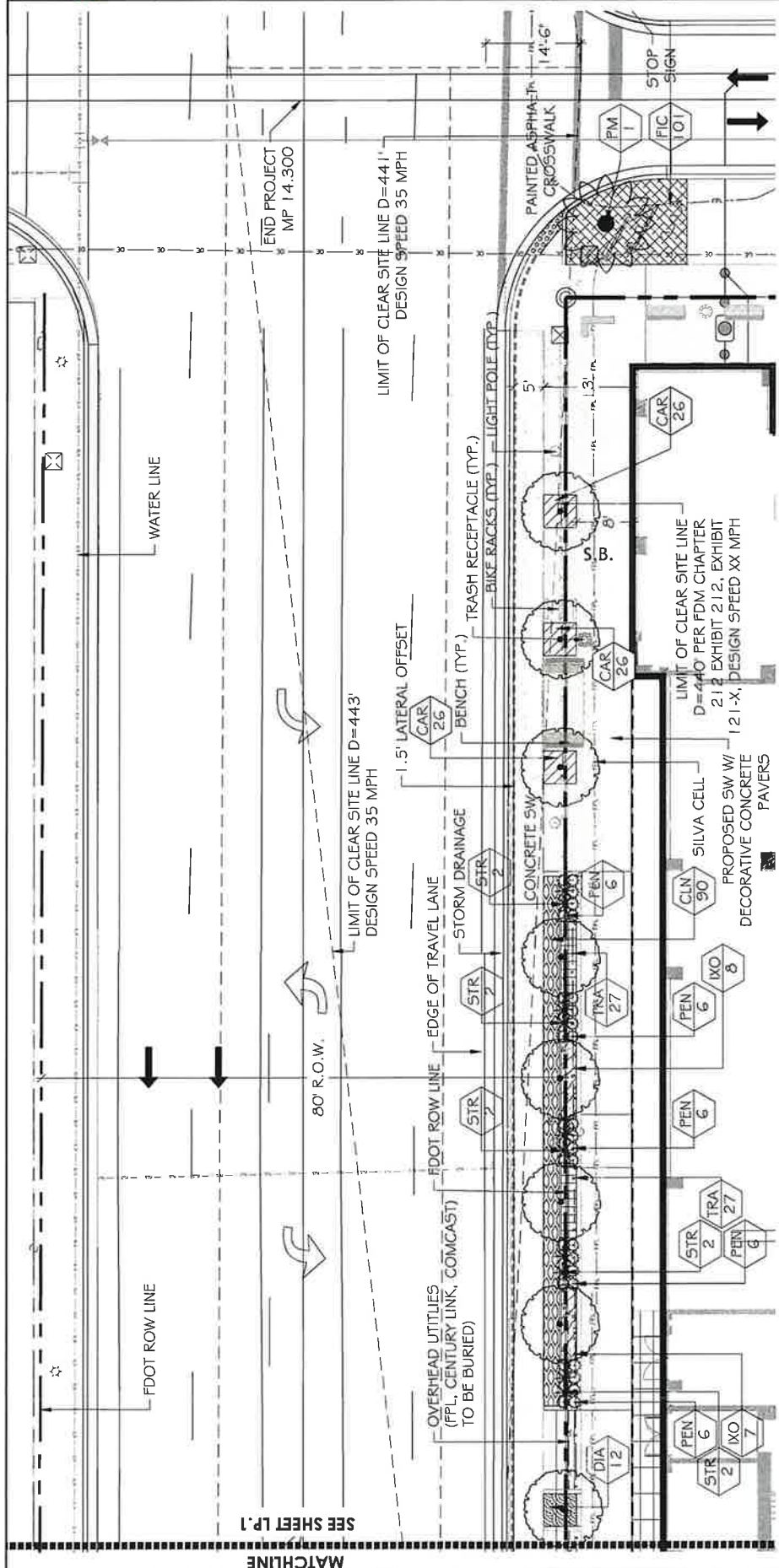
Revisions:
11/17/2023-Comments
01/06/2023-Comments

Drawn By: RG
Drawing #: 1075
Date: 10/22/2021
Sunshinestudio.com

Revisions:

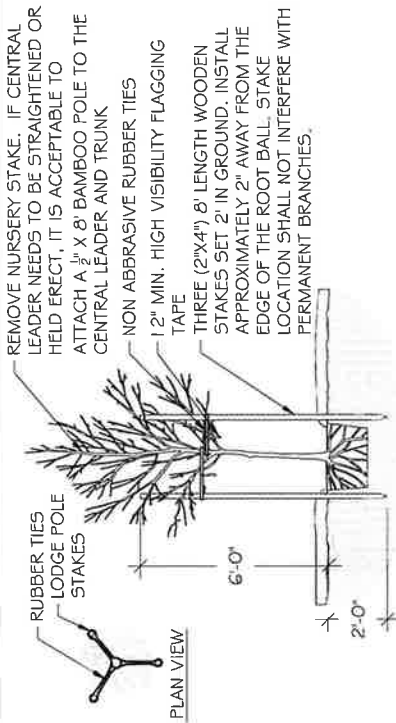
1/17/2022-Comments
01/06/2023-Comments

NAUTILUS 220
 Lake Park, FL



NOTES:
 PLANTS WITHIN THE LIMITS OF CLEAR SIGHT WITH MATURE SIZES ABOVE 18' OF HEIGHT TO RECEIVE PERPETUAL MAINTENANCE. TO BE COORDINATED WITH MAINTAINING AGENCY.

MATCHLINE
 SEE SHEET LP.1



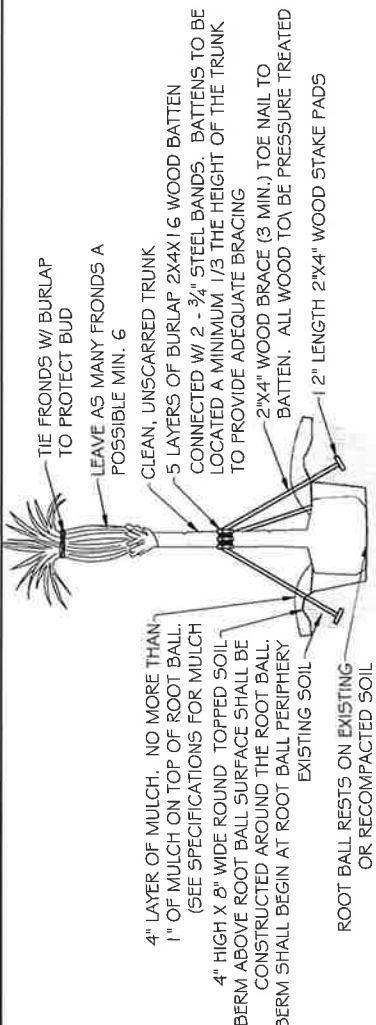
5 TREE STAKING DETAIL 1/2" = 1'-0"

LANDSCAPE NOTES:

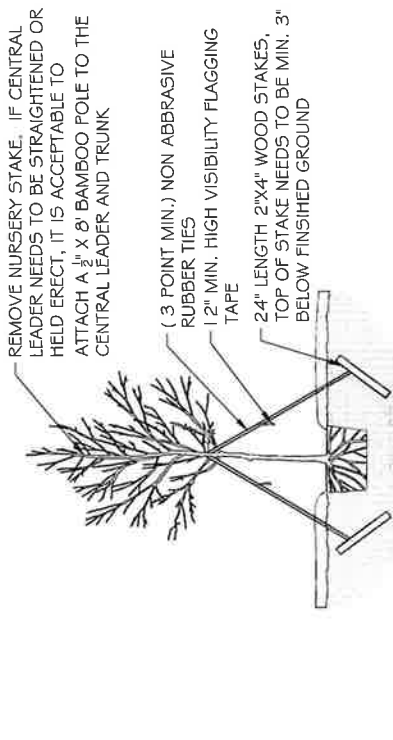
1. ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, UNLESS OTHERWISE NOTED.
2. ALL PLANTING AND SOD AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR.
3. ALL PLANTING BEDS/ ISLANDS SHALL BE FREE OF SHELLROCK, CONSTRUCTION DEBRIS, OR OTHER MISCELLANEOUS DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE.
4. ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION.
6. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT.
7. ALL TREES PLANTED UNDER OR NEAR OVERHEAD POWER LINES SHALL COMPLY WITH FPL RIGHT TREE, RIGHT PLACE REQUIREMENTS.
8. CONTRACTOR IS REQUIRED TO CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
PM	3	Phoenix dactylifera 'Medjool'	Date Palm	16'-18" CT, DIAMOND CUT, MATCHED, FLORIDA FANCY
QV	15	Quercus virginiana 'High Rise'	High Rise Live Oak	8' C.T. 16" OA HEIGHT, 6'-8" SPR.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
FEN	73	Pennisetum setaceum 'White'	White Fountain Grass	24" HT X 24" SPR. @ 24" O.C.
STR	26	Strelitzia reginae	Bird Of Paradise	36" HT X 30" SPR
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CLN	170	Cusia guttiferana nana	Dwarf Clusia	12" HT X 12" SPR. @ 18" O.C.
DIA	24	Dianella tasmanica 'Blueberry'	Blueberry Flax Lily	18" HT X 18" SPR. @ 18" O.C.
FIC	259	Ficus macrocarpa 'Green Island'	Green Island Ficus	12" HT X 12" SPR. @ 18" O.C.
IWO	23	Ixora x 'Mau'	Mau Ixora	18" HT. x 18" SPR. @ 24" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CAR	130	Canessa macrocarpa 'Emerald Blanket'	Emerald Blanket Canessa	6" HT MIN. @ 6" O.C. MIN
TRA	106	Trachelospermum asiaticum	Asian Jasmine	12" HT X 12" SPR. @ 12" O.C.



6 PALM STAKING DETAIL 1/2" = 1'-0"



7 LARGE TREE STAKING DETAIL (3 1/2" CALLIPER OR GREATER) 1/2" = 1'-0"

D. Prior to any construction activity at the site including utility work, grading, storage of materials, or installation of temporary construction facilities, install all tree protection fencing, Filter Fabric, sil fencing, tree protection signs, Geogrid, Mulch and/or Wood Chips as shown on the drawings.

3.5 SOIL MOISTURE

A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintained above permanent wilting point to a depth of 8 inches. No soil work or other activity shall be performed within the Tree and Plant Protection Area when the volumetric soil moisture is above field capacity. The permanent wilting point and field capacity for each type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture):

Soil type	Permanent wilt point w/v	Field capacity w/v
Sand (loamy sand, sandy loam)	3 - 5%	27 - 32%
Silt loam, silty clay loam	11 - 23%	37 - 45%
Clay loam, silty clay loam	17 - 28%	41 - 49%
Silt clay, silty clay	22 - 27%	39 - 41%

1. Volumetric soil moisture shall be maintained with a digital, oblique conductivity meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Supply Tools and Instruments, or approved equivalent meter.

B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend operations until the soil moisture drains to below field capacity.

3.6 ROOT PRUNING:

A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Protection Area or any other activity that will result in soil being disturbed to a depth of 24 inches below existing grade, the edges of the Tree and Plant Protection Area or as directed by the Owner's Representative. Root pruning shall be in accordance with ANSI A300 (part 8) latest edition.

- Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet of the limit of grading.
- After completion of the cut, make clean cuts with a bopper, saw or pruner to remove all root ends on the tree side of the excavation, and install the trench immediately with existing soil, filling all voids.

3.7 INSTALLATION OF GEORGRIDS, FILTER FABRIC, MATTING, WOOD CHIPS AND/OR MULCH

A. Install Geogrids, Filter Fabric, Matting, Wood Chips and/or Mulch in areas and depths shown on the plans and details or as directed by the Owner's representative. In general it is the intent of this specification to provide the following order of protection:

- All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Geogrids or Mulch, Chips or Mulch and a layer of matting over the appropriate level of protection.
- The Owner's Representative shall approve the appropriate level of protection.
- In the above requirements, light vehicle is defined as a truck grade steer with a ground pressure of 4 psi or lighter. A heavy vehicle is any light vehicle with a tire or track pressure of 8 psi. Lightweight materials are any packaged materials that can be physically moved by hand into the location. Bulk materials such as soil, or aggregate shall never be stored within the Tree and Plant Protection Area.

3.8 PROTECTION:

A. Protect the Tree and Plant Protection Area at all times from compaction of the soil, damage of any kind to banks, bark, branches, leaves and roots of all plants, and contamination of the soil, bark or leaves with construction materials, silt, oils, oils, and any chemical substance. Notify the Owner's Representative of any spills, compaction or damage and take corrective action immediately using methods approved by the Owner's Representative.

3.9 GENERAL REQUIREMENTS AND LIMITATIONS FOR OPERATIONS WITHIN THE TREE AND PLANT PROTECTION AREA:

A. The Contractor shall not engage in any construction activity within the Tree and Plant Protection Area without the approval of the Owner's Representative including, opening, moving or storing equipment; storing supplies or materials; loading temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree and Plant Protection Area may be indicated on the drawings along with any required remedial activity as listed below.

B. In the event that construction activity is unavoidable within the Tree and Plant Protection Area, notify the Owner's Representative and submit a detailed written plan of action for approval. The plan shall include a statement defining the reason for the activity and why other areas are not suited; a description of the proposed activity; the time period for the activity; and a list of remedial actions that will reduce the impact on the Tree and Plant Protection Area from the activity. Remedial actions shall include but shall not be limited to the following:

- In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either by the use of hand tools, directional boring and/or Air Knives excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots or soil.
- When encountered, exposed roots, 1 inches and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface. These roots shall be covered in Wood Chips and shall not be removed and buried permit will point out all exposed roots that are larger than 1 inch in diameter. Exposed roots shall be covered in Wood Chips. Exposed roots shall be covered in Wood Chips. Exposed roots shall be covered in Wood Chips.

3. The branches that interfere with the construction may be lopped back or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the Owner's Representative. Trunk or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI A300, part 8) and be performed under supervision of the arborist.

4. Matting, installation and excavation within the drip lines or Wood Chips or Mulch to the extent indicated. Do not permit foot traffic, scaffolding or the storage of materials within the Tree and Plant Protection Area to occur off of the temporary matting.

5. Trunk Protection: Protect the trunk of each tree to remain by covering it with a ring of 6 foot long 2 inch x 6 inch planks (possibly based upon the use with 3 inch bands). Staple the bands to the planks as necessary to hold them securely in place. Trunk protection must be kept in place no longer than 12 months. If construction requires work near a particular tree to continue longer than 12 months, the steel bands shall be inspected every six months and loosened if they are found to have become tight.

6. Air Excavation Tool: If excavation for footings or utilities is required within the Tree and Plant Protection Area, air excavation tool techniques shall be used where practical or as designed on the drawings.

a. Remove the Wood Chips from an area approximately 18 inches below the limits of the hole or trench to be excavated. Cover the Wood Chips for a distance of not less than 15 feet around the limit of the excavation area with Filter Fabric or plastic sheathing to protect the Wood Chips from silt. Round the Wood Chips so that the plastic slopes towards the excavation.

b. Using a sprayer or water hose, apply water slowly to the area of the excavation for a period of at least 4 hours, approximately 12 hours prior to the work so that the ground water level is at or near field capacity at the beginning of the work. For excavations that go beyond the dump site, rewet the soil as necessary to keep soil moisture near field capacity.

c. Using an air excavation tool specifically designed and manufactured for the intended purpose, and at least 18 inches below the excavation, excavate the soil to the depth of the excavation. Air pressure shall be a maximum of 90-100 psi.

d. The air excavation tool shall be "A-Spacer" as manufactured by Concept Engineering Group, Inc., Veneta, PA (412) 826-4800, or approved equal.

e. Using a commercial, high-powered vacuum truck if required, remove the soil from the excavation produced by the Air Knife excavation. The vacuum truck should generally operate simultaneously with the hose operator, such that the soil produced is piped up from the excavation hole, and the exposed roots can be observed and not damaged by the ongoing operation. Do not drive the vacuum truck into the Tree and Plant Protection Area unless the area is protected from compaction as approved in advance by the Owner's Representative.

f. Remove all excavated soil and excavated Wood Chips, and contaminated soil at the end of the excavation.

g. Schedule the work so that foundations or utility work is completed immediately after the excavation. Do not let the roots dry out. Mat the roots several times during the day. If the excavated area must remain open overnight, mist the roots and cover the excavation with biodegradable plastic.

h. Dispose of all silt in a manner that meets local laws and regulations.

i. Restore soil within the trench as soon as the work is completed. Utilize soil of similar texture to the removed soil and lightly compact with hand tools. Leave soil mounded over the trench to a height of approximately 10% of the trench depth to account for settlement.

j. Replace any Geogrids, Filter Fabric, Wood Chips or Mulch and/or matting that was previously required for the area.

3.10 TREE REMOVAL:

A. Remove all trees indicated by the drawings and specifications, as requiring removal, in a manner that will not damage adjacent trees or structures or contours of the soil.

B. Remove trees that are adjacent to trees or structures to remain, in sections, to limit the opportunity of damage to adjacent contours, banks, ground plane elements and structures.

C. Do not drop trees with a single cut unless the tree will fall in an area not included in the Tree and Plant Protection Area. No tree to be removed within 30 feet of the Tree and Plant Protection Area shall be pushed over or up-rooted using a piece of grading equipment.

D. Protect adjacent parking, soil, trees, shrubs, ground cover plantings and underground utilities to remain from damage during all tree removal operations, and from the removal operation. Protection shall include the root system, bark, trunk and stem, and the soil beneath the tree and the soil above the tree.

E. Remove stumps and immediate root stubs from existing trees to be removed. Grind trunk bases and large business roots to a depth of the largest buttress root or at least 18 inches below the top most roots which ever it is less and over the area of three times the diameter of the trunk (DBH).

1. For trees where the stump will fall under new paved areas, grind roots to a total depth of 18 inches below the excavation. If the size of the stump will fall under an existing paved area, grind roots to a total depth of 20 inches below the excavation.

2. In areas where the tree location is to be a planting bed or lawn, remove all woodchips and backfill stump holes with planting soil as defined in Construction Specification Planning Soil, in maximum of 12 inch layers and compact to 80 - 85% of the maximum dry density standard proctor.

3.11 PRUNING:

A. Within six months of the estimated date of substantial completion, prune all dead or hazardous branches larger than 2 inch in diameter from all trees to remain.

B. Implement all pruning recommendations found in the arborist report.

C. Prune any low, hanging branches and vines from existing trees and shrubs that overhang walks, streets and drives, or parking areas as follows:

- Walks - within 8 feet vertically of the proposed walk elevation.
- Parking areas - within 12 feet vertically of the proposed parking surface elevation.
- Streets and drives - within 14 feet vertically of the proposed driving surface elevation.

D. All pruning shall be done in accordance with ANSI A300 (part 1), SA BMP Tree Pruning (latest edition), and the Structural Pruning A Guide for the Green Industry, Edward Gilman, Brian Kempf, Nelda Mahoney and Jim Clark, 2013 Urban Tree Foundation, Visalia CA.

E. Perform other pruning tasks as indicated on the drawings or requested by the Owner's Representative.

3.12 WATERING:

A. Where tree specific disease vectors require, minimize all pruning both between the work in individual trees.

B. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants to be preserved during the entire construction period. Adequate water is defined to be maintaining soil moisture above the permanent wilt point to a depth of 8 inches or greater.

C. The Contractor shall adjust the automatic irrigation system, if available, and apply additional water, using hoses or water tanks as required.

D. Periodically test the moisture content in the soil within the root zone to determine the water content.

3.14 WEED REMOVAL

A. During the construction period, control any plants that seed in and around the fenced Tree and Plant Protection area at least three times a year.

1. All plants that are not shown on the planting plan or on the Tree and Plant Protection Plan to remain shall

be considered as weeds.

B. At the end of the construction period provide one final weeding of the Tree and Plant Protection Area.

3.15 INSECT AND DISEASE CONTROL

A. Monitor all plants to remain for disease and insect infestations during the active construction period. Provide all disease and insect control required to keep the plants in a healthy state using the principles of Integrated Plant Management (IPM). All pesticides shall be applied by a certified pesticide applicator.

3.16 CLEANUP

A. During tree and plant protection work, keep the site free of trash, pavement reasonably clean and work area in orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.

B. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.

C. Make all repairs to grades, ruts, and damage to the work or other work at the site.

D. Remove and dispose of all excess Mulch, Wood Chips, packaging, and other material brought to the site by the Contractor.

3.17 Removal of fencing and other Tree and plant protection

A. At the end of the construction period or when requested by the Owner's Representative remove all fencing, Wood Chips or Mulch, Geogrids and Filter Fabric, trunk protection and any other Tree and Plant Protection material.

3.18 DAMAGE OR LOSS TO EXISTING PLANTS TO REMAIN

A. Any trees or plants designated to remain and which are damaged by the Contractor shall be replaced in kind by the Contractor. Compensation shall be made for the loss of similar species or of equal size or 8 inch caliper, whichever is less. Such replacement shall be made within 30 days of the date of the damage. The replacement plants reasonably available which are less. Where replacement plants are to less than the size of the plant that is damaged, the Owner's Representative shall approve the size and quality of the replacement plant.

B. All trees and plants shall be installed per the requirements of Specification Section Planting

C. Plants that are planted shall be installed per the requirements of Specification Section Planting

D. Compensation shall be made for the loss of similar species or of equal size or 8 inch caliper, whichever is less. Such replacement shall be made within 30 days of the date of the damage. The replacement plants reasonably available which are less. Where replacement plants are to less than the size of the plant that is damaged, the Owner's Representative shall approve the size and quality of the replacement plant.

E. Remedial work may extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.

1. The Owner's Representative may engage an independent arborist to assess any tree or plant that appears to have been damaged to determine their health or condition.

2. Any tree that is determined to be dead, damaged or potentially hazardous by the Owner's arborist and upon the request of the Owner's Representative shall be immediately removed by the Contractor at no additional expense to the owner. Tree removal shall include all clean up of all wood parts and grinding of the stump to a depth sufficient to abate the replacement tree or plant, removal of all chips from the stump site and filling the resulting hole with topsoil.

3. Any remedial work on damaged existing plants recommended by the consulting arborist shall be completed by the Contractor at no cost to the owner. Remedial work shall include but is not limited to: soil compaction remediation and vertical mulching, pruning and or cabling, insect and disease control including injections, compensatory watering, additional mulching, and extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.

4. Remedial work may extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.

SECTION 32 9300 PLANTING

PART 1 GENERAL

1.1 SUMMARY

A. The scope of work includes all labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for, and incidental to, performing all operations in connection with, furnishing, delivery, and installation of plant (also known as "landscaping") complete as shown on the drawings and as specified herein.

B. The scope of work in this section includes, but is not limited to, the following:

- Locate, purchase, deliver and install all specified plants.
- Water all specified plants.
- Mulch, fertilize, stake, and prune all specified plants.
- Maintenance of all specified plants until the beginning of the warranty period.
- Plant warranty.
- Clean up and disposal of all excess and surplus material.
- Maintenance of all specified plants during the warranty period.

1.2 CONTRACT DOCUMENTS

A. Shall consist of specifications and general conditions and the construction drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as an entire contract. Whatever is called for by any parts shall be as binding as if called for in all parts.

1.3 RELATED DOCUMENTS AND REFERENCES

A. Related Documents:

- Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section
- Related Specification Sections
 - Section - Tree Protection and Plant Protection



REVISIONS:	DATE	DESCRIPTION
1/17/2022	Comments	
01/04/2023	Comments	

Drawn By: RG	Drawing #: 1075	Date: 10/22/2021
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REVISIONS:	DATE	DESCRIPTION
1/17/2022	Comments	
01/04/2023	Comments	

Drawn By: RG	Drawing #: 1075	Date: 10/22/2021
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the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress or over watering as indicated by wilted, shiveled, or dead leaves.

3.) Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.

a.) Main branches shall be distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.

b.) Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch union.

c.) The attachment of the largest branches (scaffold branches) shall be free of included bark.

4.) Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds), sunburned areas, conks (fungal fruiting bodies), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).

3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning cut shall be present.

1.) All trees are assumed to have one central leader trees unless a different form is specified in the plant list or drawings.

4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall be visible above the soil line.

5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake. Auxiliary stakes may be used to maintain a straight leader in the upper half of the tree.

3. Plant quality at or below the soil line:

a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:

1.) The roots shall be reasonably free of scrapes, broken or split wood.

2.) The root system shall be reasonably free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Wounds resulting from root pruning used to produce a high quality root system are not considered injuries.

3.) A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.

a.) Plants with structural roots on only one side of the trunk (L roots) shall be rejected.

4.) The root collar shall be within the upper 2 inches of the substrate/soil. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly descend, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.

5.) The root system shall be reasonably free of stem girdling roots from nursery production.

6.) At time of observations and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by stunted, discolored, distorted, or dead roots.

C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.

1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the Owner's Representative.

D. Actual planting shall be performed during these periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.

1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.

1:18 PLANTING AROUND UTILITIES

A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.

B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.

C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planting areas. The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

PART 2 PRODUCTS

2.1 PLANTS: GENERAL

A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.

1. All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 "American Standard for Nursery Stock" latest edition, unless modified by provisions in this specification. When there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct.

2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z60.1. Larger plants may not be acceptable if the resulting root ball cannot be fit into the required planting space.

3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.

B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.

C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants.

D. Plant Quality:

1. General: Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, bores, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant.

2. Plant quality above the soil line:

a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following:

1.) Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar pruned to a central and dominant leader.

a.) Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars.

2.) Leaves: The size, color, and appearance of leaves shall be typical for

1.15 SELECTION AND OBSERVATION OF PLANTS

A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.

B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to reject plants that do not meet specifications as set forth in this specification. If a particular defect or subsurface element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.

1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the quality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant.

2. Corrections are to be undertaken at the nursery prior to shipping.

C. The Contractor shall bear all cost related to plant corrections.

D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.

E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.

F. The Contractor shall require the grower or re-wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.

G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material while on site.

1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE

A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall be accompanied with a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.

1.17 SITE CONDITIONS

A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.

1. Should subsurface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost or corrections. If the Contractor fails to notify the Owner's Representative of such conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications.

B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative.

C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.4 LAYOUT AND PLANTING SEQUENCE

- Relative positions of all plants and trees are subject to approval of the Owner's Representative.
- Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.

C. When applicable, plant trees before other plants are installed.
 D. It is understood that plants are not precise objects and that minor adjustments in the layout will be required as the planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.

3.5 SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION

- Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.
 - Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and filling. Where possible, restrict the driving lanes to one area instead of driving over and compacting a large area of soil.
 - Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.

3.6 SOIL MOISTURE

A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following ranges.

Soil type	Field capacity	Permanent wilting point
Sand, Loamy sand, Sandy loam	5 - 8%	12-18%
Loam, Sandy clay, Sandy clay loam	14 - 25%	27-35%
Clay loam, Silt loam	11 - 22%	31 - 36%
Silty clay, Silty clay loam	22 - 27%	38 - 41%

- Volumetric soil moisture shall be measured with a digital moisture meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent.
- The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.

3.7 INSTALLATION OF PLANTS: GENERAL

- Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the Owner's Representative of any condition observed.
- No more plants shall be distributed about the planting bed area than can be planted and watered on the same day.
- The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality in Part 2, Products: Plants General, Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.

1. Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may

make the plant unstable or stress the plant to the point that the Owner's Representative may choose to reject the plant rather than permitting the modification.

- Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2, Products: Plants General, Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.

3. The resulting root ball may need additional staking and water after planting. The Owner's Representative may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty.

4. The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.
 F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, sides and bottom of the root ball shall be shaved to remove all circling, and matted roots. Shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches, as required to remove all root segments that are not growing reasonably radial to the trunk.

G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white fiber fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if not removed.

H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, excavate the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.

- For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.
 - The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.
 - Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand shovels.

2. If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified.
 3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any required root ball modification.
 4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be filled to a depth of 6 inches.

I. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.

J. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree girth, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.

K. The Owner's Representative may request that plants orientation be related when planted based on the form of the plant.

L. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section Planting Soil, for requirements to modify the soil within the planting bed.

M. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six-inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. DO NOT over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density. Standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.

1. When the planting hole has been backfilled to three quarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.

M. Where indicated on the drawings, build a 4 inch high, level berm of Planting Soil around the outside of the root ball to retain water. Tamp the berm to reduce leaking and erosion of the saucer.

N. Thoroughly water the Planting Soil and root ball immediately after planting.

O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative's seals are to remain on plants until the end of the warranty period.

P. Remove congregate cardboard trunk protection after planting.
 Q. Follow additional requirements for the permitted root ball packages.

3.8 Permitted Root ball packages and Special planting requirements
 A. The following are permitted root ball packages and special planting requirements that shall be followed during the planting process in addition to the above General planting requirements.

B. BALLED AND BURLAPPED PLANTS
 1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap away, do not fold down onto the Planting Soil.

2. If the plant is shipped with a wire basket that does not meet the requirements of a "Low Ribes" basket, remove the top 6 - 8 inches of the basket wires just before the final backfilling of the tree.

3. Earth root balls shall be kept intact except for any modifications required by the Owner's Representative to make root package comply with the requirement in Part 2, Products.

C. SPADE HARVESTED AND TRANSPLANTED PLANTS
 1. After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil out to a radius from the root ball edge equal to the diameter of the root ball to a depth of 6 - 10 inches by hand digging to disturb the soil interface.

2. Fill any gaps below this level with loose soil.
 D. CONTAINER (INCLUDES BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS

1. This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is low in the root ball.
 2. Remove the container.
 3. Perform root ball shaving as defined in installation of Plants: General above.

4. Remove all roots and substrate above the root collar and the main structural roots according to root correction details so root system conforms to root observations detail.
 5. Remove all substrate at the bottom of the root ball that does not contain roots.

6. Using a hose, power washer or air excavation device, wash out the substrate from around the trunk and top of the remaining root ball and find and remove all stem girdling roots within the root ball above the top of the structural roots.

3.22

MAINTENANCE DURING THE WARRANTY PERIOD by others

A. After Substantial Completion Acceptance, the Contractor shall make sufficient site visits to observe the Owner's maintenance and become aware of problems with the maintenance in time to request changes, until the date of End of Warranty Final Acceptance.

1. Notify the Owner's Representative in writing if maintenance, including watering, is not sufficient to maintain plants in a healthy condition. Such notification must be made in a timely period so that the Owner's Representative may take corrective action.
 - a. Notification must define the maintenance needs and describe any corrective action required.

2. In the event that the Contractor fails to visit the site and or notify, in writing, the Owner's Representative of maintenance needs, lack of maintenance shall not be used as grounds for voiding or modifying the provisions of the warranty.

3.23 MAINTENANCE DURING THE WARRANTY PERIOD by the plant installer

A. During the warranty period, provide all maintenance for all plantings to keep the plants in a healthy state and the planting areas clean and neat.

B. General requirements:

1. All work shall be undertaken by trained planting crews under the supervision of a foreman with a minimum of 5 years experience supervising commercial plant maintenance crews.
2. All chemical and fertilizer applications shall be made by licensed applicators for the type of chemicals to be used. All work and chemical use shall comply with all applicable local, provincial and federal requirements.
3. Assume that hoses and watering equipment and other maintenance equipment does not block paths or be placed in a manner that may create tripping hazards. Use standard safety warning barriers and other procedures to maintain the site in a safe manner for visitors at all times.
4. All workers shall wear required safety equipment and apparel appropriate for the tasks being undertaken.
5. The Contractor shall not store maintenance equipment at the site at times when they are not in use unless authorized in writing by the Owner's Representative.
6. Maintenance vehicles shall not park on the site including walks and lawn areas at any time without the Owner's Representative's written permission.
7. Maintain a detailed log of all maintenance activities including types of tasks, date of task, types and quantities of materials and products used, watering times and amounts, and number of each crew. Periodically review the logs with the Owner's Representative, and submit a copy of the logs at the end of each year of the maintenance agreement.
8. Meet with the Owner's Representative a minimum of three times a year to review the progress and discuss any changes that are needed in the maintenance program. At the end of the warranty period attend a hand over meeting to formally transfer the responsibilities of maintenance to the Owner's Representative. Provide all information on past maintenance activities and provide a list of critical tasks that will be needed over the next 12 months. Provide all maintenance logs and soil test data. Make the Contractor's supervisor available for a minimum of one year after the end of the warranty period to answer questions about past maintenance.

C. Provide the following maintenance tasks:

1. Watering: Provide all water required to keep soil within and around the root balls at optimum moisture content for plant growth.
 - a. Maintain all watering systems and equipment and keep them operational.
 - b. Monitor soil moisture to provide sufficient water. Check soil moisture and root ball moisture with a soil moisture meter on a regular basis and record moisture readings. Do not over water.
2. Soil nutrient levels: Take a minimum of 4 soil samples from around the site in the spring and fall and have them tested by an accredited agricultural soil testing lab for chemical composition of plant required nutrients, pH, salt and % organic matter. Test results shall include laboratory recommendations for nutrient applications. Apply fertilizers at rates recommended by the soil test.
 - a. Make any other soil test and/or plant tissue test that may be indicated by

plant conditions that may not be related to soil nutrient levels such as soil contaminated by other chemicals or lack of chemical uptake by the plant.

3. Plant pruning: Remove cross over branching, shorten or remove developing co dominant leaders, dead wood and winter-damaged branches. Unless directed by the Owner's Representative, do not shear plants or make heading cuts.

4. Restore plants: Reset any plants that have settled or are leaning as soon as the condition is noticed.

5. Guying and staking: Maintain plant guys in a taught position. Remove tree guys and staking after the first full growing season unless directed by Owner's Representative.

6. Weed control: Keep all beds free of weeds. Hand-remove all weeds and any plants that do not appear on the planting plan. Chemical weed control is permitted only with the approval of the Owner's Representative. Schedule weeding as needed to maintain weed free beds.

7. Trash removal: Remove all trash and debris from all planting beds and maintain the beds in a neat and tidy appearance.

8. Plant pest control: Maintain disease, insects and other pests at manageable levels. Manageable levels shall be defined as damage to plants that may be noticeable to a professional but not to the average person. Use least invasive methods to control plant disease and insect outbreaks.

a. The Owner's Representative must approve in advance the use of all chemical pesticide applications.

9. Plant replacement: Replace all plants that are defective as defined in the warranty provisions, as soon as the plant decline is obvious and in suitable weather and season for planting as outlined in above sections. Plants that become defective during the maintenance period shall be covered and replaced under the warranty provisions.

10. Mulch: Refresh mulch once a year to maintain complete coverage but do not over mulch. At no time shall the overall mulch thickness be greater than 3 inches. Do not apply mulch within 6 inches of the trunks or stems of any plants. Replacement mulch shall meet the requirements of the original approved material. Mulch shall be no more than one inch on top of the root ball surface.

11. Bed edging: Check and maintain edges between mulch and lawn areas in smooth neat lines as originally shown on the drawings.

12. Leaf, fruit and other plant debris removal: Remove fall leaf, spent flowers, fruit and plant part accumulations from beds and paved surfaces. Maintain all surface water drains free of debris. Debris removal shall be undertaken at each visit to weed or pick-up trash in beds.

13. Damage from site use: Repair of damage by site visitors and events, beyond normal wear, are not part of this maintenance. The Owner's Representative may request that the Contractor repair damage beds or plantings for an additional cost. All additional work shall be approved in advance by the Owner's Representative.

3.27 END OF WARRANTY FINAL ACCEPTANCE / MAINTENANCE OBSERVATION

A. At the end of the Warranty and Maintenance period the Owner's Representative shall observe the work and establish that all provisions of the contract are complete and the work is satisfactory.

1. If the work is satisfactory, the maintenance period will end on the date of the final observation.
 2. If the work is deemed unsatisfactory, the maintenance period will continue at no additional expense to the Owner until the work has been completed, observed, and approved by the Owner's Representative.
- B. FAILURE TO PASS OBSERVATION: If the work fails to pass final observation, any subsequent observations must be rescheduled as per above. The cost to the Owner for additional observations will be charged to the Contractor at the prevailing hourly rate of the Owners Representative.

END OF SECTION 32 9300

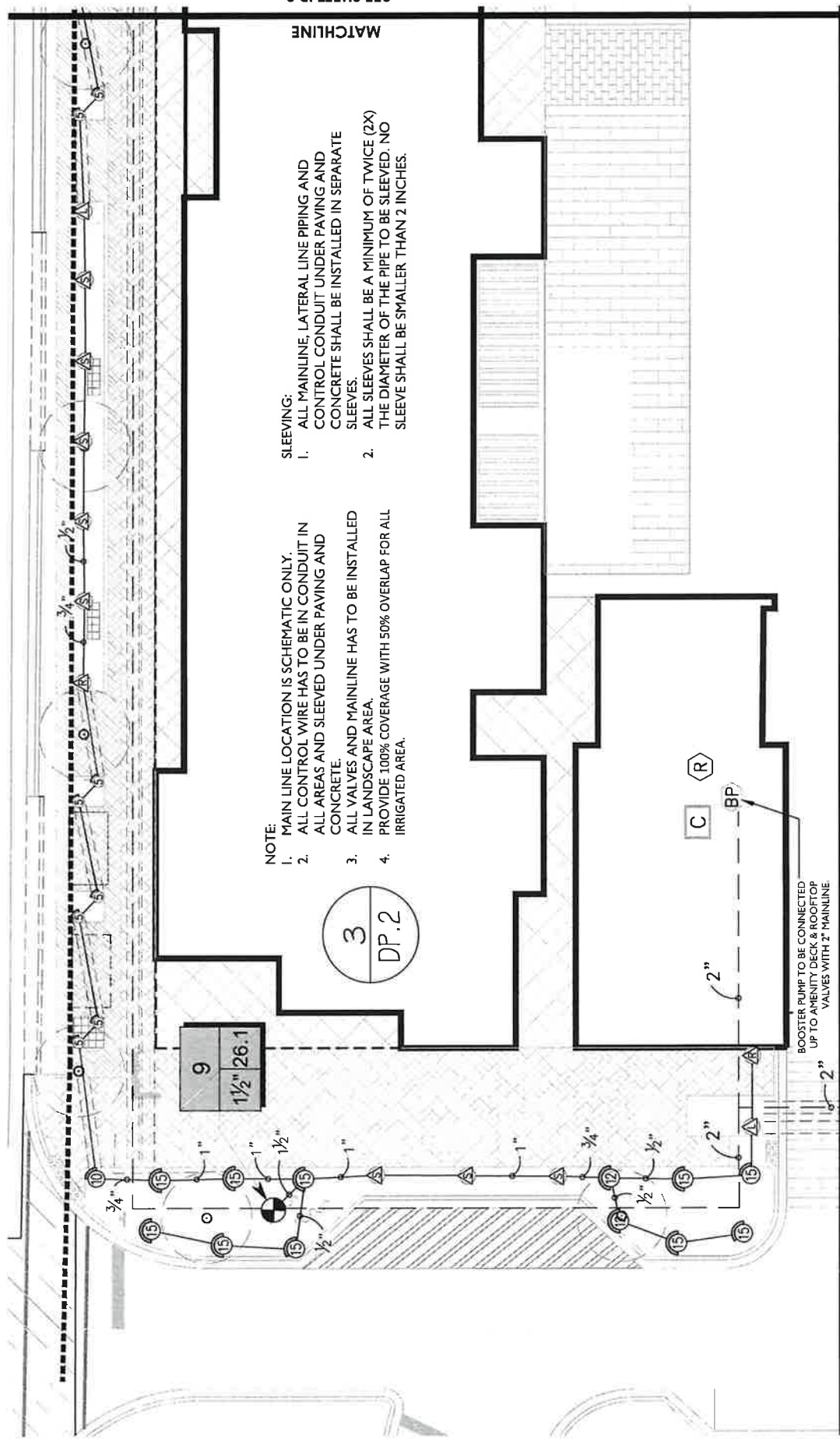


NAUTILUS 220 Lake Park, FL

Revisions:
11/17/2022-Comments
01/04/2023-Comments

Drawn By: RG
Drawing #: 1075
Date: 10/22/2021

LANDSCAPE SPECIFICATIONS SHEET # LP.12



- NOTE:**
1. MAIN LINE LOCATION IS SCHEMATIC ONLY.
 2. ALL CONTROL WIRE HAS TO BE IN CONDUIT IN ALL AREAS AND SLEEVED UNDER PAVING AND CONCRETE.
 3. ALL VALVES AND MAINLINE HAS TO BE INSTALLED IN LANDSCAPE AREA.
 4. PROVIDE 100% COVERAGE WITH 50% OVERLAP FOR ALL IRRIGATED AREA.
- SLEEVING:**
1. ALL MAINLINE, LATERAL LINE PIPING AND CONTROL CONDUIT UNDER PAVING AND CONCRETE SHALL BE INSTALLED IN SEPARATE SLEEVES.
 2. ALL SLEEVES SHALL BE A MINIMUM OF TWICE (2X) THE DIAMETER OF THE PIPE TO BE SLEEVED. NO SLEEVE SHALL BE SMALLER THAN 2 INCHES.



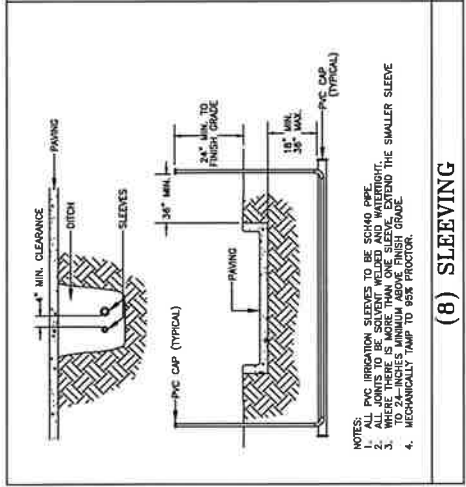
GROUND LEVEL IRRIGATION PLAN
SCALE: 1/16" = 1'-0"

SEAL:

Duval County FL
 PR: (86) 726-5669
 P.E. No. 65910

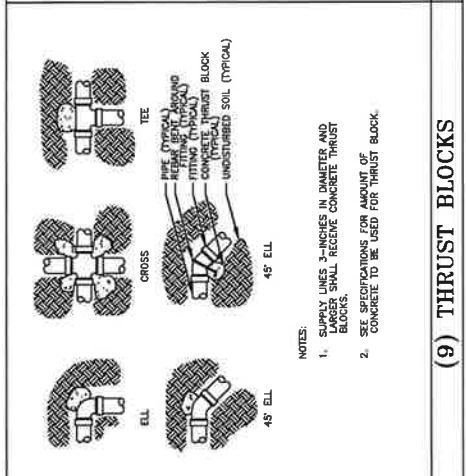
PROJECT:
 NAUTILUS 211
 LAKE PARK, FLORIDA

DATE: 11/09/2021
 DRAWN BY: Duval County FL
 CHECKED BY:
 SCALE: AS SHOWN
 SHEET: IP - 3



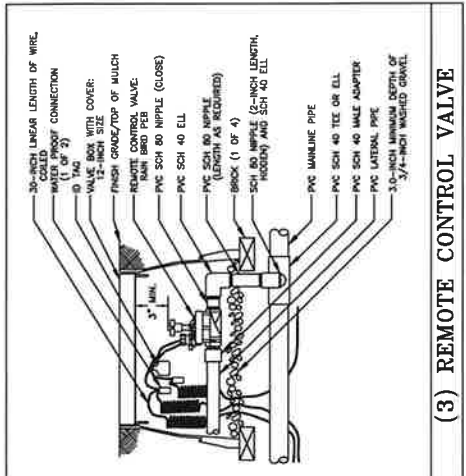
NOTES:
 1. PVC IRRIGATION SLEEVES TO BE 3/4\"/>

(8) SLEEVING

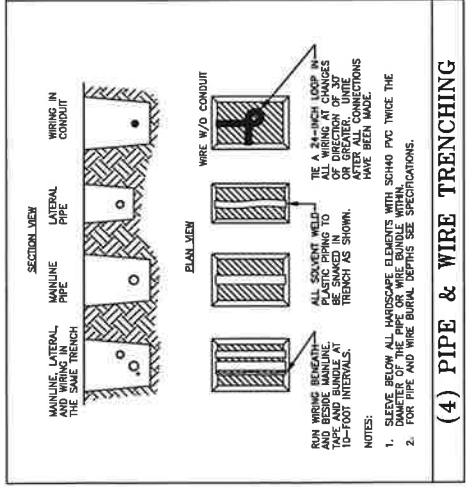


NOTES:
 1. SUPPLY LINES 3-INCHES IN DIAMETER AND SMALLER SHALL RECEIVE CONCRETE THRUST BLOCKS.
 2. SEE SPECIFICATIONS FOR AMOUNT OF CONCRETE TO BE USED FOR THRUST BLOCK.

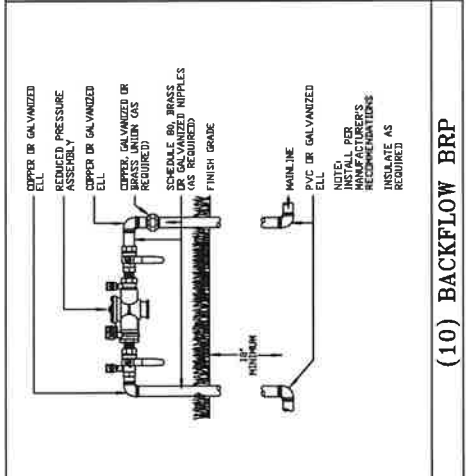
(9) THRUST BLOCKS



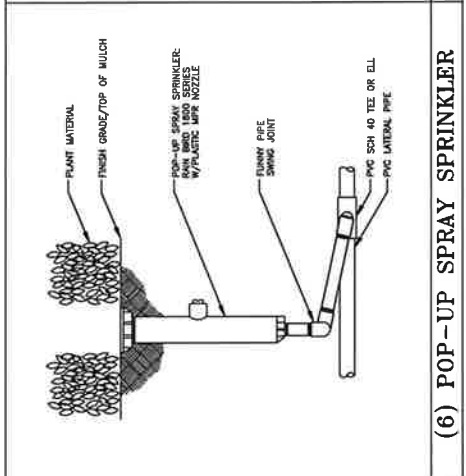
(3) REMOTE CONTROL VALVE



(4) PIPE & WIRE TRENCHING



(10) BACKFLOW BRP



(6) POP-UP SPRAY SPRINKLER

Depth of coverage per Florida Building Code amended appendix F

FOR NONTRAFFIC AND NONCULTIVATED AREAS:

Pipe Diameter	Minimum depth of Cover
1/2" through 1 1/2"	6" - 12"
1 1/2" through 2"	12" - 18"
2 1/2" through 3"	18" - 24"
6" and larger	24" - 36"

FOR VEHICLE TRAFFIC AREAS:

Pipe Diameter	Minimum depth of Cover
1/2" through 2 1/2"	18" - 24"
3" through 5"	24" - 30"
6" and larger	30" - 36"

(7) DEPTH OF COVERAGE

SECTION: 93020000
PERMIT: 2022-L-496-00005
COUNTY: Palm Beach
STATE RD: 5

EXHIBIT C

MAINTENANCE PLAN FOR LANDSCAPE IMPROVEMENTS

This Exhibit forms an integral part of the DISTRICT FOUR (4) LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT between the State of Florida, Department of Transportation and the AGENCY.

Please see attached

INTEGRATED PLANT MANAGEMENT

An assessment of each planting area's soil is recommended to periodically determine the nutrient levels needed to sustain healthy, vigorous plant growth.

Palms, shrubs, trees, and turf areas shall be fertilized in such a manner and frequency to ensure that the plant material remains healthy and vigorously growing. Please be alert to changes in fertilization types per University of Florida, Institute of Food and Agricultural Services (I.F.A.S.) recommendations. Establishment of an integrated pest management program is encouraged to ensure healthy plants, which are free of disease and pests.

PRUNING

All pruning, and the associated safety criteria, shall be performed according to American National Standard Institute (ANSI) A300 standards and shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist. Pruning shall be carried out with the health and natural growth of plant materials in mind, to achieve the FDOT requirements for maintaining clear visibility for motorists, and provide vertical clearance for pedestrian, bicyclist, and truck traffic where applicable. Visibility windows must be maintained free of view obstructions, and all trees and palms must be maintained to prevent potential roadway and pedestrian hazards. All palms are to be kept fruit free. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be mature height in compliance with the *FDM Window Detail*. Vertical clear zones for vegetation heights over roadways and sidewalks must meet the requirements of the *FDOT Maintenance Rating Program (MRP)* standards. See Reference pages. The R.L.A. of Record will provide the specific pruning heights for mature or maintained height and spread of all plant material to achieve the design intent shall be noted in Part II., Specific Project Site Maintenance Requirements and Recommendations.

STAKING AND GUYING

All staking materials are to be removed after one year or as directed by the RLA of Record.). Any subsequent staking and guying activities by the Agency must adhere to *FDOT Standard Plans* guidelines (See Index 580-001). The Agency shall closely monitor staking and guying attachment materials so that they are securely fastened to avoid potential roadway hazards.

TURF MOWING

All grassed areas are to be mowed and trimmed with sufficient frequency to maintain a deep, healthy root system while providing a neat and clean appearance to the urban landscape. All turf efforts, mowing, curb/sidewalk edging and turf condition, must at a minimum, meet *FDOT Maintenance Rating Program (MRP)*.

LITTER CONTROL

The project site shall remain as litter free as practicable. It is recommended to recycle this litter to avoid unnecessary waste by its reuse. Litter removal efforts must meet *FDOT Maintenance Rating Program (MRP)* standards.

WEEDING/HERBICIDE

All planting areas shall be maintained as weed free as practicable by enlisting integrated pest management practices in areas specified on the plans and maintaining proper mulch levels. Extreme care is recommended when using a chemical herbicide to avoid overspray onto plant materials. It is the applicator's responsibility to restore any damage resulting from overspray to the plantings, per the approved plans.

SITE FURNISHINGS

Site furnishing such as Trash Receptacles, Benches, Bollards and Bicycle Racks shall be maintained in such a manner as to prolong the life of the fixture and prevent potential safety hazards. If the fixtures and their overall function and mounting systems become damaged, they shall be replaced with the same type and specification as the approved plan.

MAINTENANCE OF TRAFFIC CONTROL

Reference the FDOT website regarding the selection of the proper traffic control requirements to be provided during routine maintenance and / or new installations of this DOT roadway.

VEGETATION MANAGEMENT AT OUTDOOR ADVERTISING (ODA)

To avoid conflicts with permitted outdoor advertising, please reference the State of Florida website regarding the vegetation management of outdoor advertising. This website provides a portal to search the FDOT Outdoor Advertising Inventory Management System Database. The database contains an inventory of outdoor advertising structures, permits and other related information maintained by the Department.

Also, reference the *Florida Highway Beautification Program* website link for *Vegetation Management at ODA signs* Florida Statutes and Florida Administrative Code related to vegetation management at outdoor advertising sign, permit applications for vegetation management and determining mitigation value of roadside vegetation.

PART II.

SPECIFIC PROJECT SITE MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS

1. The project includes installation of Live Oaks, Medjool Date palms, shrubs, groundcover, and irrigation within the FDOT ROW adjacent to a new mixed use residential project. Additional items in the ROW include benches and concrete pavers.
2. Canopy Trees are intended to be maintained at mature height and spread. (Refer to Part I Pruning, for clear sight window and vertical clear zone pruning requirements.)
3. Remove suckering growth from base and clear trunk areas for single trunked trees on a monthly basis.
4. To maintain the intended appearance of all palms, apply the latest palm fertilizer recommended by the University of Florida IFAS Extension per the manufacturer's specifications.
5. To maintain the intended appearance of all shrubs or turf grass, apply the latest fertilizer recommended by the University of Florida IFAS Extension per the manufacturer's specifications.
6. Do not remove fronds from self-cleaning palms, unless damaged. Palms with persistent fronds shall only have dead fronds removed, do not remove any green fronds. If it is deemed necessary to prune a palm's fronds, no fronds shall be trimmed above 3 o'clock and 9 o'clock on the horizontal plain.

REFERENCES (4-27-20)

This reference list is provided as a courtesy. The list may not contain the most current websites. The most current references must be accessed for up-to-date information.

Accessible Sidewalk (ADA) <http://www.access-board.gov/guidelines-and-standards/streets-sidewalks>

Americans with Disabilities Act (ADA) (ADAAG) http://www.ada.gov/2010ADAstandards_index.htm

American National Standard Institute, *ANSI A300, (Part 1) for Tree Care Operations – Trees, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning)*, available for purchase
<http://webstore.ansi.org>

Florida Department of Agriculture and Consumer Services, Division of Plant Industry, *Florida Grades and Standards for Nursery Plants 2015* <http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Plant-and-Apary-Inspection>

Florida Department of Community Affairs (DCA), *Florida Board of Building Codes & Standards, 2017 Florida Building Code, Chapter 11 Florida Accessibility Code for Building Construction Part A*
http://www.floridabuilding.org/fbc/workgroups/Accessibility_Code_Workgroup/Documentation/CHAPTER_11_w_fl_a_specifics.htm

Florida Department of Transportation, *Program Management, Maintenance Specifications Workbook Supplemental Specifications, Section 580 Landscape Installation*
<http://www.fdot.gov/programmanagement/Maintenance/2019Jan/default.shtm>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 580-001 Landscape Installation*
<http://www.fdot.gov/design/standardplans/current/IDx/580-001.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 212.11 Clear Sight Triangles*
<http://www.fdot.gov/roadway/FDM/current/2018FDM212Intersections.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 215.2.3 Clear Zone Criteria and 215.2.4 Lateral Offset, Table 215.2.1 Clear Zone Width Requirements, Table 215.2.2 Lateral Offset Criteria (for Trees)*
<http://www.fdot.gov/roadway/FDM/current/2018FDM215RoadsideSafety.pdf>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index Series 102-600 Traffic Control through Work Zones* <http://www.fdot.gov/design/standardplans/current/IDx/102-600.pdf>

Department of Transportation, Landscape Architecture Website www.MyFloridaBeautiful.com

Florida Department of Transportation, *Maintenance Rating Program Handbook*
<http://www.dot.state.fl.us/statemaintenanceoffice/MaintRatingProgram.shtm>

Florida Department of Transportation Outdoor Advertising Database
<http://www2.dot.state.fl.us/rightofway/>

Florida Exotic Pest Plant Council Invasive Plant Lists <http://www.fleppc.org/list/list.htm>

Florida Irrigation Society <http://www.fisstaterg.org>

Florida Power and Light (FPL), *Plant the Right Tree in the Right Place*
http://www.fpl.com/residential/trees/right_tree_right_place.shtml