

SECTION: 93060000
STATE ROAD: A1A
PERMIT: 2023-L-496-00006
COUNTY: PALM BEACH

**AMENDMENT NUMBER SEVEN (7) TO
FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT FOUR (4)
LANDSCAPE INCLUSIVE MAINTENANCE MEMORANDUM OF AGREEMENT**

THIS AMENDMENT Number Seven (7) to the Agreement dated July 20, 2017, made and entered into this _____ day of _____ 20____ by and between the State of Florida Department of Transportation hereinafter called the **DEPARTMENT** and the **TOWN OF HIGHLAND BEACH**, a municipal corporation of the State of Florida, hereinafter called the **AGENCY**.

W I T N E S S E T H

WHEREAS, the parties entered into the Landscape Inclusive Maintenance Memorandum of Agreement dated, July 20, 2017 for the purpose of maintaining the landscape improvements by the AGENCY on State Road A1A (South Ocean Boulevard); and,

WHEREAS, the DEPARTMENT and the AGENCY have agreed to add additional landscape by permit to be installed on State Road A1A (South Ocean Boulevard) in accordance with the above referenced Agreement; and,

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

1. Pursuant to Page 7, Paragraph 7 of the Landscape Inclusive Maintenance Memorandum of Agreement for State Road A1A (South Ocean Boulevard) dated July 20, 2017, the DEPARTMENT will allow an adjacent property owner to construct additional landscape improvements or to modify an improvement as indicated in **Exhibit "A"**, State Road A1A (South Ocean Boulevard) from M.P. 6.303 to M.P. 6.314. In accordance with the plans attached as **Exhibit "B"**.
2. The AGENCY shall agree to maintain the additional landscape improvements in the Agreement described above according to Part I of the Maintenance Plan, Exhibit "E" of the original agreement and Part II as follows:

Part II - Specific Project Site Maintenance Requirements and Recommendations:

1. The landscape design intent at the front of the property is to minimize the impact in the right of way.
2. 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.
3. Groundcover and shrub horizontal growth shall be maintained to prevent foliage from growing beyond the limits of the planting areas shown on the plan. Maintain an 8" setback from the foliage to the edge of curb, pavement, sidewalk and/or other hardscape improvements.
4. Maintain the vertical height of Big Blue Liriope at natural height (no trimming required).
5. Inspect groundcovers and shrubs on a monthly basis for maintaining full ground coverage.
6. Evaluate plant material on a monthly basis for pests, diseases, drought stress or general decline. If required, follow the integrated pest management program established by the Agency to ensure healthy plants.
7. Concrete pavers shall be inspected on a monthly basis for aesthetic appearance and safety conditions. Address any issues identified by repairing or replacing those specific locations. To maintain the overall aesthetic appearance and safety of the concrete pavers they shall be cleaned on a twice-yearly basis to prevent mold, dirt, oil, and gum build up. Joints and cracks in concrete, patterned concrete or asphalt, concrete pavers, concrete curbs, expansion joints, catch basins, gutter areas, etc. shall be inspected on a monthly basis to keep those areas free of weeds.
8. Inspect the irrigation system performance on a monthly basis to ensure the system is providing 100% coverage, does not have sections of low pressure, heads and valves are clean and clear of debris and any damaged irrigation components (i.e., spray nozzles, spray heads, valve boxes, etc.) are repaired or replaced.

Except as modified by this Amendment, all terms and conditions of the original Agreement and all Amendments thereto shall remain in full force and effect.

LIST OF EXHIBITS

Exhibit A - Landscape Improvements Maintenance Boundaries Limits

Exhibit B - Landscape Improvement Plans

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

TOWN OF HIGHLAND BEACH

By: _____ Date: _____
Chairperson / Mayor / Manager

Attest: _____ (SEAL)
Town Clerk

Legal Approval: _____

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

By: _____ Date: _____
Transportation Development Director

Attest: _____ (SEAL)
Executive Secretary

Legal Review: _____
Office of the District General Counsel

| | |
|--------------------|-------------------------|
| SECTION: | 93060000 |
| STATE ROAD: | A1A |
| PERMIT: | 2023-L-496-00006 |
| COUNTY: | PALM BEACH |

EXHIBIT A

LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES LIMITS

I. ORIGINAL INCLUSIVE LANDSCAPE MAINTENANCE AGREEMENT LIMITS:

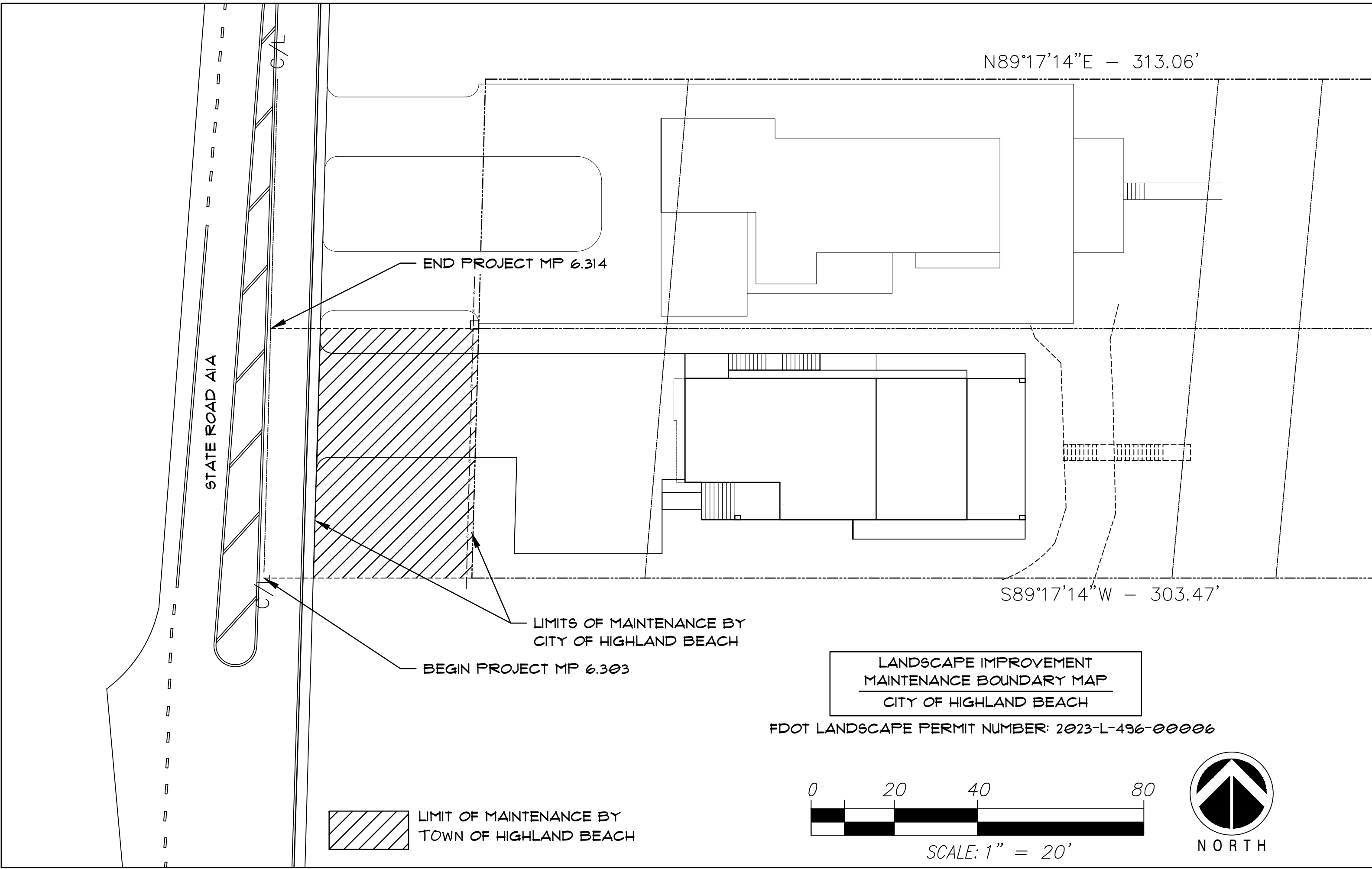
State Road A1A (South Ocean Boulevard) from approximately ¼ mile North of Spanish River Blvd (M.P. 4.868) to approximately ½ mile South of Linton Blvd (M.P. 7.711)

II. LANDSCAPE PERMIT PROJECT LIMITS (THIS PROJECT):

State Road A1A (3521 South Ocean Boulevard) from M.P. 6.303 to M.P. 6.314

See attached map*

*All other limits of the original agreement and amendments shall apply



| | |
|--------------------|-------------------------|
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EXHIBIT B

LANDSCAPE IMPROVEMENT PLANS

The AGENCY agrees to install the landscape improvements in accordance with the plans and specifications attached hereto and incorporated herein.

Please see attached plans prepared by: Michael Flaugh, PLA
Michael Flaugh Landscape Architect
May 8, 2023

LOCATION MAP:

NEAREST INTERSECTION
LINTON BLVD. AND AIA

PROJECT LOCATION

FDOT ROADWAY INFORMATION

-STATE ROAD AIA (SOUTH OCEAN BLVD.)

-ROADWAY ID: 9306000

-35 MPH DESIGN SPEED

-SIGHT DISTANCE DESIGN CRITERIA

-DESIGN SPEED 35 MPH

-PASSENGER VEHICLE

-D: 390

-DL: 215

-DR: 115

DESIGN PROFESSIONALS

LANDSCAPE ARCHITECT

MICHAEL FLAUGH LA

3144 SE OCEAN BLVD.

STUART FL, 34996

IRRIGATION DESIGNER

ROY TVEITE

RT IRRIGATION DESIGN

P.O. BOX 650622

VERO BEACH FL, 32965

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IR-1 IRRIGATION PLAN

IR-2 IRRIGATION DETAILS

IR-3 IRRIGATION DETAILS

LOCAL OFFICIAL

HIGHLAND BEACH

TOWN PLANNER

INGRID ALLEN

3614 SOUTH OCEAN BLVD.

HIGHLAND BEACH, FL 33487

Michael Flough
LANDSCAPE ARCHITECT

FL Reg. #LA0001728
772.419.0024
Stuart
Houzz.com/pro/Michael-Flough www.MikeFloughLA.com

Sheet
T1
Title Sheet

Landscape Plan
NEW RESIDENCE
3521 S Ocean Blvd., Highland Beach, FL 33487

Michael
Flough

Digitally signed
by Michael Flough
Date: 2023.05.08
15:27:15 -04'00'

Please note:
This landscape plan is a professional interpretation of existing and proposed site elements based on multiple sources of information. These sources may include: property surveys, architectural plans, google aerial imagery, site observations, photographs and site plans. At times, these supporting documents are inaccurate or approximate of best and on-site adjustments to the design during installation are necessary. It is the collector's responsibility to verify all measurements and quantities prior to commencing work.

Date: 07/27/2021
Design by: MF/PA
Reviewed by: MF
Scale: 1"=8'
Revised: 08/17/2021,
01/16/2023, 02/15/2023,
03/17/2023, 05/08/2023

EDGE OF PAVEMENT

STATE ROAD AIA (SOUTH OCEAN BLVD.)

EDGE OF PAVEMENT

PAVEMENT MARKING FOR TRAVEL LANES

EXISTING UTILITY POLE

EXISTING OVERHEAD ELECTRICAL LINES

FDOT RIGHT OF WAY LINE

END PROJECT MP 6.314

BEGIN PROJECT MP 6.303

S89°17'14"W - 30'

811

KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG

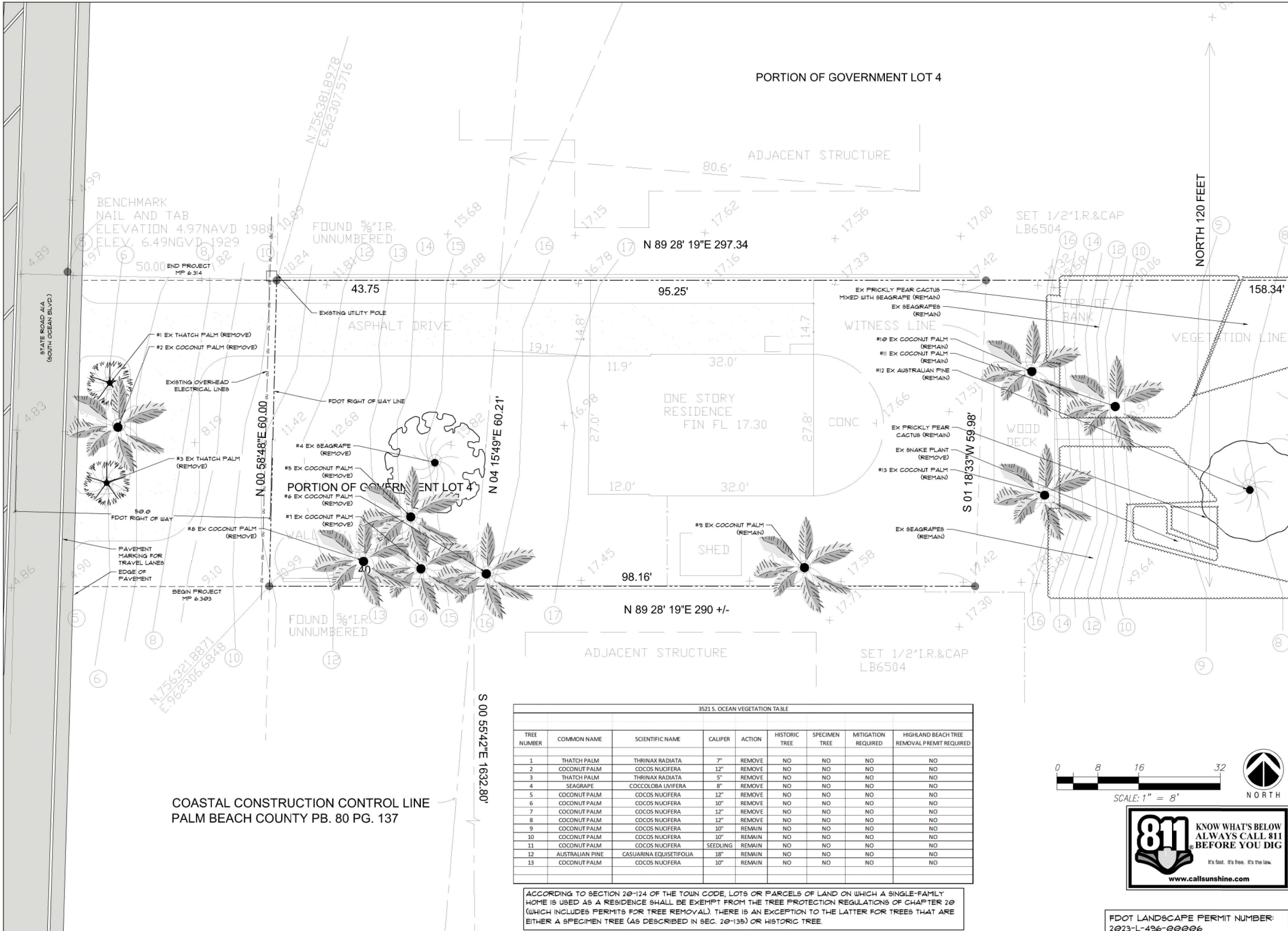
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SCALE: 1" = 8'

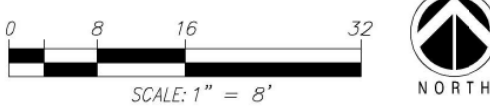
NORTH

FDOT LANDSCAPE PERMIT NUMBER:
2023-L-436-00006



| 3521 S. OCEAN VEGETATION TABLE | | | | | | | |
|--------------------------------|-----------------|-------------------------|----------|--------|---------------|---------------|---|
| TREE NUMBER | COMMON NAME | SCIENTIFIC NAME | CALIPER | ACTION | HISTORIC TREE | SPECIMEN TREE | HIGHLAND BEACH TREE REMOVAL PERMIT REQUIRED |
| 1 | THATCH PALM | THRINAX RADIATA | 7" | REMOVE | NO | NO | NO |
| 2 | COCONUT PALM | COCOS NUCIFERA | 12" | REMOVE | NO | NO | NO |
| 3 | THATCH PALM | THRINAX RADIATA | 5" | REMOVE | NO | NO | NO |
| 4 | SEAGRAPE | COCCOLOBA UVIFERA | 8" | REMOVE | NO | NO | NO |
| 5 | COCONUT PALM | COCOS NUCIFERA | 12" | REMOVE | NO | NO | NO |
| 6 | COCONUT PALM | COCOS NUCIFERA | 10" | REMOVE | NO | NO | NO |
| 7 | COCONUT PALM | COCOS NUCIFERA | 12" | REMOVE | NO | NO | NO |
| 8 | COCONUT PALM | COCOS NUCIFERA | 12" | REMOVE | NO | NO | NO |
| 9 | COCONUT PALM | COCOS NUCIFERA | 10" | REMAIN | NO | NO | NO |
| 10 | COCONUT PALM | COCOS NUCIFERA | 10" | REMAIN | NO | NO | NO |
| 11 | COCONUT PALM | COCOS NUCIFERA | SEEDLING | REMAIN | NO | NO | NO |
| 12 | AUSTRALIAN PINE | CASUARINA EQUISETIFOLIA | 18" | REMAIN | NO | NO | NO |
| 13 | COCONUT PALM | COCOS NUCIFERA | 10" | REMAIN | NO | NO | NO |

ACCORDING TO SECTION 20-124 OF THE TOWN CODE, LOTS OR PARCELS OF LAND ON WHICH A SINGLE-FAMILY HOME IS USED AS A RESIDENCE SHALL BE EXEMPT FROM THE TREE PROTECTION REGULATIONS OF CHAPTER 20 (WHICH INCLUDES PERMITS FOR TREE REMOVAL). THERE IS AN EXCEPTION TO THE LATTER FOR TREES THAT ARE EITHER A SPECIMEN TREE (AS DESCRIBED IN SEC. 20-135) OR HISTORIC TREE.





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Michael Flough
LANDSCAPE ARCHITECT

FL Reg. #LA0001728
772.419.0024
Stuart
Houzz.com/pro/Michael-Flough
www.MichaelFlough.A.com

Sheet
L1
Existing
Vegetation Plan

Landscape Plan
NEW RESIDENCE
3521 S Ocean Blvd., Highland Beach, FL 33487

Michael
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FDOT GENERAL NOTES

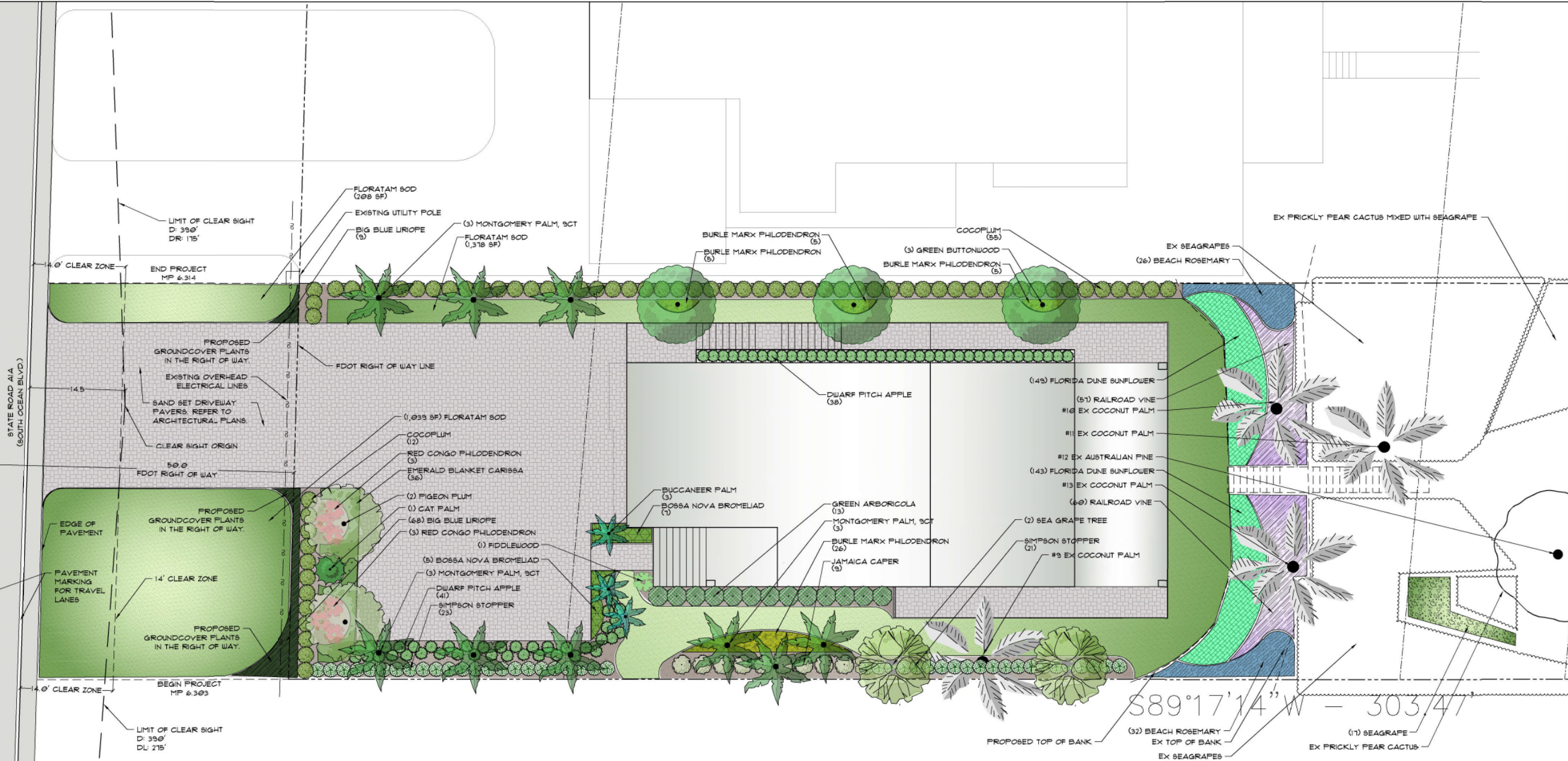
- GOVERNING STANDARD PLANS:
Florida Department of Transportation, FY 2022-23 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs) are available at the following website: <https://www.fdot.gov/design/standardplans>
- GOVERNING STANDARD SPECIFICATIONS:
Florida Department of Transportation, July 2022 Standard Specifications for Road and Bridge Construction at the following website: <https://www.fdot.gov/programmanagement/implemented/specbooks>
- Contractor shall repair all damage done to FDOT property during demolition, relocation &/or installation activities at his sole expense.
- Any plant material substitution within or impacting the FDOT Right of Way whether requested by the Contractor, Owner, Landscape Architect or other will need to get approval from the FDOT District Landscape Architect.
- Architectural Pavers installation for sidewalks, medians, driveways, or roadways within the FDOT right of way shall comply with current FDOT Standard Specification 526.
Online Reference: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/specbooks/fy-2023-24/fy2023-24ebook.pdf?sfvrsn=6b69416d_6
- 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 fulfilled. Excavated materials shall be hauled by the Permittee, at their cost & expense from the site to the FDOT Palm Beach Operations Center or stockpiled in those areas as directed by the Department, including asphalt millings.

FDOT PLANTING NOTES























- For the portion of landscape plant material that will be installed within the FDOT Right of Way, landscape installation shall comply with current applicable FDOT Maintenance Specification 580. Online Reference: <ssm580000wd-722-17992.pdf> (windows.net)
- For the portion of landscape plant material that will be installed within the FDOT Right of Way refer to the FDOT Standard Plans Index 580-001 Landscape Installation.
Online Reference: <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/design/standardplans/2023/idx/580-001.pdf?>
- Sodded areas will be in accordance with Standard Plans Index 570-010 and Standard Specifications Sections 162, 570, 981, 982, 983, 987 of the Department's latest edition of Governing Design Standards and Standard Specifications. All disturbed areas will be sodded within one (1) week of installation of said permitted work.



FDOT LANDSCAPE PERMIT NUMBER:
2023-L-436-00006





PLANT SCHEDULE

| TREES | QTY | BOTANICAL NAME | COMMON NAME | CONT | GAL | SIZE | NOTES | NOTES |
|---|----------|--------------------------------------|-------------------------|--------|----------------------------------|--------------------|------------|------------------|
|  | 2 | COCCOLOBA DIVERSIFOLIA | PIGEON PLUM | B & B | 3" CAL | 14' OA HT. | NATIVE | DROUGHT TOLERANT |
|  | 2 | COCCOLOBA UVIFERA | SEA GRAPE TREE | B & B | 3" CAL | 14' OA HT. | NATIVE | DROUGHT TOLERANT |
|  | 3 | CONOCARPUS ERECTUS 'GREEN' | GREEN BUTTONWOOD | 45 GAL | 3" CAL | 14' OA HT. | NATIVE | DROUGHT TOLERANT |
|  | 3 | PSEUDOPHOENIX SARGENTI | BUCCANEER PALM | B & B | | 14' OA HT. | NATIVE | DROUGHT TOLERANT |
|  | 9 | VEITCHIA MONTGOMERYANA | MONTGOMERY PALM, 9CT | B & B | FL FANCY | 9" CT, 14' OA HT. | NON NATIVE | |
| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING | SIZE | NOTES | NOTES |
|  | 9 | CAPPARIS CYNOPHALLOPHORA | JAMAICA CAPER | 1 GAL | AS SHOWN | 3 - 4' HT., FULL | NATIVE | DROUGHT TOLERANT |
|  | 1 | CHAMAEDOREA CATARACTARUM | CAT PALM | 1 GAL | AS SHOWN | 4' HT., 3' 8PRD. | NON NATIVE | |
|  | 61 | CHRYSOBALANUS ICAGO 'RED-TIP' | COCOPLUM | 1 GAL | AS SHOWN | 36" HT., FULL | NATIVE | DROUGHT TOLERANT |
|  | 1 | CITHAREXYLUM FRUTICOSUM | FIDDLEWOOD | 1 GAL | AS SHOWN | 36" HT., FULL | NATIVE | DROUGHT TOLERANT |
|  | 79 | CLUBIA ROSEA 'NANA' | DWARF PITH APPLE | 3 GAL | AS SHOWN | 14"x12" | NON NATIVE | DROUGHT TOLERANT |
|  | 44 | MYRCIANTHES FRAGRANS | SIMPSON STOPPER | 1 GAL | AS SHOWN | 36" HT., FULL | NATIVE | DROUGHT TOLERANT |
|  | 6 | PHILODENDRON 'ROJO CONGO' | RED CONGO PHILODENDRON | 3 GAL | AS SHOWN | 24"x24" | NON NATIVE | |
|  | 13 | SCHEFFLERA ARBORICOLA | GREEN ARBORICOLA | 25 GAL | AS SHOWN | 4' HT., FULL | NON NATIVE | DROUGHT TOLERANT |
| SHRUB AREAS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING | SIZE | NOTES | NOTES |
|  | 11 | COCCOLOBA UVIFERA | SEAGRAPE | 3 GAL | 24" O.C. | 18" HT., FULL | NATIVE | DROUGHT TOLERANT |
| GROUND COVERS | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING | SIZE | NOTES | NOTES |
|  | 36 | CARISSA MACROCARPA 'EMERALD BLANKET' | EMERALD BLANKET CARISSA | 1 GAL | 18" O.C. | 6"x8" | NON-NATIVE | DROUGHT TOLERANT |
|  | 58 | CONRADINA CANESCENS | BEACH ROSEMARY | 1 GAL | 18" O.C. | | NATIVE | DROUGHT TOLERANT |
|  | 292 | HELIANTHUS DEBILIS | FLORIDA DUNE SUNFLOWER | 1 GAL | 12" OC | 4"x8" | NATIVE | DROUGHT TOLERANT |
|  | 111 | IPOMOEA PES-CAPRAE | RAILROAD VINE | 1 GAL | 18" O.C. | FULL | NATIVE | DROUGHT TOLERANT |
|  | 71 | LIRIOPE MUSCARI 'BIG BLUE' | BIG BLUE LIRIOPE | 1 GAL | 12" OC | 6"x8" | NON-NATIVE | |
|  | 12 | NEOREGELIA 'BOSSA NOVA' | BOSSA NOVA BROMELIAD | 1 GAL | 24" O.C. | SUN GROWN, 12"x12" | NON-NATIVE | |
|  | 41 | PHILODENDRON X 'BURLE MARX' | BURLE MARX PHILODENDRON | 1 GAL | | | NON-NATIVE | |
| OTHER | QTY | BOTANICAL NAME | COMMON NAME | CONT | SPACING | SIZE | NOTES | NOTES |
|  | 2,625 SF | STENOTAPHRUM SECUNDATUM 'FLORATAM' | FLORATAM SOD | SOD | TIGHTLY FITTED, STAGGERED JOINTS | | | |

GENERAL NOTE:
ALL PLANTS ARE TO BE A MINIMUM GRADE OF FLORIDA #1

REFERENCE NOTES SCHEDULE

| SYMBOL | PLANTING ACCESSORIES DESCRIPTION | QTY | DEPTH/HEIGHT | INSTALLATION | PATTERN |
|---|----------------------------------|----------|--------------|--|---|
|  | 32'-94' MULCH | 11.99 CY | 3" | FINISHED GRADE EVEN WITH ADJACENT SOD/HARDSCAPES | BLACK, SHREADED, HARDWOOD, NON-CYPRESS |
|  | 32'-96' SOIL | 16.9 CY | 4" | TILLED IN | 1:1 SCREENED COMPOST AND SCREENED TOPSOIL |

| NATIVE / DROUGHT TOLERANT PLANT TABLE | | |
|---------------------------------------|-----------------------|---------------------------|
| PLANT TYPE | TOTAL PLANTS PROVIDED | NATIVE / DROUGHT TOLERANT |
| TREES / PALMS | 19 | 10 (53%) |
| SHRUBS | 220 | 213 (97%) |
| GROUNDCOVERS | 650 | 520 (80%) |



RAILROAD VINE

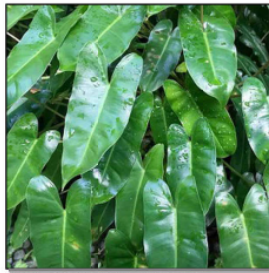


BIG BLUE LIRIOPE

IN FDOT R/W



BOSSA NOVA BROMELIAD



BURLE MARX PHILODENDRON



ST AUGUSTINE FLORATAM SOD



PIGEON PLUM



SEAGRAPE



GREEN BUTTONWOOD TREE



BUCCANEER PALM



MONTGOMERY PALM



CAT PALM



RED TIP COCOPLUM



FIDDLEWOOD



DWARF CLUBIA



SIMPSON STOPPER



RED CONGO PHILODENDRON



ARBORICOLA



CARISSA EMERALD BLANKET



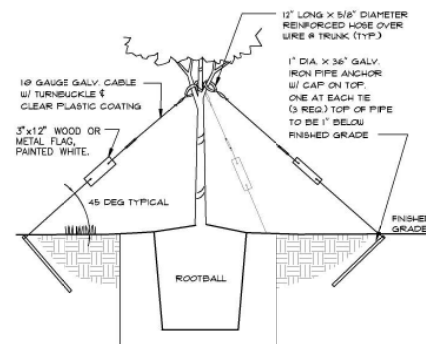
BEACH ROSEMARY



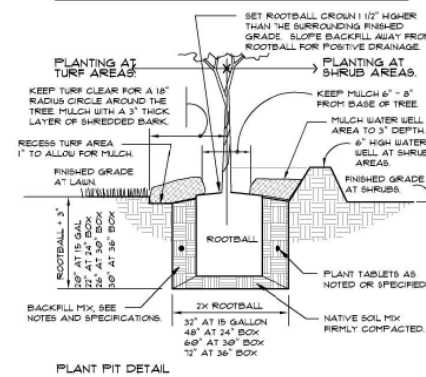
FLORIDA DUNE SUNFLOWER

LANDSCAPE INSTALLATION NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL DESIGNATE AN ENGLISH SPEAKING, SKILLED CREW FOREMAN FOR THE PROJECT, WHO WILL BE AVAILABLE AND ACCESSIBLE FOR THE DURATION OF THE LANDSCAPE INSTALLATION.
2. ALL SPECIFICATIONS MUST BE SATISFIED. IF THERE IS A PROBLEM LOCATING A MATERIAL WITH GIVEN SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT BY EMAIL PRIOR TO INSTALLATION. AT THE DISCRETION OF THE LANDSCAPE ARCHITECT, A SUBSTITUTION MAY BE MADE.
3. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO REVIEW AND RECONCILE PLAN WITH LANDSCAPE MATERIALS LIST, AND ANALYZE SITE CONDITIONS AND ACCESS PRIOR TO SUBMITTING A PROPOSAL.
4. LANDSCAPE CONTRACTOR MUST PROVIDE EVIDENCE OF WORKMAN'S COMPENSATION AND LIABILITY INSURANCE IN PROPOSAL PACKAGE.
5. THE LANDSCAPE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE LAWS, CODES AND ORDINANCES.
6. ALL PLANT MATERIAL FURNISHED BY THE LANDSCAPE CONTRACTOR SHALL BE FLORIDA #1 OR BETTER (GRADES AND STANDARDS FOR NURSERY PLANTS, FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, LATEST EDITION), UNLESS OTHERWISE NOTED ON THE LANDSCAPE MATERIALS LIST. AS MANY SPECIES TOLERATE BOTH SUNNY AND SHADY GROWING CONDITIONS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PLANT MATERIAL GROWN IN SIMILAR CONDITIONS TO THE SITE.
7. THE LANDSCAPE CONTRACTOR SHALL COMPLETE ALL WORK ACCORDING TO THE FLORIDA GREEN INDUSTRIES BEST MANAGEMENT PRACTICES.
8. THE LANDSCAPE CONTRACTOR MUST SPECIFY START AND COMPLETION DATES, IF AWARDED THE PROJECT.
9. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.
10. ALL PLANTING AREAS SHALL BE PREPARED BY REMOVING ALL DEBRIS, INCLUDING ASPHALT, CONCRETE, OR SIMILAR MATERIALS NOT SUITED FOR LANDSCAPE PLANTING.
11. PLANTING SOIL SHALL BE CLEAN OF ROCKS, STICKS, ROOTS AND WEEDS, AND SHALL BE WELL-DRAINING.
12. ALL LANDSCAPED AREAS SHALL BE FINISH GRADED SUCH THAT FINISHED ELEVATION WILL BE FLUSH AND LEVEL WITH SURROUNDING PAVED SURFACES. THE FINISHED GRADE AFTER PLANTING AND MULCHING SHALL NOT IMPEDE THE FLOW OF DRAINAGE INTO LANDSCAPED AREAS AND TO PREVENT THE BACKWASH OF MULCH AND DEBRIS INTO PAVED AREAS.
13. ALL PLANTING BEDS MUST DRAIN SUFFICIENTLY PRIOR TO PLANTING. IF EXISTING SOIL IS NOT ADEQUATE FOR ESTABLISHMENT OF PLANT MATERIALS DUE TO POOR DRAINAGE OR CHEMICAL PROPERTIES, SOIL AMENDMENTS SHALL BE ADDED PRIOR TO PLANTING.
14. PLANTS SHALL NOT BE PLACED TOO CLOSE TO ONE ANOTHER OR ANY HARDSCAPES. SEE LANDSCAPE MATERIALS LIST AND PLANTING DETAILS FOR SPACING AND PLACEMENT OF ALL PLANTS. A MULCH STRIP SHALL BE LEFT BETWEEN THE PLANTINGS AND WALLS, EDGE OF SOD, DRIVEWAY OR WALKWAYS. ALL PLANTS SHALL BE PLACED OUTSIDE THE EAVES OF THE ROOF, UNLESS OTHERWISE INDICATED ON THE LANDSCAPE PLAN.
15. ALL PLANTS TO BE RELOCATED SHALL BE PROPERLY ROOT PRUNED 6 TO 10 WEEKS PRIOR TO RELOCATION.
16. ALL NEW LANDSCAPE PLANTS SHALL BE PLANTED SLIGHTLY HIGHER THAN THE EXISTING GRADE LEAVING TOP OF THE ROOT BALL EXPOSED.
17. ALL PLANT MATERIALS SHALL BE THOROUGHLY WATERED IN AT THE TIME OF PLANTING.
18. 3" LAYER OF ORGANIC MULCH SHALL BE LAID IN ALL LANDSCAPE BEDS. NO MULCH SHALL BE LAID NEAR TREE TRUNKS. NO MULCH SHALL BE LAID ON TOP OF CITRUS TREE ROOT BALLS.
19. NEWLY PLANTED TREES SHALL BE STAKED ONLY IF THE ROOT BALL MOVES IN THE WIND OR THE TREES ARE LOCATED IN AN AREA OF WINDY CONDITIONS. ALL PALMS SHALL BE STAKED. ALL WOOD BRACES AND BRACE FRAMES SHALL BE STAINED DARK BROWN. NO NAILS SHALL BE DRIVEN INTO ANY PALM OR TREE.
20. PLANTING PLAN TAKES PRECEDENCE OVER PLANT LIST.
21. THE LANDSCAPE BID SHALL INCLUDE IRRIGATION ON A SEPARATE CONTRACT, EXPRESSED AS A LINE-ITEM PROPOSAL.
22. ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH FULLY AUTOMATIC IRRIGATION SYSTEM. THE IRRIGATION CONTRACTOR SHALL PROVIDE 100% COVERAGE IN ALL IRRIGATED PLANTING AREAS. THE IRRIGATION SYSTEM SHALL BE DESIGNED ACCORDING TO ACCEPTED IRRIGATION STANDARDS USING WATER CONSERVATION PRINCIPLES WITH LOW-VOLUME IRRIGATION SYSTEM. THE SYSTEM SHALL ACCOMMODATE EASY ADJUSTMENTS FOR SEASONAL IRRIGATION NEED CHANGES OR LOCAL WATERING RESTRICTIONS.
23. ALL SOD AND SHRUB AREAS SHALL BE IRRIGATED ON SEPARATE ZONES, WHENEVER POSSIBLE. PLANTING AREAS WITH DIFFERENT WATERING NEEDS SHALL BE PLACED ON SEPARATE ZONES.
24. ALL SHRUB AND GROUND COVER AREAS SHALL BE IRRIGATED WITH DRIP LINE OR MIST HEADS. TREES AND PALMS SHALL HAVE BUBBLERS. ALL HEADS IN A GIVEN ZONE MUST HAVE THE SAME PRECIPITATION RATE.
25. SPRAY HEADS SHALL BE PLACED AND ADJUSTED TO MINIMIZE OVER-SPRAY ON PAVED AREAS, ROADWAYS AND CURBING. NO OVER-SPRAY ON BUILDINGS IS ACCEPTABLE.
26. THE CONTRACTOR(S) SHALL KEEP ALL WORK AREAS NEAT AND TIDY ON A DAILY BASIS. AT COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REMOVE FROM THE PROPERTY ALL TEMPORARY STRUCTURES AND GARBAGE AT HIS/HER OWN EXPENSE.
27. THE CONTRACTOR(S) SHALL KEEP ALL PLANTS WATERED, FERTILIZED, MULCHED, PRUNED, STAKED AND GUYED AS NECESSARY TO ASSURE SPECIFIED MINIMUM GRADE OF FLORIDA #1 THROUGHOUT THE DURATION OF THE PROJECT CONSTRUCTION PERIOD. PLANTING BEDS SHALL BE KEPT FREE OF LITTER AND UNDESIRABLE VEGETATION. THE CONTRACTOR(S) IS RESPONSIBLE FOR KEEPING ALL THE PLANT MATERIAL HEALTHY, VIGOROUS, AND UNDAMAGED THROUGHOUT THE DURATION OF THE PROJECT CONSTRUCTION PERIOD.
28. THE FINAL PAYMENT IS MADE UPON COMPLETION OF PROJECT AND EXECUTION OF LIEN RELEASE AFFIDAVIT.
29. ALL SHRUBS AND GROUND COVERS SHALL BE WARRANTED FOR 90 DAYS; ALL TREES AND PALMS SHALL BE WARRANTED FOR 1 YEAR FROM THE DATE OF FINAL ACCEPTANCE AND PAYMENT.



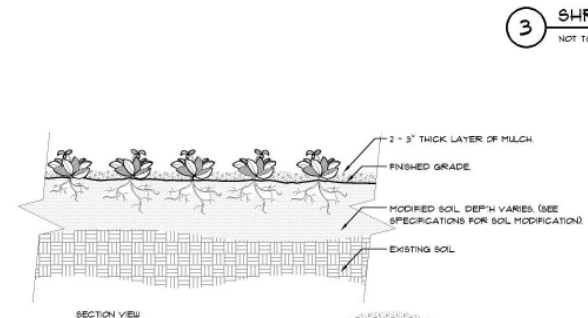
STAKING DETAIL



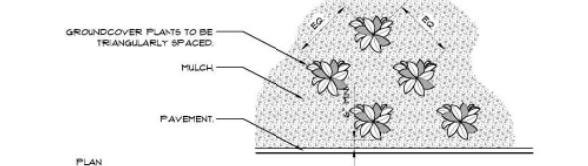
PLANT PIT DETAIL

1 TREE GUY WIRE PLANTING

NOT TO SCALE FX-PL-FX-TREE-11



SECTION VIEW

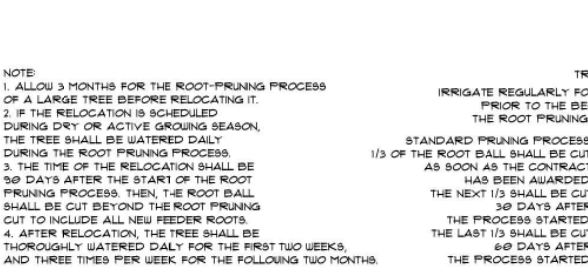


PLAN

NOTES:
1- SEE PLANTING LEGEND FOR GROUND COVER SPECIES, SIZE, AND SPACING DIMENSION.
2- SHALL ROOTS (GT OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIMETRY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE UNLESS THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIMETRY CAN BE REMOVED AT THE TIME OF PLANTING. SEE ROOT BALL SHAVING CUT ANGLE DETAIL.
3- SETTLE SOIL AROUND ROOT BALL OF EACH GROUND COVER PRIOR TO MULCHING.

4 GROUND COVER

NOT TO SCALE FX-PL-FX-GROU-01

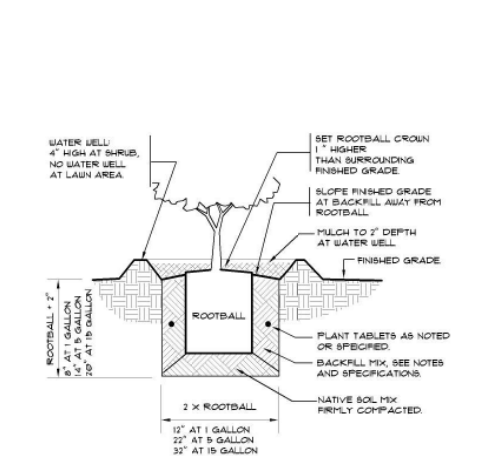


5 TREE RELOCATION

NOT TO SCALE

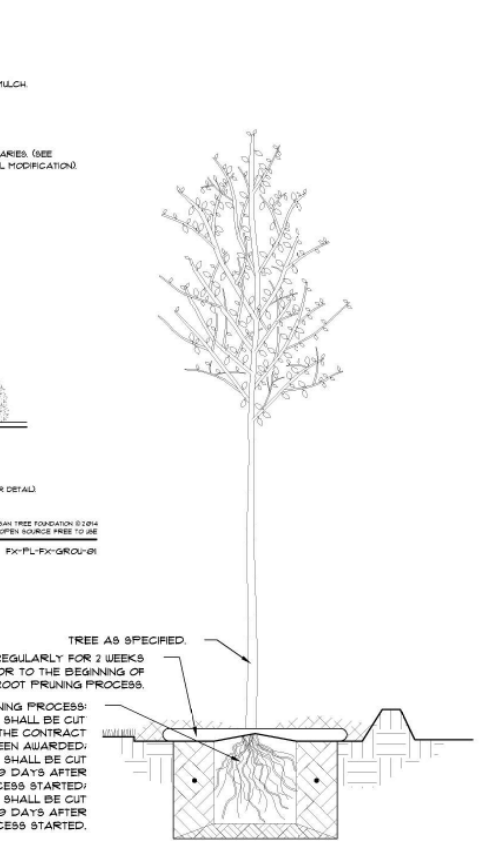
2 PALM TREE PLANTING

NOT TO SCALE FX-PL-FX-TREE-10



3 SHRUB PLANTING

NOT TO SCALE FX-PL-FX-SHRB-01



LANDSCAPE MAINTENANCE GUIDELINES:

1. LAWN CARE:
 - 1.1. MAINTAIN ST. AUGUSTINE LAWN AT 3" HEIGHT. LEAVE LAWN CLIPPINGS ON THE LAWN.
 - 1.2. FERTILIZE IN FEBRUARY, MAY AND OCTOBER. APPLY PRE-EMERGENT WEED KILLER IN EARLY SPRING AND FALL.
 - 1.3. PRACTICE INTEGRATED PEST MANAGEMENT TO IDENTIFY AND TREAT INSECT STRESS, WEED AND FUNGAL PROBLEMS. INSPECT AND CONTROL INSECT DAMAGE ON LAWNS DURING SUMMER MONTHS. FOLLOW LABEL DIRECTIONS FOR ANY INSECTICIDE, HERBICIDE OR FUNGICIDE APPLICATION. REFER TO GROWERS GUIDELINES FOR DETAILED INSTRUCTIONS.
 - 1.4. 100% OF THE SOD AREAS SHALL BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM. INSPECT THE IRRIGATION SYSTEM FOR BREAKS AND HEAD ALIGNMENT ROUTINELY.
2. MULCH:
 - 2.1. ALL LANDSCAPE BEDS SHALL BE MULCHED TWICE A YEAR.
 - 2.2. APPLY 3" LAYER OF MSC CERTIFIED, SHREDDED EUCALYPTUS OR RECYCLED HARDWOOD MULCH.
3. FERTILIZING:
 - 3.1. FERTILIZE WITH A GOOD QUALITY ORGANIC FERTILIZER THREE TIMES A YEAR PER LABEL INSTRUCTIONS STARTING IN MID TO LATE FEBRUARY.
 - 3.2. YELLOWING LEAVES ARE OFTEN A SIGN OF NUTRITIONAL DEFICIENCY.
 - 3.3. DO NOT APPLY FERTILIZER BETWEEN JUNE 1 AND SEPTEMBER 30. COMPOST SHALL BE USED IN LIEU OF FERTILIZER DURING THE RAINY SEASON, AS NEEDED.
 - 3.4. MAINTAIN A FERTILIZER FREE ZONE ALONG THE RIVER TO PREVENT RUN-OFF.
4. PEST AND DISEASES:
 - 4.1. SCOUT FOR PESTS AND DISEASES REGULARLY. ONLY 1% OF ALL INSECTS ARE HARMFUL TO PLANTS.
 - 4.2. USE INTEGRATED PEST MANAGEMENT PRACTICES. USE PREVENTATIVE CHEMICAL APPLICATIONS ONLY, WHEN DETERMINED NECESSARY BY A PEST MANAGEMENT PROFESSIONAL.
 - 4.3. CHEMICAL PEST CONTROL SHALL BE USED ONLY WHEN THE DAMAGE IS EXPECTED TO BE SIGNIFICANT.
5. WEEDS:
 - 5.1. WEED CONTROL SHALL BE PREVENTATIVE.
 - 5.2. HERBICIDE APPLICATIONS MUST BE DONE BY A LICENSED PEST-CONTROL PROFESSIONAL.
6. IRRIGATION:
 - 6.1. PROGRAM THE IRRIGATION SYSTEM TO RUN IN THE EARLY MORNING.
 - 6.2. NEW PLANTINGS SHOULD BE WATERED DAILY FOR THE FIRST TWO WEEKS, AFTER WHICH THREE TIMES PER WEEK FOR THE FOLLOWING TWO MONTHS.
 - 6.3. NEW TREES SHALL BE WATERED AT LEAST ONCE A WEEK FOR THE FOLLOWING YEAR AND SHRUBS FOR THE FOLLOWING 6 MONTHS FOR PROPER ESTABLISHMENT.
 - 6.4. TREES SHOULD RECEIVE 2 - 3 GALLONS OF WATER PER INCH OF TRUNK DIAMETER AT EACH WATERING.
 - 6.5. AT EACH WATERING, APPLY 1" WATER TO ESTABLISHED PLANTING BED.
 - 6.6. THE AUTOMATIC IRRIGATION SYSTEM SHALL BE INSPECTED ONCE A MONTH FOR LEAKS, BRAKES AND MISALIGNED HEADS.
 - 6.7. INCREASE WATERING FREQUENCY DURING TIMES OF HEAVY WINDS AND DROUGHT, TYPICALLY IN THE SPRING. PLEASE NOTE THAT A RAIN SENSOR WILL NOT DETECT THE DRYING EFFECTS OF HEAVY WINDS.
 - 6.8. REDUCE WATERING FREQUENCY DURING COOL WINTER AND RAINY SUMMER MONTHS. WATER ONLY AS NEEDED AS HEAVY RAINS AND IRRIGATION WILL INCREASE WEEDS. THE IRRIGATION SYSTEM MAY BE TURNED OFF DURING MONTHS OF HEAVY RAIN. A RAIN SENSOR MAY BE USED TO OVERRIDE THE SYSTEM DURING THE RAINY SEASON.
7. PRUNING:
 - 7.1. ALL PRUNING AND TRIMMING TOOLS SHALL BE CLEANED AFTER EACH USE TO PREVENT SPREADING OF DISEASES.
 - 7.2. REMOVE DEAD FRONDS, DEAD WOOD AND CROSSING BRANCHES ON LARGE SHRUBS, PALMS AND TREES ANY TIME OF THE YEAR.
 - 7.3. FLOWERING SHRUBS: LATE SUMMER AND FALL FLOWERING SHRUBS, AS WELL AS CONIFERS SHALL BE PRUNED ONCE A YEAR IN MARCH. SPRING BLOOMING SHRUBS SHALL BE PRUNED ONCE A YEAR, AFTER THEIR BLOOMS FADE IN LATE SPRING.
 - 7.4. SHADE TREES SHALL BE STRUCTURALLY PRUNED ONCE A YEAR IN SPRING BY A CERTIFIED ARBORIST.
 - 7.5. SHRUBS SHALL BE MAINTAINED FOLLOWING THEIR NATURAL FORM WITH ROUNDED TOP AND WIDER BASE. SMALL-LEAVED (LESS THAN 1" LENGTH) SHRUBS MAY BE SHEARED WITH POWERED HEDGE TRIMMERS. ALL SHRUBS SHALL BE TRIMMED ONE TO THREE TIMES A YEAR TO MAINTAIN DESIRED HEIGHT. ALL OVERGROWN SHRUBS SHALL BE CUT BACK IN MAY AND IN SEPTEMBER.
 - 7.6. HEDGES SHALL BE PRUNED REGULARLY FROM THE BEGINNING FOR PROPER ESTABLISHMENT. ALL HEDGES MUST BE MAINTAINED WITH NARROWER TOP THAN THE BOTTOM FOR SUNLIGHT TO REACH THE LOWER HALF OF THE PLANT.
 - 7.7. ORNAMENTAL GRASSES MAY BE CUT BACK ONCE A YEAR IN SUMMER TO REMOVE BROWN LEAVES. CUTTING MAY BE COMPLETED IN FOUR WEEK INTERVALS SO NOT TO HAVE ALL THE ORNAMENTAL GRASSES RECOVERING AT THE SAME TIME.
8. DIVIDING PLANTS:
 - 8.1. BROMELIADS: WHEN THE MOTHER PLANT TURNS BROWN, CAREFULLY PULL UP THE BROMELIAD CLUMP. CUT THE PUPS APART WITH A SHARP KNIFE OR PRUNERS PRESERVING AS MANY OF THE ROOTS AS POSSIBLE. DISCARD THE DYING MOTHER PLANT AND PLANT THE PUPS. THE DEAD MOTHER PLANT MAY ALSO BE TUSTED OFF AT THE BASE, WITHOUT REMOVING THE CLUMP FROM THE GROUND.
 - 8.2. HERBACEOUS PERENNIALS: THE CLUMPS MAY BE DIVIDED EVERY TWO TO THREE YEARS IN LATE SPRING OR SUMMER. DIG THE ROOT BALL OUT OF THE GROUND AND CAREFULLY DIVIDE THE CLUMP INTO 2-4 SMALLER SECTIONS.
9. RELOCATING PLANT MATERIAL:
 - 9.1. THE BEST TIME TO RELOCATE PLANTS IN THE GARDEN IS FEBRUARY THROUGH APRIL.
 - 9.2. THE PLANT SHALL BE PROPERLY ROOT-PRUNED BETWEEN 6 AND 10 WEEKS BEFORE RELOCATION.
 - 9.3. AT THE TIME OF THE RELOCATION, THE ROOT BALL SHALL BE CUT BEYOND THE ROOT PRUNING CUT TO INCLUDE ALL NEW FEEDER ROOTS.
 - 9.4. WATER RELOCATED PLANTS DAILY FOR THE FIRST TWO WEEKS, AFTER WHICH THREE TIMES PER WEEK FOR THE FOLLOWING TWO MONTHS.
10. MAINTAINING SOIL PH:
 - 10.1. SANDY SOILS ARE NATURALLY ALKALINE, BUT MOST PLANT MATERIALS PREFER SOILS IN NEUTRAL OR ACIDIC RANGE TO THRIVE.
 - 10.2. ADDING ORGANIC MATTER REGULARLY WILL MAINTAIN A HEALTHY PH LEVEL FOR ALL PLANTS.
 - 10.3. COMPOST WILL DECREASE THE SOIL PH THROUGH THE DECOMPOSITION PROCESS.
 - 10.4. ACIDIC ORGANIC MATTER, SUCH AS PINE NEEDLES AND ACID PEAT WILL REDUCE THE PH TEMPORARILY.
 - 10.5. GRANULAR SULFUR SHOULD ONLY BE USED AS THE LAST RESORT TO LOWER SOIL PH.
11. CONTAINER PLANTS:
 - 11.1. ONLY USE POTTING SOIL OR POTTING MIX IN CONTAINERS.
 - 11.2. WATER THOROUGHLY. CONTAINER PLANTS NEED MORE WATER THAN THE PLANTS IN THE GROUND. DURING SUMMER MONTHS, HERBS IN CONTAINERS WILL NEED WATERING ONCE DAILY.
12. COLD PROTECTION:
 - 12.1. WATER COLD SENSITIVE PLANTS THOROUGHLY 12 HOURS BEFORE THE FORECASTED COLD FRONT.
 - 12.2. COVER THE PLANTS AT DUSK WITH BLANKETS OR BREATHABLE COVERS. REMOVE THE COVERS AFTER DAWN.

FDOT LANDSCAPE PERMIT NUMBER:
2023-L-436-00006

Sheet
L4
Details and
Specifications

Landscape Plan
NEW RESIDENCE
3521 S Ocean Blvd., Highland Beach, FL 33487

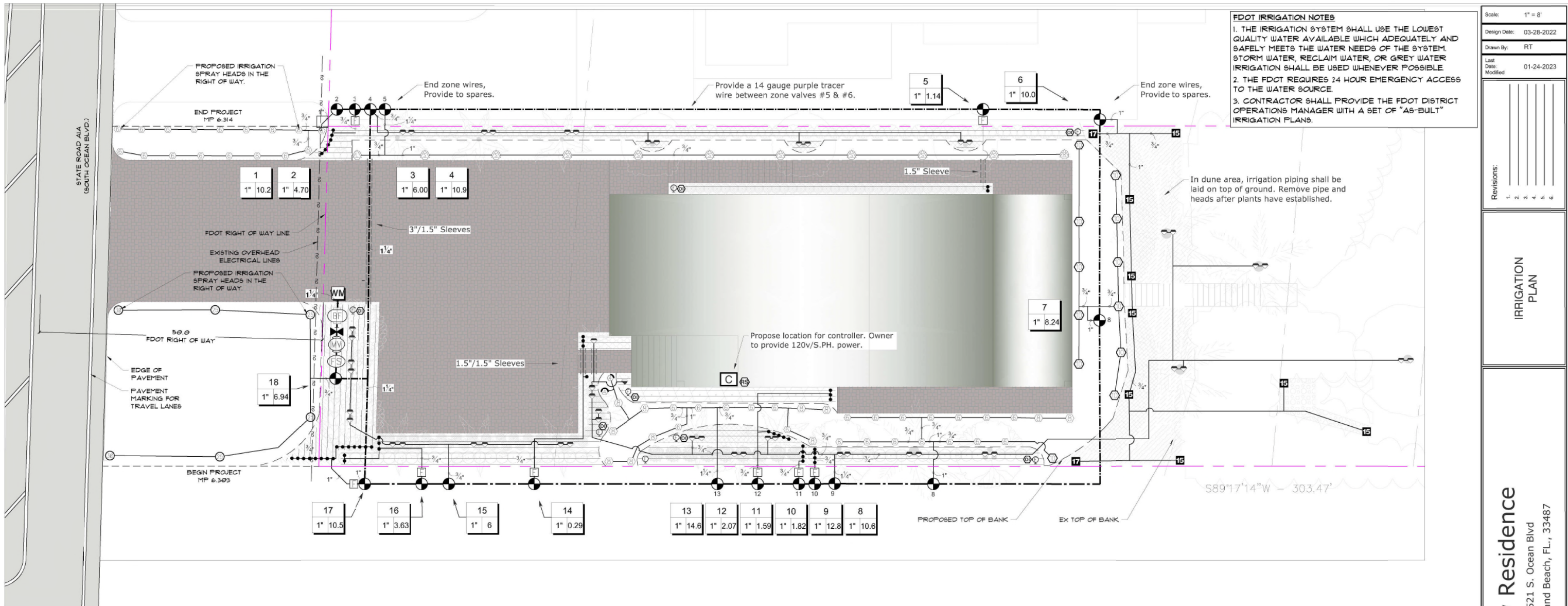
Michael
Flaugh

Digitally signed by
Michael Flaugh
Date: 2023.05.08
15:28:20 -04'00'



Date: 07/27/2021
Design by: MF/PA
Reviewed by: MF
Scale: 1"=8'
Revised: 08/17/2021,
01/16/2023, 02/15/2023,
03/17/2023, 05/08/2023

Michael Flaugh
LANDSCAPE ARCHITECT
FL Reg. #A0001728
772.419.9024
Shurt
Hauzz.com/prg/Michael-Flaugh www.MikeFlaugh.A.com



IRRIGATION SCHEDULE

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | SYMBOL | MANUFACTURER/MODEL/DESCRIPTION |
|--------|--|--------|---|
| | Hunter PROS-06-CV 15 Strip Series Turf Spray 6" Pop-Up Sprinkler. With Drain Check Valve. | | Proposed Zurn 720A 1" Pressure Vacuum Breaker (by others) |
| | Hunter PROS-06-CV, Rain Bird HE-VAN Series nozzles Turf Spray 6" Pop-Up Sprinkler with Drain Check Valve. | | Hunter PHC-2400 Wi-Fi enabled, full-functioning controller with touchscreen, 24-Station fixed controller, 120 VAC, Outdoor model. |
| | Hunter PROS-06-CV, with Rain Bird SQ Series nozzles. Turf Spray 6.0" Pop-Up Sprinkler. With Drain Check Valve. | | Hunter WR-CLK Rain Sensor, install within 1000 ft of controller, in line of sight. 22-28 VAC/VDC 100 mA power from timer transformer. Mount as noted. |
| | Hunter PROS-06-CV ADJ Turf Spray 6.0" Pop-Up Sprinkler. With Drain Check Valve. | | Hunter HC-100-FLOW 1" Flow meter for use with Hydramatic enabled controller to monitor flow and provide system alerts. Also functions as stand alone flow totalizer/sub meter on any residential or commercial irrigation system. |
| | Hunter PROS-12-CV Adj Series Shrub Spray, 12in. Pop-Up. With Drain Check Valve. | | Hunter HY-100 1" MPT x MPT threaded inlet and outlet filter with 150 mesh stainless steel screen |
| | Hunter PCB 10 Flood Bubbler, 1/2" FIPT. | | Water Meter 1" Owner to Provide a (1") potable water meter with a minimum size PE service line of 1.25 inches. |
| | Hunter PGP-04-MPR 25 Turf Rotor, 4" Pop-Up. Adjustable to Full Circle. MPR Nozzle. | | Irrigation Lateral Line: PVC Schedule 40 Sch-40 solvent weld bell end PVC pipe, ASTW D2266. Use only Weld-on Medium body 721 Blue glue with P-70 purple primer. Apply solvent weld glue per manufactures instructions. See specifications and details for additional installation instructions. |
| | Netafirm TL050MFV-1 Automatic flush valve, 1/2" male pipe thread. | | Irrigation Mainline: PVC Schedule 40 Sch-40 solvent weld bell end PVC pipe. Use only Weld-on Medium body 721 Blue glue with P-70 purple primer. Apply solvent weld glue per manufactures instructions. See specifications and details for additional additional instructions. |
| | Rain Bird OPERIND Drip System Operation Indicator, stem rises 6" for clear visibility when drip system is charged to a minimum of 20psi. Includes 16" of 1/4" distribution tubing with connection fitting pre-installed. | | Pipe Sleeve: PVC Schedule 40 Sleeving sizes 1.5-inch thru 4-inch shall be Sch-40 pipe, Sleeving 6-inch and larger shall be Class 200 pipe. See details and specifications for additional installation instructions. |
| | Hunter PGPV-101A 1" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use. Female NPT Inlet/Outlet. Angle Configuration, With Flow Control. | | Valve Callout |
| | Nibco T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location. Size Range - 1/4" - 3". | | |
| | Hunter ICV-G 1" 1" Plastic Electric Master Valve, Globe Configuration, with NPT Threaded Inlet/Outlet. | | |

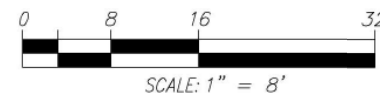
WATERING SCHEDULE

| NUMBER | MODEL | TYPE | PRECIP | SUN | MON | TUE | WED | THU | FRI | SAT | IN./WEEK | GAL./WEEK | GAL./DAY |
|---------|------------------|-------------------|-----------|--------|-----|--------|--------|-----|-----|--------|----------|-----------|----------|
| 1 | Hunter PGPV-101A | Turf Spray | 4.66 in/h | 6 min | | | 6 min | | | 6 min | 1.3 | 173 | 57.6 |
| 2 | Hunter PGPV-101A | Area for Dripline | 1.45 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 244 | 81.4 |
| 3 | Hunter PGPV-101A | Buttler | 2.58 in/h | 7 min | | 7 min | 7 min | | | 7 min | 0.9 | 126 | 42 |
| 4 | Hunter PGPV-101A | Turf Spray | 2.27 in/h | 12 min | | 12 min | 12 min | | | 12 min | 1.3 | 381 | 127 |
| 5 | Hunter PGPV-101A | Area for Dripline | 1.45 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 59.3 | 19.8 |
| 6 | Hunter PGPV-101A | Shrub Spray | 0.92 in/h | 29 min | | 29 min | 29 min | | | 29 min | 1.3 | 850 | 283 |
| 7 | Hunter PGPV-101A | Turf Spray | 1.88 in/h | 14 min | | 14 min | 14 min | | | 14 min | 1.3 | 346 | 115 |
| 8 | Hunter PGPV-101A | Turf Spray | 3.66 in/h | 8 min | | 8 min | 8 min | | | 8 min | 1.3 | 232 | 77.4 |
| 9 | Hunter PGPV-101A | Buttler | 2.49 in/h | 8 min | | 8 min | 8 min | | | 8 min | 0.9 | 281 | 93.5 |
| 10 | Hunter PGPV-101A | Area for Dripline | 1.45 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 94.4 | 31.5 |
| 11 | Hunter PGPV-101A | Area for Dripline | 1.45 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 82.7 | 27.6 |
| 12 | Hunter PGPV-101A | Area for Dripline | 1.44 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 108 | 35.9 |
| 13 | Hunter PGPV-101A | Turf Spray | 4.76 in/h | 6 min | | 6 min | 6 min | | | 6 min | 1.3 | 247 | 82.5 |
| 14 | Hunter PGPV-101A | Area for Dripline | 1.42 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 15.1 | 5.04 |
| 15 | Hunter PGPV-101A | Buttler | 2.58 in/h | 7 min | | 7 min | 7 min | | | 7 min | 0.9 | 126 | 42 |
| 16 | Hunter PGPV-101A | Area for Dripline | 1.44 in/h | 18 min | | 18 min | 18 min | | | 18 min | 1.25 | 189 | 62.9 |
| 17 | Hunter PGPV-101A | Area for Dripline | 1.91 in/h | 14 min | | 14 min | 14 min | | | 14 min | 1.25 | 421 | 140 |
| 18 | Hunter PGPV-101A | Turf Rotor | 0.79 in/h | 33 min | | 33 min | 33 min | | | 33 min | 1.3 | 687 | 229 |
| TOTALS: | | | | 270 | | 270 | 270 | | | 270 | | 4,862 | 1,554 |

Note: Run times are base on SFWMD 10 year average rain fall, peak usage in July. Contractor / owner must adjust run time to current weather condition...

VALVE SCHEDULE

| NUMBER | MODEL | SIZE | TYPE | GPM | PSI @ POC | PRECIP |
|--------|------------------|------|-------------------|-------|-----------|-----------|
| 1 | Hunter PGPV-101A | 1" | Turf Spray | 10.16 | 35.7 | 4.66 in/h |
| 2 | Hunter PGPV-101A | 1" | Area for Dripline | 4.7 | 35.3 | 1.44 in/h |
| 3 | Hunter PGPV-101A | 1" | Bubbler | 6 | 41.4 | n/a |
| 4 | Hunter PGPV-101A | 1" | Turf Spray | 10.89 | 37.4 | 2.27 in/h |
| 5 | Hunter PGPV-101A | 1" | Area for Dripline | 1.14 | 35.5 | 1.44 in/h |
| 6 | Hunter PGPV-101A | 1" | Shrub Spray | 10.0 | 42.2 | 0.92 in/h |
| 7 | Hunter PGPV-101A | 1" | Turf Spray | 8.24 | 35.7 | 1.88 in/h |
| 8 | Hunter PGPV-101A | 1" | Turf Spray | 10.56 | 36.0 | 3.66 in/h |
| 9 | Hunter PGPV-101A | 1" | Bubbler | 12.75 | 42.3 | n/a |
| 10 | Hunter PGPV-101A | 1" | Area for Dripline | 1.82 | 35.4 | 1.44 in/h |
| 11 | Hunter PGPV-101A | 1" | Area for Dripline | 1.59 | 35.3 | 1.44 in/h |
| 12 | Hunter PGPV-101A | 1" | Area for Dripline | 2.07 | 35.4 | 1.44 in/h |
| 13 | Hunter PGPV-101A | 1" | Turf Spray | 14.55 | 35.9 | 4.76 in/h |
| 14 | Hunter PGPV-101A | 1" | Area for Dripline | 0.29 | 35.0 | 1.44 in/h |
| 15 | Hunter PGPV-101A | 1" | Bubbler | 6 | 40.5 | n/a |
| 16 | Hunter PGPV-101A | 1" | Area for Dripline | 3.63 | 35.1 | 1.44 in/h |
| 17 | Hunter PGPV-101A | 1" | Area for Dripline | 10.53 | 35.3 | 1.44 in/h |
| 18 | Hunter PGPV-101A | 1" | Turf Rotor | 6.94 | 34.9 | 0.79 in/h |



FDOT LANDSCAPE PERMIT NUMBER:
2023-L-496-00006

Scale: 1" = 8'

Design Date: 03-28-2022

Drawn By: RT

Last Date: 01-24-2023

Modified:

Revisions:

| | |
|---|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

IRRIGATION PLAN

New Residence

3521 S. Ocean Blvd

Highland Beach, FL, 33487

Michael Flough

Digitally signed by Michael Flough

Date: 2023.05.08 15:28:34 -04'00'

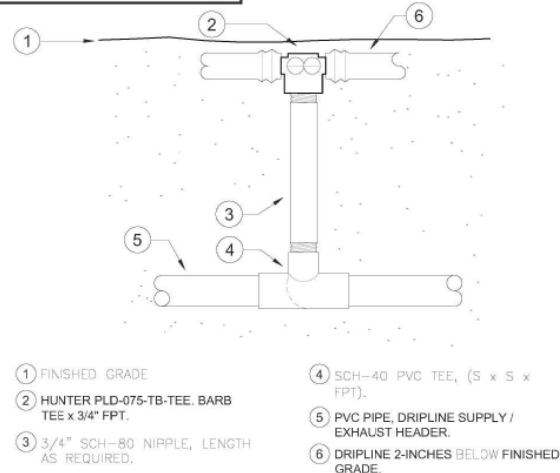


IR-1

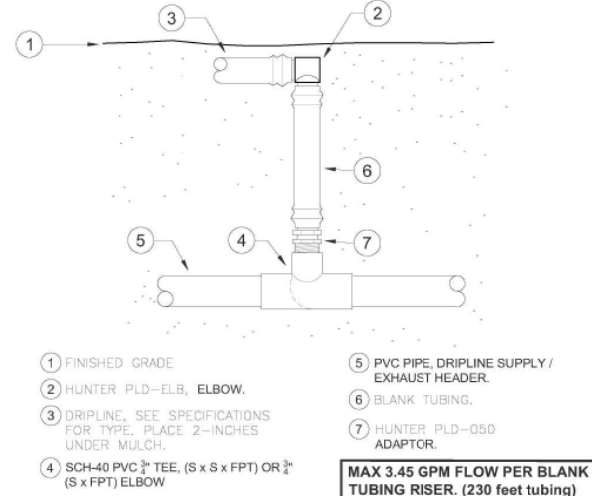
of 3

Project # 2022-0328_HB

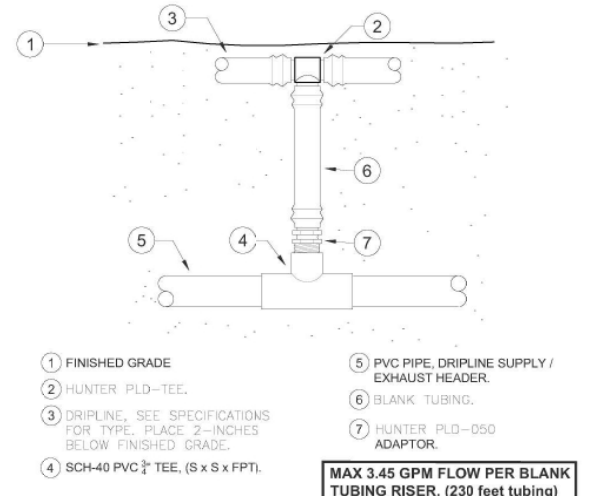
MAX 6.90 GPM FLOW PER RISER.
(230 FEET IN EACH DIRECTION)



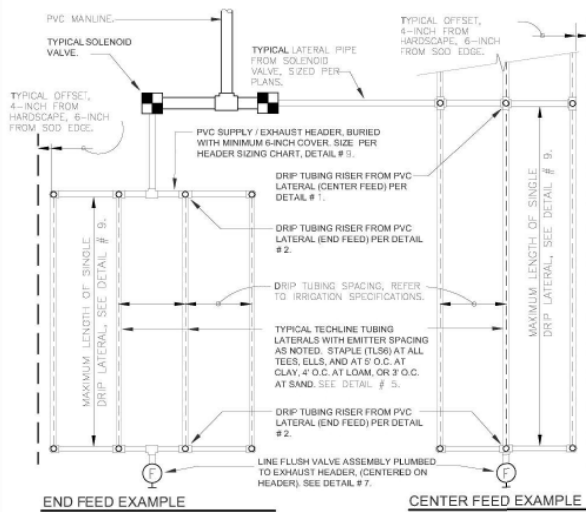
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N.T.S. DRIPLINE SUPPLY HEADER CENTER FEED RISER



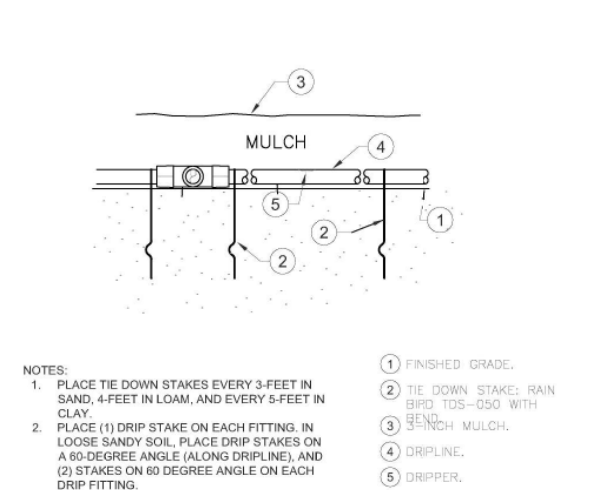
2 DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION
N.T.S. DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION



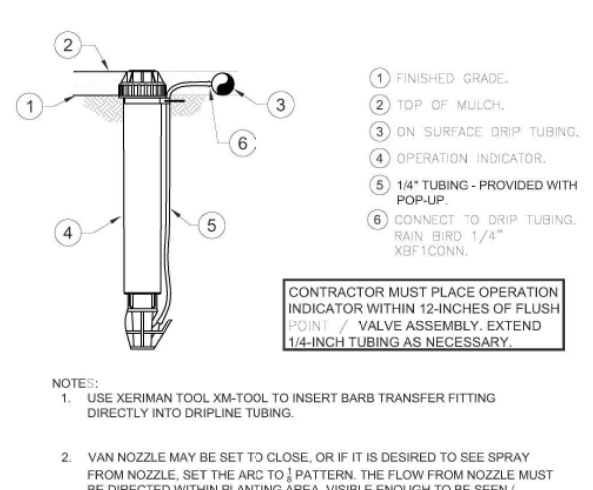
3 DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION
N.T.S. DRIPLINE SUPPLY / EXHAUST HEADER CONNECTION



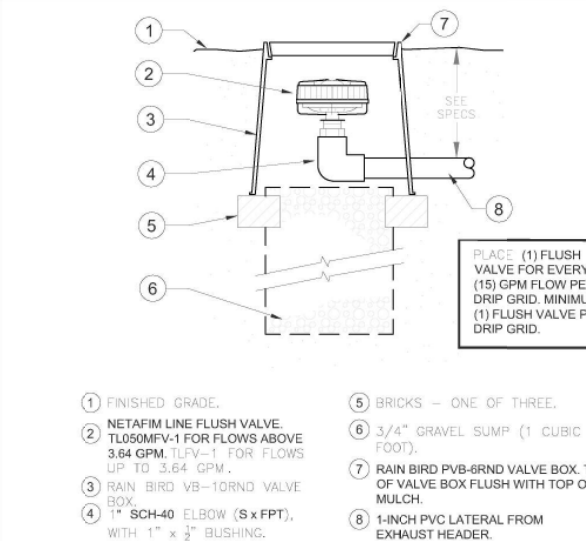
4 GENERAL DRIP EQUIPMENT PLACEMENT
N.T.S.



5 RAIN BIRD TDS-050 (WITH BEND) DRIP STAKES
N.T.S.



6 RAIN BIRD OPERATION INDICATOR
N.T.S.



7 NETAFIM FLUSH VALVE - PLUMBED TO PVC
N.T.S.

| HDL-COP DRIPLINE GENERAL GUIDELINES FOR WATERING TIME | TURF | | | SHRUB & GROUND COVER | | |
|---|---------|------|-----------|----------------------|---------|----------|
| | CLAY | LOAM | SANDY | CLAY | LOAM | SANDY |
| DIPPER FLOW (GPH) | 0.40 | 0.60 | 0.90 | 0.40 | 0.60 | 0.90 |
| DIPPER INTERVAL | 24" | 12" | 12" | 24" | 18" | 12" |
| LATERAL (ROW) SPACING | 18"-24" | 12" | 9"-12" | 18"-24" | 18"-24" | 12"-18" |
| APPLICATION RATE (IN/HR) | .22-.17 | .96 | 1.93-1.44 | .22-.17 | .43-.32 | 1.44-.96 |
| TIME TO APPLY 1/4" | 68-88 | 16 | 8-10 | 68-88 | 35-47 | 10-16 |

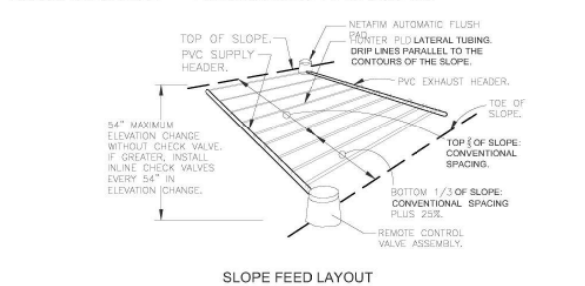
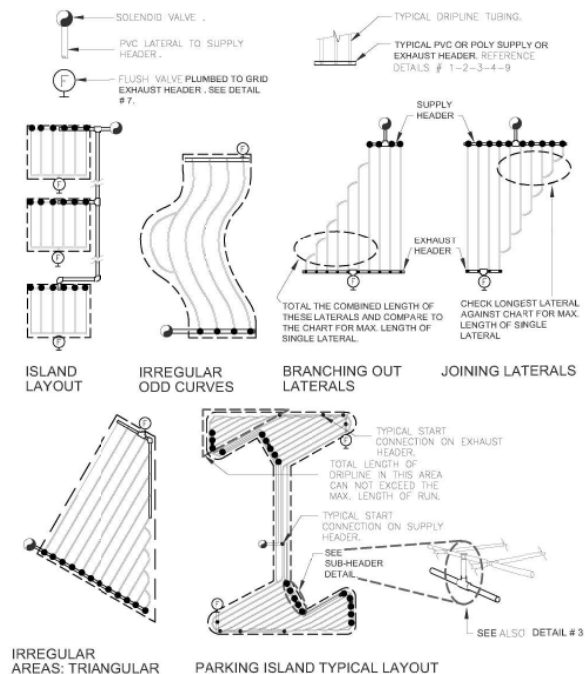
8 HUNTER HDL-COP DRIPLINE TABLE -1
N.T.S.

| HUNTER HDL-COP MAXIMUM LENGTH OF SINGLE LATERAL (FEET) | | | | | | | | | | | |
|---|-----------------|-----|-------|------|-----------------|------|-----------------|------|-----|-----|-----|
| DRIPLER SPACING | | 12" | | | 18" | | | 24" | | | |
| DRIPLER FLOW RATE (GPH) | | 0.4 | 0.6 | 0.9 | — | 0.4 | 0.6 | 0.9 | 0.6 | 0.9 | |
| INLET PRESSURE (PSI) | 15 | — | 285 | 236 | 164 | — | 404 | 333 | 233 | 423 | 292 |
| | 20 | — | 339 | 280 | 192 | — | 475 | 395 | 273 | 501 | 348 |
| | 30 | — | 411 | 339 | 236 | — | 582 | 482 | 333 | 610 | 419 |
| | 40 | — | 463 | 385 | 267 | — | 657 | 545 | 376 | 688 | 479 |
| HUNTER HDL-COP FLOW PER 100 FEET | | | | | | | | | | | |
| DRIPLER SPACING | 0.4 GPH DRIPLER | | | | 0.6 GPH DRIPLER | | 0.9 GPH DRIPLER | | | | |
| | GPH | GPM | GPH | GPM | GPH | GPM | GPH | GPM | GPH | GPM | |
| 12" | — | — | 40.00 | 0.67 | 60.00 | 1.00 | 90.0 | 1.50 | | | |
| 18" | — | — | 26.67 | 0.44 | 40.00 | 0.67 | 59.9 | 0.99 | | | |
| 24" | — | — | 20.00 | 0.33 | 30.00 | 0.50 | 45.0 | 0.75 | | | |
| SUPPLY AND EXHAUST HEADER SIZING CHART (UNLESS NOTED ON PLANS) | | | | | | | | | | | |
| STEP 1: ADD LENGTH OF ALL TECHLINE LATERAL TUBING CONNECTED TO THE HEADER. STEP 2: DIVIDE THIS TOTAL LENGTH BY 100 TO INDICATE THE LENGTH IN UNITS OF 100. STEP 3: LOCATE THE GPM THAT APPLIES FOR EACH UNIT OF 100 FEET LENGTH ON THE CHART "TECHLINE FLOW PER 100 FEET". MULTIPLY THIS GPM NUMBER TIMES THE UNITS OF 100 FEET FOR THE TOTAL GPM AT THIS HEADER. STEP 4: SIZE THE HEADER WITH THE FOLLOWING: 1 TO 6 GPM: 1/2" HEADER. 6 TO 10 GPM: 3/4" HEADER. 10 TO 20 GPM: 1 1/4" HEADER. 20 TO 30 GPM: 1 1/2" HEADER. | | | | | | | | | | | |

9 HUNTER HDL-COP DRIPLINE TABLE - 2
N.T.S.

DRIP SPECIFICATIONS:

- DRIP TUBING; HUNTER HDL-CV-GOP, ROW SPACING 12-INCHES. DRIP GRID LAY-OUT IS BASED ON 30 PSI. IF PRESSURE BY SOLENOID VALVE IS HIGHER THAN 50 PSI, INSTALL A AS-50 ON SOLENOID VALVE.
- INSTALL DRIP SYSTEM IN THE FOLLOWING ORDER: A). WITH ALL MAINLINE AND IT'S ASSOCIATE EQUIPMENT COMPLETELY INSTALLED, FLUSH MAINLINE TILL FREE AND CLEAR OF DEBRIS. B). INSTALL ALL LATERALS TO THE VARIOUS DRIP GRIDS, AND SUPPLY HEADERS WITH RISERS EXTENDED ABOVE GROUND. CENTER FEED RISERS, TEMPORARY EXTEND NIPPLES WITH PIPE AND COUPLINGS (DO NOT GLUE). FLUSH TILL FREE AND CLEAR OF DEBRIS, TEMPORARY CAP NIPPLES, SEAL BLANK TUBING (RISERS) WITH TAPE. C). INSTALL EXHAUST HEADERS - RISERS - FLUSH POINTS. D). INSTALL DRIP GRID, STAPLE TUBING PER DETAIL #5, CONNECT DRIP TUBING TO SUPPLY HEADER RISERS, FLUSH TILL FREE AND CLEAR OF DEBRIS. E). CONNECT DRIP GRID TO EXHAUST HEADER RISERS, FLUSH SYSTEM USING "FLUSH VALVE". PVC DISCHARGE AND EXHAUST HEADERS MUST BE BURIED WITH MINIMUM 6" COVER. MULCH IS NOT CONSIDERED AS COVERAGE.
- INSTALL OPERATION INDICATORS "OI" WITHIN 12-INCHES OF FLUSH POD, ONE AT END OF EACH DRIP GRID. SEE DETAIL #6. ACTIVATE Drip ZONE, ENSURE ALL OPERATION INDICATORS ARE FULLY EXTENDED, ADJUST STREAM SPRAY TO WHERE IT CAN EASILY BE SEEN BY MAINTENANCE PERSON.
- PRESSURE TEST WITH OWNERS REPRESENTATIVE PRESENT; PER ZONE, TEMPORARY INSTALL (2) PRESSURE GAUGES (LIQUID FILLED PRESSURE GAUGES) ON (2) FLUSH POINTS, (1) ON LARGEST GRID "FLUSH POINT" AND THE OTHER ON FARTHEST GRID "FLUSH POINT". ACTIVATE ZONE, AFTER FLOW HAS STABILIZED, VERIFY ALL ZONE OPERATION INDICATORS ARE FULLY EXTENDED, CHECK PRESSURE ON BOTH GAUGES, PRESSURE MUST BE 20 PSI OR HIGHER TO PASS TEST. IF TEST FAILS, CONTRACTOR TO LOCATE AND CORRECT PROBLEM AND RETEST. IT IS IN THE CONTRACTORS BEST INTEREST TO PERFORM HIS OWN TEST BEFORE HE CALLS OWNERS REPRESENTATIVE PRESENTS TO AVOID RE-INSPECTION FEE'S.
- PRESSURE TEST RESULTS SHALL BE NOTED AS-BUILD DRAWING BY THE "FLUSH VALVE" WHERE TESTS WAS TAKEN. ALL "FLUSH VALVE" LOCATIONS SHALL BE INCLUDED IN AS-BUILD DRAWINGS.



- NOTES:
- THESE TYPICAL LAY-OUT DRAWINGS ARE TO SHOW HOW THE WATER MOVEMENT IN DRIP LINES FLOW TOWARDS EXHAUST HEADER, AND WHAT REQUIRED CALCULATIONS ARE NEEDED TO BE PERFORMED BY CONTRACTOR.
 - MOST LANDSCAPE BEDS ARE IRREGULAR AND MAY NOT REFLECT THE SHAPE AND SIZE AS SHOWN IN THESE DETAILS. CONTRACTOR SHALL LAY-OUT SHRUB BED DRIP GRID BASE ON THE PRINCIPLES SHOWN IN THIS DETAIL AND ACCORDING TO ALL OTHER DETAILS SHOWN ON THIS SHEET.

10 TYPICAL DRIP GRID LAY-OUT
N.T.S.

FDOT LANDSCAPE PERMIT
NUMBER: 2023-L-496-00006

Scale: 1" = 8'

Design Date: 03-28-2022

Drawn By: RT

Last Date: 01-24-2023

Revisions:

| | |
|---|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

IRRIGATION
DRIP DETAILS

New Residence

3521 S. Ocean Blvd
Highland Beach, FL., 33487

Michael
Flaugh

Digitally signed by
Michael Flaugh
Date: 2023.05.08
15:28:47 -0400

NORTH

REGISTERED LANDSCAPE ARCHITECT
FLA 1778
MICHAEL FLAUGH

IR-2
of 3

Project # 2022-0328_HB

