



Town of Lake Park, Florida

Tree Board Meetingg Agenda

Tuesday, April 11, 2023 at 6:00 PM

Town Hall Commission Chamber, 535 Park Avenue, Lake Park, FL 33403

Brady Drew	—	Chair
Lauren Paxton	—	Board Member
Shana Phelan	—	Board Member
Gillian Kennedy Wright	—	Board Member

PLEASE TAKE NOTICE AND BE ADVISED, that if any interested person desires to appeal any decision of the Tree Board, with respect to any matter considered at this meeting, such interested person will need a record of the proceedings, and for such purpose, may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Persons with disabilities requiring accommodations in order to participate in the meeting should contact the Town Clerk's office by calling 881-3311 at least 48 hours in advance to request accommodations.

CALL TO ORDER/ROLL CALL

PLEDGE OF ALLEGIANCE

SELECTION OF A CHAIR AND VICE-CHAIR:

1. Selection of a Chair and Vice-Chair

CONSENT AGENDA:

2. January 10, 2023 Tree Board Meeting Minutes

NEW BUSINESS:

3. Centennial Arbor Day Ceremony

PUBLIC COMMENT:

This time is provided for addressing items that do not appear on the Agenda. Please complete a comment card and provide it to the Agency Clerk so speakers may be announced. Please remember comments are limited to a TOTAL of three minutes.

COMMITTEE MEMBER COMMENTS:

STAFF MEMBER COMMENTS:

ADJOURNMENT:

FUTURE MEETING DATE: The next scheduled Tree Board Meeting will be conducted on May 9, 2023.



Town of Lake Park Library Board

Agenda Request Form

Meeting Date: **April 11, 2023**

Agenda Item No.

Agenda Title: **Selection of a Chair and Vice-Chair**

- | | |
|---|--|
| <input type="checkbox"/> SPECIAL PRESENTATION/REPORTS
<input type="checkbox"/> BOARD APPOINTMENT
<input type="checkbox"/> PUBLIC HEARING ORDINANCE ON _____ READING
<input checked="" type="checkbox"/> NEW BUSINESS
<input type="checkbox"/> OTHER: _____ | <input type="checkbox"/> CONSENT AGENDA
<input type="checkbox"/> OLD BUSINESS |
|---|--|

Approved by Town Manager _____ **Date:** _____

Vivian Mendez, MMC, Town Clerk

Name/Title

Originating Department: <div style="text-align: center;">Town Clerk</div>	Costs: \$ 0.00 Funding Source: Acct. # <input type="checkbox"/> Finance _____	Attachments: 1. Town Code
Advertised: Date: _____ Paper: _____ <input checked="" type="checkbox"/> Not Required	All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.	Yes I have notified everyone _____ <div style="text-align: center;">OR</div> Not applicable in this case VM Please initial one.

Summary Explanation/Background: The Town's Code states that on the first Board meeting of each calendar year the Board must select a Chair and Vice Chair from its members.

The purpose of this item is to ask that the Board select a Chair by vote and then a Vice Chair by vote.

Recommended Motion: I move to select _____ as Chair.
 I move to select _____ as Vice Chair.

(3) [Reserved.]

(4) Keep records of all of the activities of the library board and make annual reports to the town manager and the town commission relative thereto or whenever requested to do so by the town commission.

(Ord. No. 5-1968, § IV, 4-15-1968; Code 1978, § 12-27; Ord. No. 05-2010, § 5, 6-2-2010)

• **ARTICLE IV. - BOARDS AND COMMITTEES^[5] Modified**

• **DIVISION 1. - GENERALLY**

• **Sec. 2-111. - Election of board and committee officers. Modified**

(a) *Chair.* Each board and committee of the town shall annually elect from its membership a chair, who shall preside at all meetings of such board or committee, and a vice-chair, who shall preside at all meetings of such board or committee in the absence or disability of the chair, at a regular meeting to be conducted in January, or if there is no meeting in January then at the first meeting of the board or committee in the new year.

(b) *Administrative support.* The town manager shall assign town employees to each board or committee, including a recording secretary who shall be responsible for recording the meetings and producing minutes of the board or committee meetings.

(Code 1978, § 2-56; Ord. No. 17-1991, § 1, 11-6-1991; Ord. No. 05-2015, § 2, 5-6-2015)

• **Sec. 2-112. - Membership on boards and committees terminated for missing meetings; filling of vacancies.**

(a) *Definitions.* For the purposes of this section, the following words, terms and phrases shall have the meanings herein ascribed to them:

Board means board or committee, as appropriate.

Valid excuse means one of the following:

(1)

Illness of a member or other person for whom the member is a caregiver;

(2)

Death of a member's relative; or

(3)

Scheduled absence approved in advance by the town clerk.

(b) *Recording of attendance.* The secretary of each board shall record the names of the board members who are present and absent at each board meeting, and shall include in the minutes of the meeting, the name of any member who has missed a meeting without a valid excuse, including regular and special meetings of said board.

(c) *Termination of membership.* Membership on a town board shall be automatically terminated for any member who, without valid excuse, misses three board meetings both regular and special in any consecutive 365-day period (any one-year term of the member).

(d) *Review of minutes.* The town clerk shall be responsible for reviewing the minutes of each board to determine when a vacancy has occurred, the town clerk shall confirm the unexcused absences of the member with the board secretary and once confirmed shall subsequently publish notice of the vacancy in a newspaper of general circulation of the town. The town commission shall fill the vacancy no sooner than two weeks after the publication of such notice. The term of a board member who is removed from office for lack of attendance shall end at the close of the third meeting in which the member failed to attend and which absence was not excused.

(e) *Notice of vacancies.* The town clerk shall monitor the terms of office for board members. Not less than 60 days prior to the end of a board member's term, the clerk shall publish a notice of the impending vacancy.

(f) *Publication of notice.* When publication of notice is required pursuant to this section, such publication shall be in the town newsletter and/or by other reasonable means of posting and publication. Copies of such notices shall be provided to the town commission at the next regular meeting following publication.

(g) *Profile sheet.* Each person seeking an initial appointment to a board shall be required to complete a profile sheet. The form for such profile sheet shall be approved by the commission. Any current regular member or alternate member seeking appointment or reappointment shall also be required to complete a profile sheet if one has not been completed within the previous three years. A profile sheet shall be due no later than 48 hours prior to the regular town commission meeting at which the appointment is scheduled to occur.

(h) *Appointment of alternate members.* The town commission shall appoint two alternates for each board. Alternate members of a board shall be appointed as first alternate and second alternate and shall serve in that order when necessary. Alternate members shall be permitted to participate in all board discussions. When an alternate member serves, the alternate member shall have all the powers and duties of a regular member including the right to vote on any matter before the board.

(i) *Nomination for action on vacancies.* The clerk shall prepare a list of volunteers, including members who seek reappointment, along with the profile sheet for commission action on a vacancy. The list of volunteers shall include the name of each person seeking the appointment for which a profile sheet has been timely received. The commission may interview board and committee members appearing on the clerk's list who volunteer for reappointment or appointment. A nomination to fill a vacancy may be made by any member of the commission. For a nominee to be appointed there must be a second and majority vote of the commission. Thereafter, the clerk shall notify each volunteer applicant in writing of the commission's action.

(j) Vacancies on a board or committee shall be automatically filled by an alternate member of that board or committee for the unexpired term. If two vacancies occur at the same time, the second vacancy shall be filled by the second alternate for the unexpired term. If a board or committee has more than two vacancies, the town commission may appoint temporary members, as necessary, who shall serve until the commission makes a regular appointment. The town clerk shall notify an alternate upon a change in status.

(k) *Residency requirement.* All members of town boards shall be residents of the town. However, unless otherwise prohibited by law, the town commission may appoint no more than two (including alternate members) town business owners to the boards of the town, excepting the planning and zoning board, and all appointments to said boards shall be made by the town commission.

(Ord. No. 33-1974, §§ I—III, 11-20-1974; Ord. No. 10-1979, § 1, 8-1-1979; Ord. No. 8-1982, § 1, 3-3-1982; Ord. No. 16-1990, § 1, 9-5-1990; Ord. No. 4-1991, § 1, 2-6-1991; Ord. No. 11-1994, § I, 5-18-1994; Ord. No. 6-1995, § I, 3-1-1995; Ord. No. 12-2001, § 1, 8-15-2001; Code 1978, § 2-57; Ord. No. 22-2004, § 2, 11-17-2004; Ord. No. 31-2004, § 2, 1-19-2005; Ord. No. 12-2006, § 2, 11-1-2006; Ord. No. 10-2013, § 2, 8-21-2013)

- **Sec. 2-113. - Scheduled board meetings; hours.**

All meetings of the various town boards shall be conducted after 5:00 p.m.

(Ord. No. 8-1985, § 1, 5-1-1985; Code 1978, § 2-58)

- **Secs. 2-114—2-150. - Reserved.**



Town of Lake Park Town Tree Board

Agenda Request Form

Meeting Date: April 11, 2023

Agenda Item No.

Agenda Title: January 10, 2023 Tree Board Meeting Minutes.

☐ SPECIAL PRESENTATION/REPORTS ☒ **CONSENT AGENDA**
☐ BOARD APPOINTMENT ☐ OLD BUSINESS
☐ PUBLIC HEARING ORDINANCE ON _____ READING
☐ NEW BUSINESS
☐ OTHER: _____

Vivian Mendez, Town Clerk, MMC

Name/Title

Originating Department: <div style="text-align: center;">Town Clerk's Office</div>	Costs: \$ 0.00 Funding Source: Acct. # <input type="checkbox"/> Finance _____	Attachments: Meeting Minutes Exhibit "A"
Advertised: Date: _____ Paper: _____ <input checked="" type="checkbox"/> Not Required	All parties that have an interest in this agenda item must be notified of meeting date and time. The following box must be filled out to be on agenda.	Yes I have notified everyone _____ <div style="text-align: center;">OR</div> Not applicable in this case ____ Please initial one.

Recommended Motion: I move to approve the January 10, 2023 Tree Board Meeting Minutes.



Town of Lake Park, Florida

Tree Board Meeting Minutes

Tuesday, January 10, 2023 at 6:00 PM

Town Hall Commission Chamber, 535 Park Avenue, Lake Park, FL 33403

Brady Drew	—	Chair
Pamela Frazier	—	Vice-Chair
Shana Phelan	—	Board Member
Gillian Kennedy Wright	—	Board Member

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CALL TO ORDER/ROLL CALL

6:00 P.M.

PRESENT

Brady Drew

Shana Phelan

Gillian Kennedy Wright

ABSENT

Pamela Fraizer

PLEDGE OF ALLEGIANCE

Chair Drew

PRESENTATIONS:

None

CONSENT AGENDA:

Motion made to approve the Consent Agenda by Phelan, Seconded by Kennedy Wright.

Voting Yea: Drew

1. December 13, 2022 Tree Board Meeting Minutes.

NEW BUSINESS:

2. Progress Update on the 100% Design Specifications and Implementation Timeline for the 2nd Street Green Infrastructure (Roadside Bioswale) Project

Public Works Director Roberto Travieso introduced the team working on this project. Mr. Raul Mercado representing Water Resource Management Associates (WRMA); Michael Mercado representing WRMA; Nicole Plunkit representing Cotleur & Hearing. Mr. Raul Mercado and Michael Mercado presented to the Board (see Exhibit "A").

Chair Drew thanked everyone for the presentation. He asked questions regarding the shade trees quoted in the Mobility Plan on 2nd Street. He asked if shade trees would be installed anywhere else along 2nd Street. Public Works Director Travieso explained that there are no plans outside of the scope of the plan currently underway. He explained that they were currently looking for funding opportunities to expand the project along 2nd Street. Mr. Raul Mercado further explained why this area was chosen and the funding associated with this project.

Board Member Phelan asked questions regarding the project and notifying the residents impacted. Public Works Director Travieso explained that his staff was undergoing training on how to properly maintain the infrastructure. He stated that a mailer was sent to all residents in the Town and not just those that would be impacted. She asked questions regarding plantings that are placed above the storm chambers. Mr. Michael Mercado explained the locations of the storm chambers was not ideal for trees plantings.

PUBLIC COMMENT:

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None

COMMITTEE MEMBER COMMENTS:

Phelan had no comments.

Wright had no comments.

Drew had no comments.

STAFF MEMBER COMMENTS:

None

ADJOURNMENT:

6:48 P.M.

FUTURE MEETING DATE: The next scheduled Tree Board Meeting will be conducted on February 14, 2023.

Chair Brady Drew

Town Clerk, Vivian Mendez, MMC

Town Seal

Approved on this _____ of _____, 2023

Final Design Progress Update on the 2nd Street Green Infrastructure Roadside Bioswale Project

Roberto Travieso
Director, Department of Public Works



Presentation Outline



1. Opening Comments
2. Project Background
3. Storm Water Master Plan (SWMP)
4. Why 2nd Street?
5. Design Approach
6. Implementation Timeline
7. Landscape Design & Renderings
8. Questions



Project Team



- **John D'Agostino** – Town Manager
- **Roberto Travieso** – Public Works Director
- **Raul Mercado** – Principal Engineer, WRMA
- **Michael Mercado** – Lead Design Engineer, WRMA
- **Don Hearing** -- Principal/Landscape Architect, Cotleur & Hearing
- **John Wille** – Capital Projects Manager



Project Background & Design Concept

MICHAEL MERCADO, PE

Stormwater Management Needs Assessment

Water Quantity



- Study showed that of the 10.62 miles of storm sewers (Approx. 29%) needs to be immediately (1-5 years) rehabilitated (Repaired/Replaced) and the rest within 20 years.
- Identifies key major capacity surcharge flooding problems along Southern Outfall (446 acre watershed)
- Identifies many areas without stormsewers with nuisance flooding such as along 2nd Street
- Identifies long term climate change (Sea Level Rise) challenges along 0.8 miles of LVI waterfront



Stormwater Management Needs Assessment

Water Quality



2/3 of the ToLP area Discharges untreated runoff to the impaired Lake Worth Lagoon



FDEP/NPDES Permit requires the ToLP to monitor runoff discharges from 14 outfalls

Receiving Waterbody	Table 4 Pollutant Loading Reductions (Lbs/year) for 5% Roadside Bioswales BMPs					
	BOD ₅	TSS	TP	CU	ZN	N
LWL (Current BMPs)	22,418	98,253	883	53.7	261.5	10,630
LWL (Proposed Bioswales)	20,081	76,444	796	50.8	238.6	10,366
Reduction %	10.4	22.2	9.8	5.4	8.8	2.5

Bioswales along 5% of the ToLP ROW's will reduce sediment pollutants loadings to the LWL by as much as 22% (TSS)

Stormwater Master Plan (SWMP)

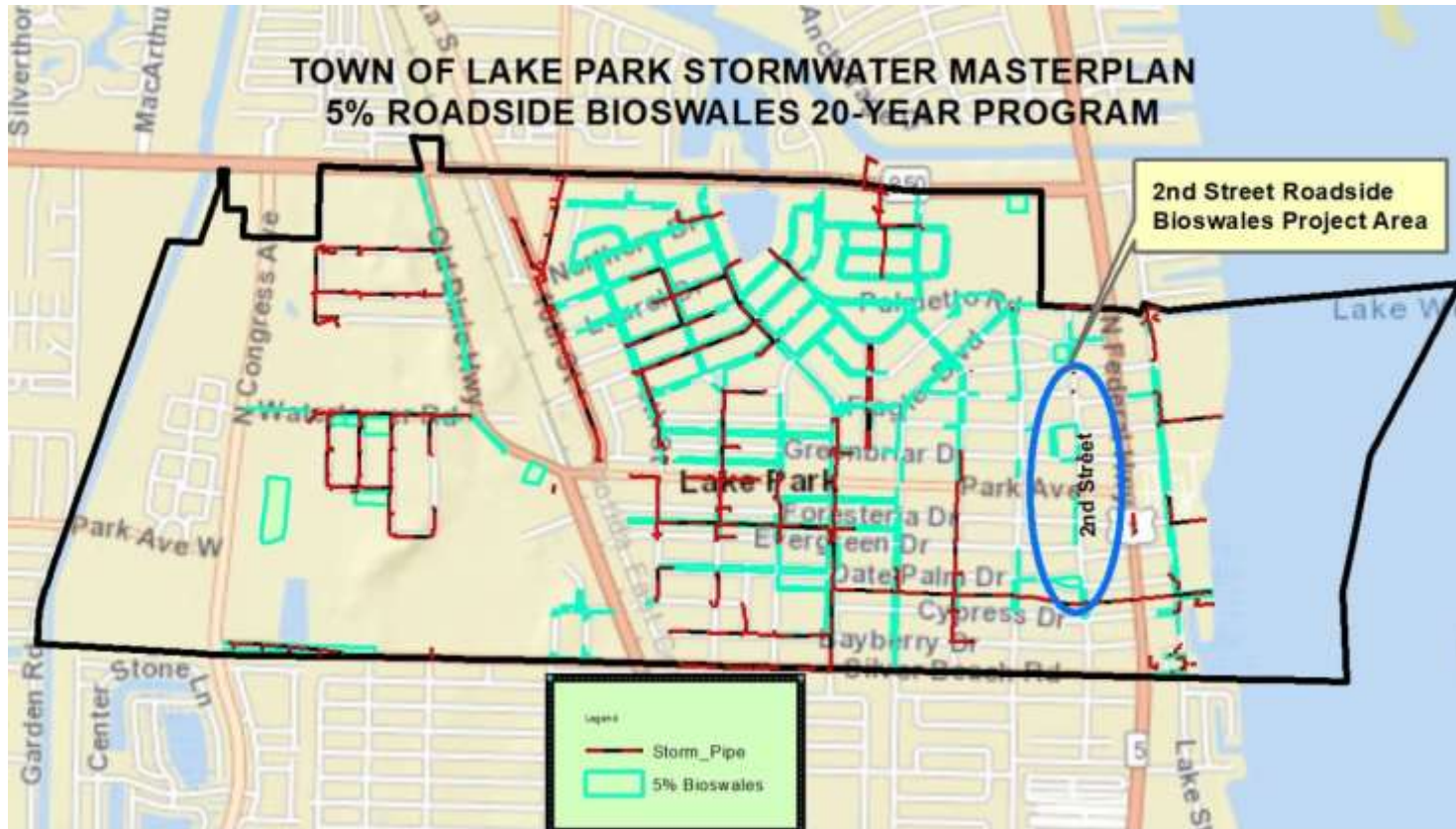


- Updated in 2019-2020
- Adopted by Town Commission in 2021
- Provided the incremental conversion of 5% roadside swales to green infrastructure (bioswales/biodentention areas)
- Recommends the use of Stormwater fees exclusively to cover O&M costs (no Capital Improvements)
- Recommends the use of federal grants for project Capital Improvements



Stormwater Master Plan Approach

Green Infrastructure For Climate Change



**5% ROADSIDE BIOSWALES
20-YEAR PROGRAM**

**FIRST PROJECT - BIOSWALES
ALONG 2ND STREET ROW**

**Higher Intensity Rainfall is Causing More Frequent
Nuisance Flooding Along 2nd Street Intersections**

Why 2ND Street ?



- Extra pavement was added to the **ROW** in the past without grading
- Additional impervious area runoff creates ponding and nuisance flooding at intersections
- Opportunity for design of a **GI-Based Bioswale** to address nuisance flooding and water quality **NPDES** requirements



FORESTERIA DRIVE

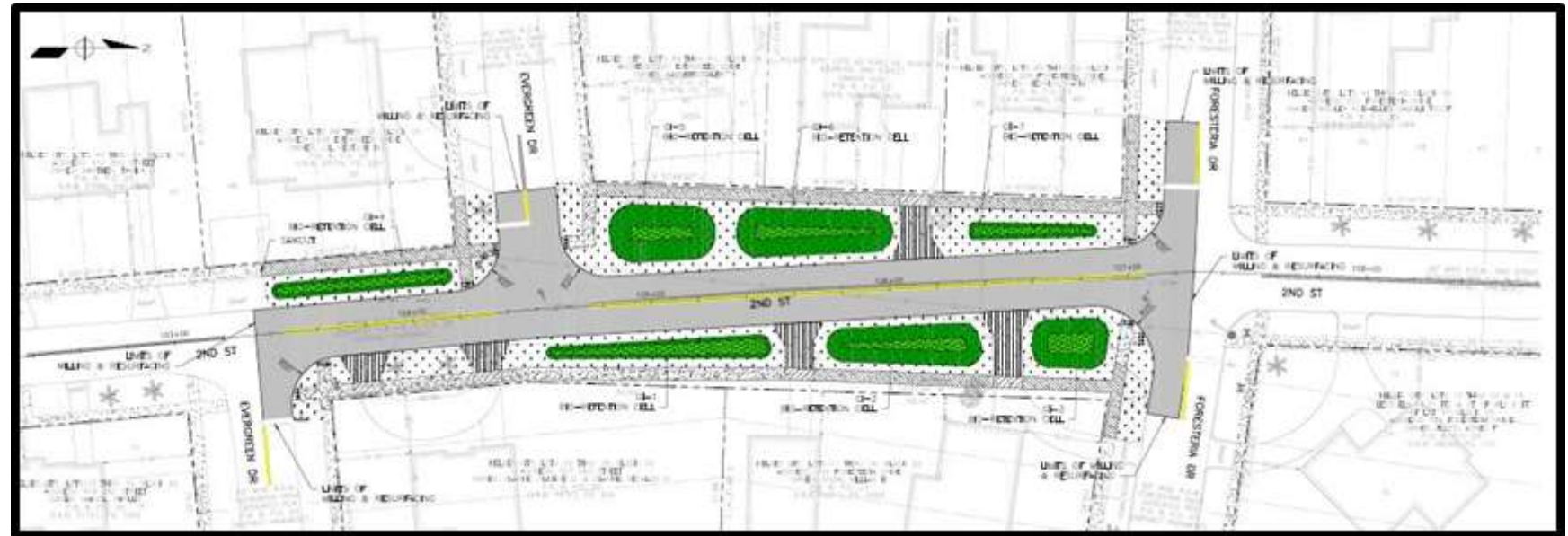


EVERGREEN DRIVE

Prototype Bioswale Design Solution Surface Component



- Surface (planted) bioswales captures first flush of runoff for infiltration and evapotranspiration

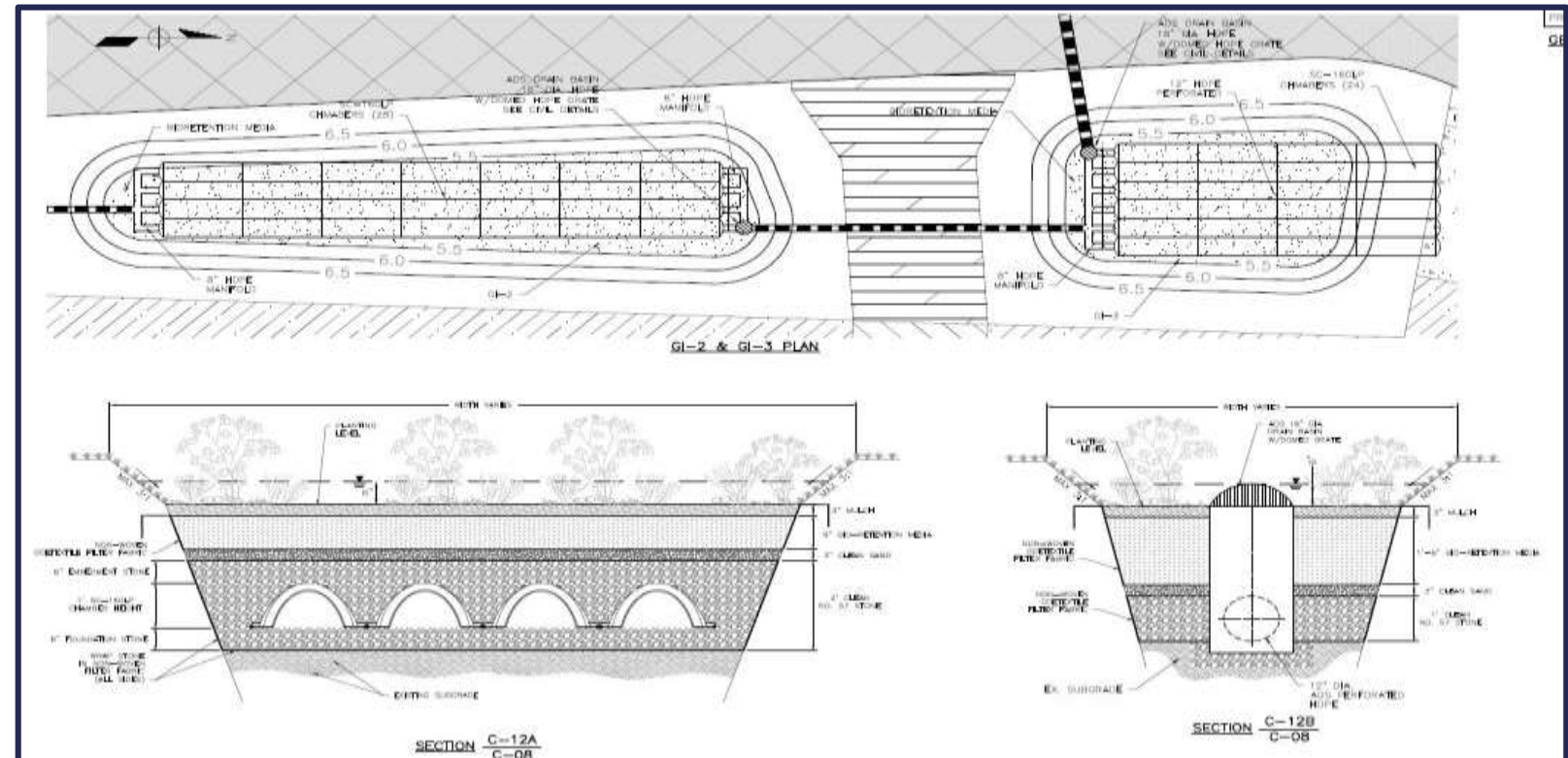


- ❑ Bioswales green-planted areas beautify the right-of-way
- ❑ Bioswales soils layers provide mulch for additional water quality treatment of runoff



Prototype Bioswale Design Solution Underground Component

- Underground Storage Filtration Chambers provide additional runoff volume treatment capacity



- Interconnected chambers for maximum utilization of underground space
- Chambers can be accessed for maintenance to clear debris



Project Landscape Design

NICOLE PLUNKETT, ASLA, PLA, AICP

Landscape Design Approach



- Observe street design standards published by FDOT

Clear Zone: The unobstructed, traversable area beyond the edge of the traveled way for the recovery of errant vehicles. Source: Florida Green Book

- Clear Zone Design Guideline from edge of traveled lane:
 - 6' < 400 Average Daily Traffic (ADT)
- Standards also applicable to landscape design



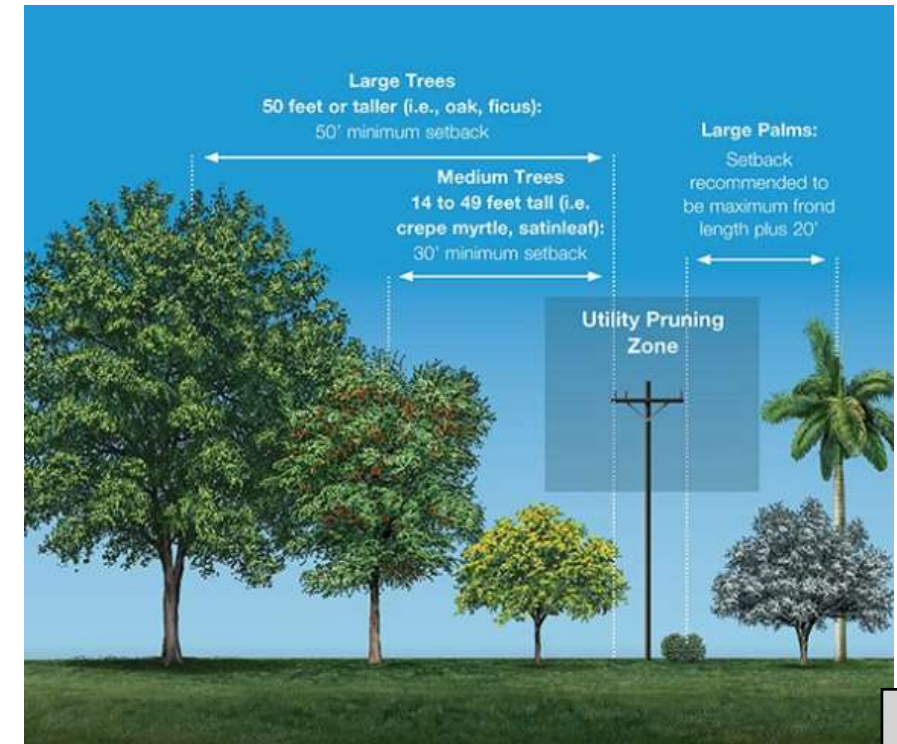
Landscape Design Approach



Observe applicable Regulations for utility operators in the Town:



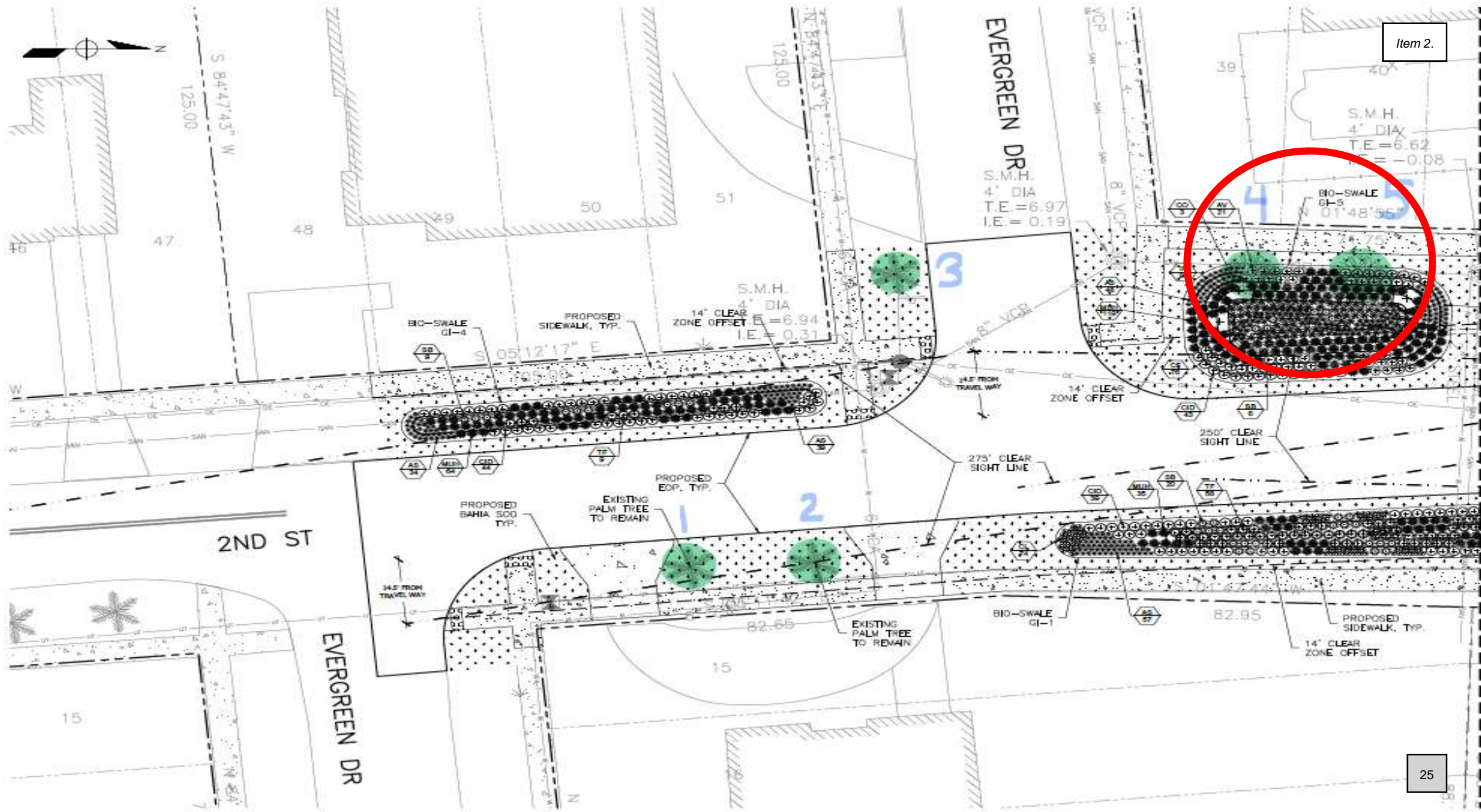
- **Small/Medium Trees & Palm Trees:** No closer than 10 feet to utility structure
- **Large Trees:** No closer than 15 feet to utility structure

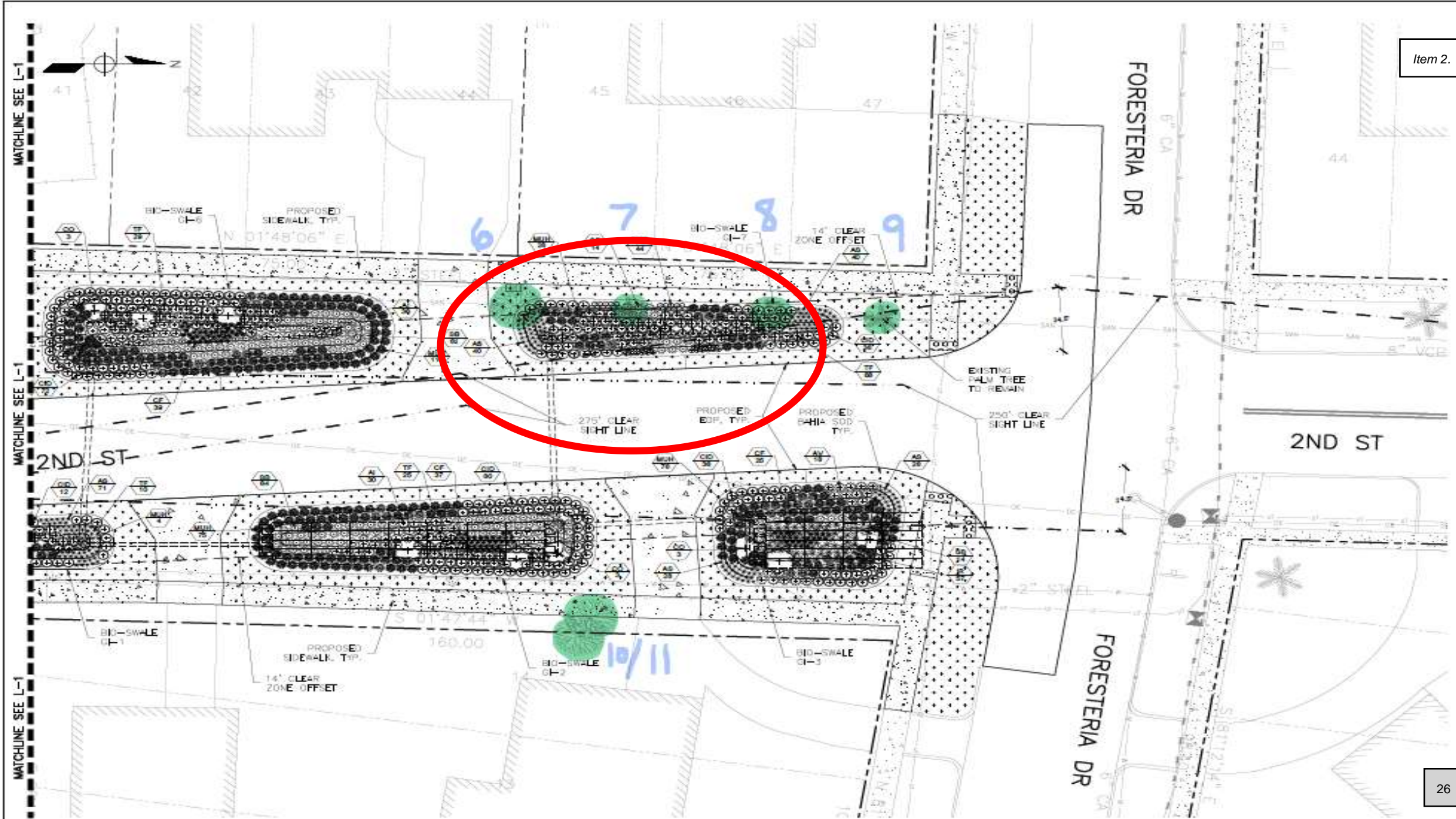


Existing Canopy Tree/Palm Tree Conflicts



- Canopy Trees in project area: **5** | Palm Trees in project area: **6**
- All **(11)** trees/palm trees in project area are currently unpermitted
- Some trees/palm trees are within the FDOT-mandated Clear Zone
- Proposed project improvements and grading necessitates the removal/relocation of (5) canopy and palm trees (No.'s 4,5,6,7, and 8)
- Planned coordination with public property owners to relocate trees onto private property, where desired and possible, during project implementation
- New street trees may be included in Bioswale design for other locations, depending on compliance with Clear Zone, Seacoast Utilities', and FPL setback criteria







Project Landscape Renderings

NICOLE PLUNKETT, ASLA, PLA, AICP



CROSS SECTION - LOCATION 105+00.00

PLANT PALETTE |



BUTTONBUSH



DWARF COCOPLUM



WIREGRASS



SAND CORDGRASS



SWAMP MILKWEED



CANNA LILY



CHALKY BROOMSEDGE
BLUESTEM



BLUE FLAG IRIS



LEAVENWORTH'S TICKSEED



MUHLY GRASS



DWARF FAKAHATCHEE GRASS



BIOSWALE / RAIN GARDEN



BIOSWALE / RAIN GARDEN



BIOSWALE / RAIN GARDEN



Implementation Timeline & Next Steps

ROBERTO TRAVIESO



Project Implementation Timeline

- **Design & Bidding (Design partially funded by FDEP Coastal Partnership Initiative Grant)**
 - 100% Design Plans & Specifications: November 2022
 - Final Regulatory Permits: December 2022
 - Bidding Advertisement: February 2023
 - Contractor Selection: March – April 2023
 - Contract Negotiations: May – June 2023
- **Construction (Funded by Resilient Florida Grant)**
 - Mobilization/Start Up: July 2023
 - Completion/Close Out: July 2024




Questions

GENERAL NOTES:

1. 14.5' CLEAR ZONE OFFSET PER FLORIDA GREEN BOOK, 2022 EDITION, TABLE 4-1
2. CLEAR SIGHT LINE DISTANCES PER FLORIDA GREEN BOOK, 2022 EDITION, FIGURE 3-19 AND 3-20.
3. DESIGN SPEED = 25 MPH
4. A 3' BAHIA SOD STRIP IS PROPOSED BETWEEN THE EOP AND BIO-SWALE PLANTINGS AND BETWEEN THE FRONT OF SIDEWALK AND BIO-SWALE PLANTINGS.
5. SEE SHEET L-3 FOR LANDSCAPE SPECIFICATIONS AND PLANTING DETAILS.
6. SEE SHEET E-2 FOR TREE PROTECTION FENCING DETAIL.

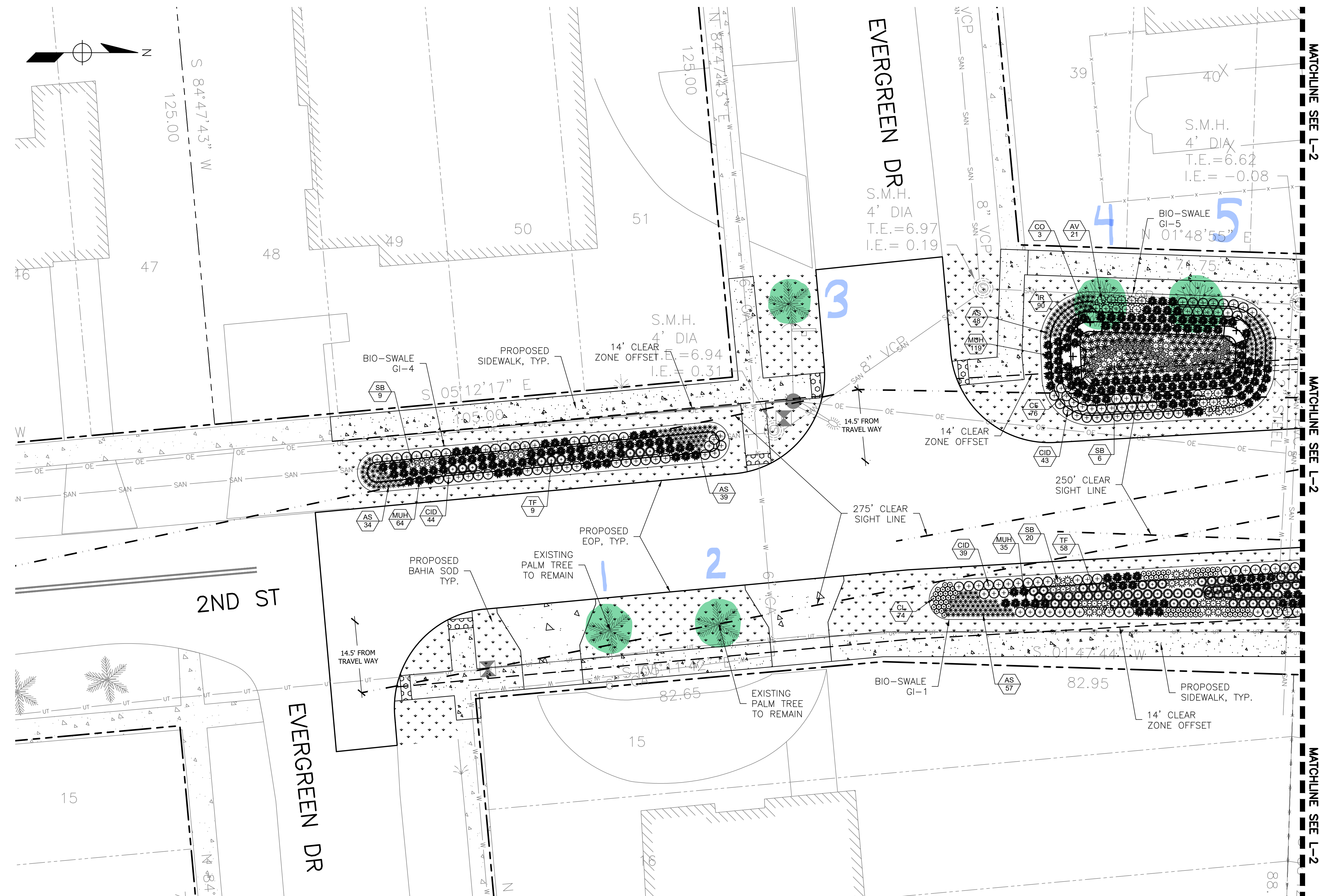
LEGEND:

- 
- PROP. 4" THICK CONCRETE
- PROP. 6" THICK CONCRETE
- PROP. BAHIA SOD RESTORATION

100% DESIGN

NO.	DESCRIPTION	BY	DATE
REVISIONS			
TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS STORMWATER IMPROVEMENT PROGRAM – DIVISION E SECOND STREET GREEN INFRASTRUCTURE			
LANDSCAPING PLAN SHEET 1 LANDSCAPING			
SCALE	AS SHOWN	DRAWN	MRM
CLIENT ID	G004	CHECKED	RRM
CONTRACT ID	G00401	SUBMITTED	WRMA
SURVEYED	JEB4		
DATE	10/13/2022	RECOMMENDED	
CADD FILE	LPSWE-L001-1		

- 1



TOWN OF LAKE PARK
DEPARTMENT OF PUBLIC WORKS
640 OLD DIXIE HWY
LAKE PARK, FL 33403
PHONE: (561) 881-3345
FAX: (561) 881-3349



WATER RESOURCES MANAGEMENT ASSOCIATES, INC.
250 TEQUESTA DRIVE, SUITE 302, TEQUESTA, FL 33469
PHONE: 561-529-2075 | FAX: 561-401-9385



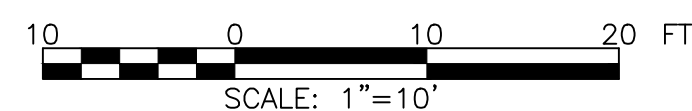
Cotleur & Hearing

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DIAL 811



SCALE: 1"=10'

10 INCHES

- 1

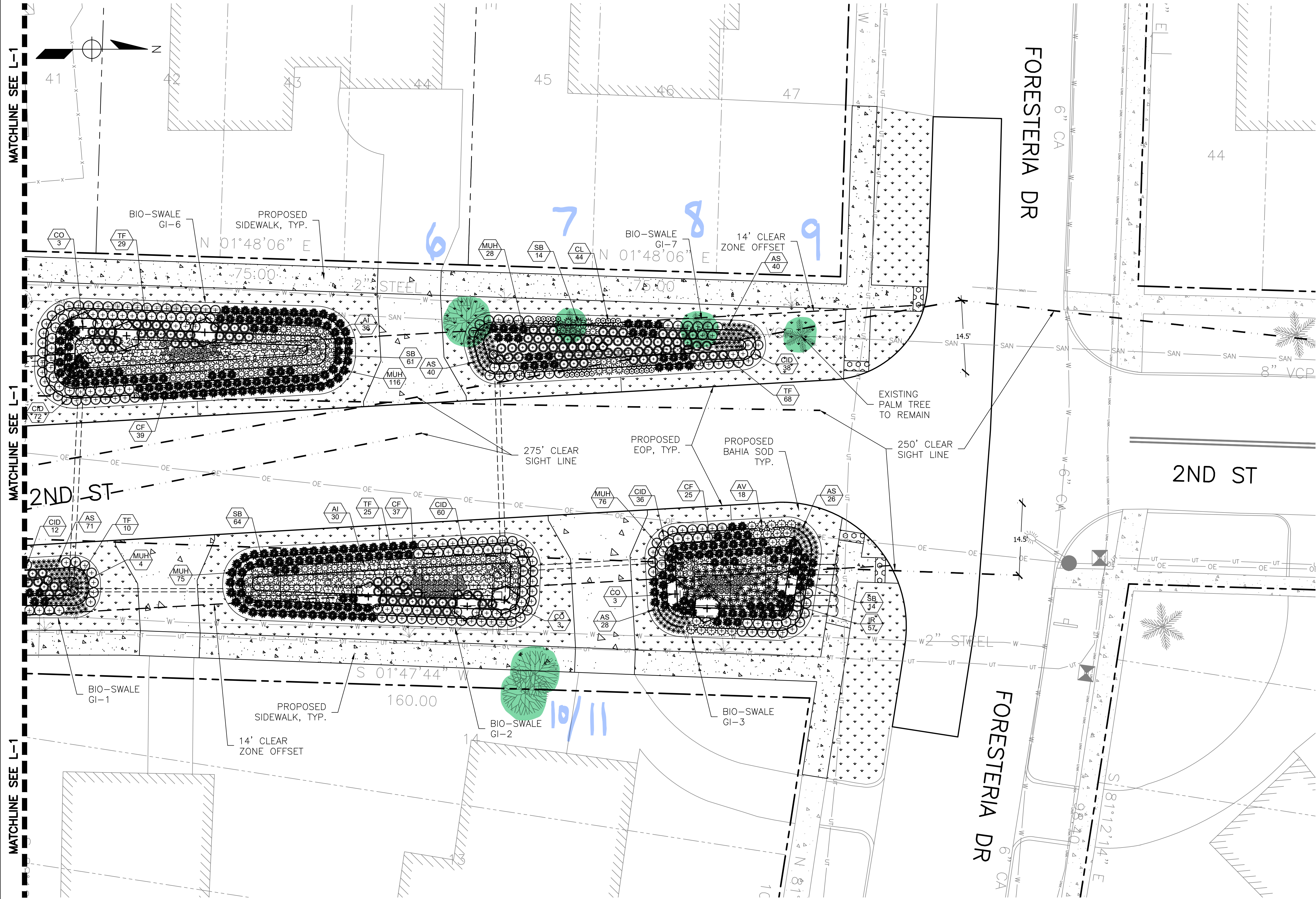
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6. SEE SHEET E-2 FOR TREE PROTECTION FENCING DETAIL.

LEGEND:

- PROP. 4" THICK CONCRETE
- PROP. 6" THICK CONCRETE
- PROP. BAHIA SOD RESTORATION

100% DESIGN			
NO.	DESCRIPTION	BY	DATE
REVISIONS			
TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS			
STORMWATER IMPROVEMENT PROGRAM - DIVISION E SECOND STREET GREEN INFRASTRUCTURE			
LANDSCAPING PLAN SHEET 2			
LANDSCAPING			
SCALE	AS SHOWN	DRAWN	MRM
CLIENT ID	G004	CHECKED	MRM
CONTRACT ID	G00401	SUBMITTED	WRMA
SURVEYED	JEB		
DATE	10/13/2022	RECOMMENDED	
CADD FILE	LPSWE-L002-1		





TOWN OF LAKE PARK
DEPARTMENT OF PUBLIC WORKS
640 OLD DIXIE HWY
LAKE PARK, FL 33403
PHONE: (561) 881-3345
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WRMA
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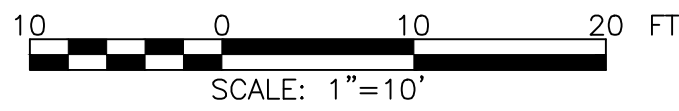
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Hearing

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REDUCTION
VERIFICATION
SCALE

10 INCHES

PROJECT LOCATION: 2nd Street (Foresteria Drive to Evergreen Drive), map of project location attached.

PROJECT BACKGROUND: The interconnected channel and pond routing (ICPR4) H&H model developed for the Town's SWMP was used to perform hydrodynamic modeling of the rainfall/runoff process occurring throughout the watersheds. Hydrologic simulations were performed for three-year/24-hour, 10-year/24-hour, 25-year/three-day, 50-year/three-day and 100-year/three-day storm events. Results illustrate that the interconnected system of reinforced concrete pipes (RCP), corrugated metal pipes (CMP) and high-density polyethylene (HDPE) pipes do not have the capacity to convey runoff from mostly impervious dense urban areas for storm events of significance (greater than three-year frequency). Furthermore, there is localized flooding in areas (such as along 2nd Street) that do not possess a dedicated storm sewer system. This modeling aligns with real-world detrimental impacts that the Town is already experiencing.

The need is further demonstrated by the implications set forth as the result of projected climate change-based sea-level rise (SLR) by the United States Army Corps of Engineers (USACE). The change in SLR between 2019 and 2060 is estimated by USACE to be 36 inches. This corresponds to a 2060 average high tide of 2.7 feet NAVD. Once this occurs, preliminary ICPR4 H&H modeling (coded to reflect SLR of 2.7 feet) indicates that the problems being experienced today will grow in severity along the 60-inch trunk storm sewer and the 2nd Street vicinity, meaning that any drainage occurring along 2nd Street will not be able to enter the Southern Outfall by sheet flow or by pipe.

The roadside bioswales will serve two functions:

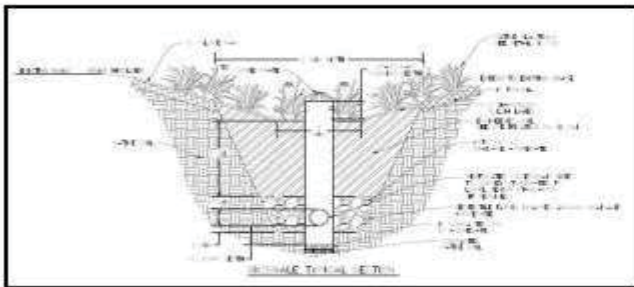
1. They will act to significantly mitigate pollutant-laden storm water runoff that otherwise would flow into the LWL and act as a natural filtration system to reduce total suspended solids.
2. They will reduce the centrality of the Southern Outfall 60-inch trunk-line pipe by diverting upstream storm water runoff sheet flow away from the main storm sewer trunk and to the underground water table aquifer, which will also introduce more resiliency into the storm water infrastructure system.

The 2nd Street project is a component of the 20-year long-term 5% Roadside Bioswale Plan that will ensure adequate resiliency and sustainability for a minimum of approximately 75% of its total land area.

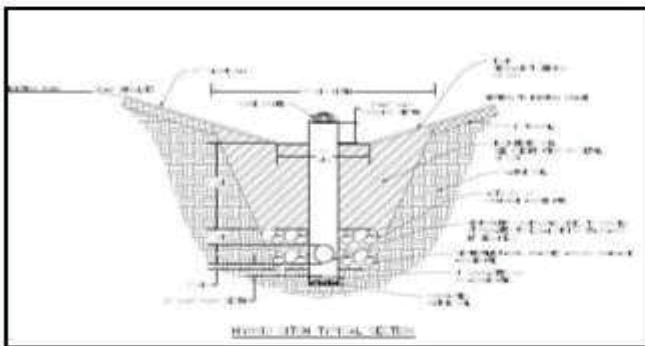
PROJECT DESCRIPTION: The proposed project entails the strategic placement of roadside bioswales at two locations on 2nd Street where flooding has been documented, including 2nd Street and Foresteria Drive, and 2nd Street and Evergreen Drive. The overall goal of the project is to intercept and collect sheetflow at its source along the 2nd Street right-of-way in the vicinity of the road and prevent runoff from entering the Southern Outfall trunk (via sheet flow to inlets). Instead, the bioswales will function to intercept runoff for filtration to the water table aquifer and reduce runoff volumes through evaporation and transpiration.



Example Roaside Bio-Swales



Bioswale with Planting



Bioswale with no planting



The proposed project has two primary objectives:

1. Access the physical conditions of the topography and the soil's infiltration rates at the two affected sites (see aforementioned site locations) and the feasibility of two types of bioswale designs to direct runoff production to the groundwater table via infiltration and deep percolation and deliver untreated runoff flows that otherwise would enter the Southern Outfall via sheet flow and be transferred to the Lake Worth Lagoon. The proposed roadside GI-based bioswales will also address the increasing adverse impact of higher climate change-based rainfall intensity volumes.
2. Mitigate pollutant-laden runoff load discharge to the Lake Worth Lagoon by providing water quality treatment and infiltration of runoff to the underground aquifer.

In order to achieve these objectives, this project will focus on data collection and management and the engineering design and specifications for the bio-swales, culminating in construction documents and bid package for implementation.

TASKS and DELIVERABLES:

Task #1: Data Collection and Management

Task Description: The Grantee will work with Water Resources Management Associations, Inc. (WRMA), which is currently under a five-year contract with the Town. WRMA will perform topographic surveys at the two proposed sites. WRMA will also secure the services of a geotechnical engineering firm for the acquisition of the soil's physical properties data via shallow augers and/or shallow piezometer wells. This data is necessary to perform drainage infiltration analysis and determine the size of the required bioswale media for treatment of local runoff. The picture below shows the location of proposed field testing. The testing scope of work includes:



- Two (2) borehole permeability/percolation tests, usual open hole, constant head test to be performed on grassed swale areas along 2nd Street. One will be located at the southeast corner of 2nd Street and Foresteria Drive, and a second at the southwest corner of 2nd Street and Evergreen Drive.
- Two (2) 10ft deep Standard Penetration Test (SPT) borings will be performed in grassed swale areas adjacent to the previous permeability tests for minimal disruption.
- Two (2) 10ft Standard Penetration Test (SPT) borings with pavement coring reporting format. These will be performed at the intersections of 2nd Street and Foresteria Drive, and 2nd Street and Evergreen Drive.

None of these field tests will be performed in environmental sensitive areas and will not require the use of any chemical pollutants.

Deliverables: Data Collection and Management Technical Report

Attachment 3, DEP Agreement #: CZ419

5 of 7

Task #2: Preliminary Engineering Design and Planning (30% Plans)

Task Description: The Grantee will work with a professional engineer and certified floodplain management professional from WRMA that will apply the topographic and soils project data, combined with H&H design tools, to perform design plans and specifications for the two sites. WRMA will review the collected data and create 30% plans for the addition of GI-based bioswales at the two sites. This level of design entails the development of preliminary conceptual design options that could be implemented at the site depending upon major site constraints.

Deliverables: 30% Design Plans

Task #3: Engineering Design and Site Layout (60%)

Task Description: The Grantee will build upon the previous task to include the selection of the final bioswale placement at the two locations, include the type of, bioswales selected (bioswale with or without plantings), and any required adjustments to the road (edge of pavement, driveways, etc.).

Deliverables: 60% Design Plans and Quantity Takeoff Cost Estimate

Task #4: Detailed Engineering Design (90%)

Task Description: The Grantee will build upon the previous two tasks to include the preparation of design specifications and preliminary construction-ready plans. The design will also include the preparation of the project technical manual and a detailed engineer's opinion of probable cost.

Deliverables: 90% Design Plans and Engineer's Opinion of Probable Cost

Task #5: Final Plans and Specifications (100%)

Task Description: The Grantee will complete the design plans in preparation of the final design plans (ready for bidding/construction). Grantee will summarize project with a final report utilizing Exhibit F format.

Deliverables: 100% Final Ready For Construction Design Plans and Specifications, and Final Engineer's Opinion of Probable Cost. Final Report of project.

Performance Standard: The Department's Grant Manager will review the deliverables to verify that they meet the specifications in the Grant Work Plan and the task description. Upon review and written acceptance by the Department's Grant Manager of all deliverables under this task, the Grantee may proceed with payment request submittal.

Payment Request Schedule: Grantee may submit a payment request for cost reimbursement upon completion of each task and Department approval of all associated task deliverables.

PROJECT TIMELINE: The tasks must be completed by the corresponding task end date and all deliverables must be received by the designated due date.

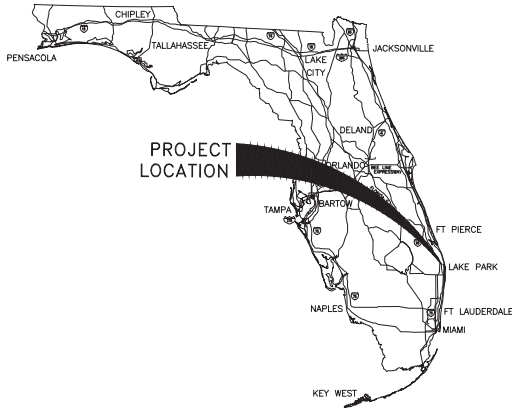
Task No.	Task or Deliverable Title	Deliverable Due Date
1	Data Collection and Management	10/31/2021
2	Pre-Liminary Engineering and Planning (30% Plans)	01/31/2022
3	Engineering Design and Site Layout (60% Plans)	04/30/2022
4	Detailed Engineering Design (90% Plans)	07/31/2022
5	Final Plans and Specifications (100% Plans)	08/31/2022

BUDGET DETAIL BY TASK:

Categories	Task 1	Task 2	Task 3	Task 4	Task 5	Totals
Contractual Services	\$10,000	\$4,000	\$10,000	\$2,000	\$4,000	\$30,000
Match Total	\$10,000	\$4,000	\$10,000	\$2,000	\$4,000	\$30,000
Total	\$20,000	\$8,000	\$20,000	\$4,000	\$8,000	\$60,000

PROJECT BUDGET SUMMARY: Cost reimbursable grant funding must not exceed the category totals for the project as indicated below. Match funding shall be provided in the categories indicated below.

Category Totals	Grant Funding Not to Exceed	Match Funding	Total Project Funding
Contractual Services Total	\$30,000	\$30,000	\$60,000
Total:	\$30,000	\$30,000	\$60,000



TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS

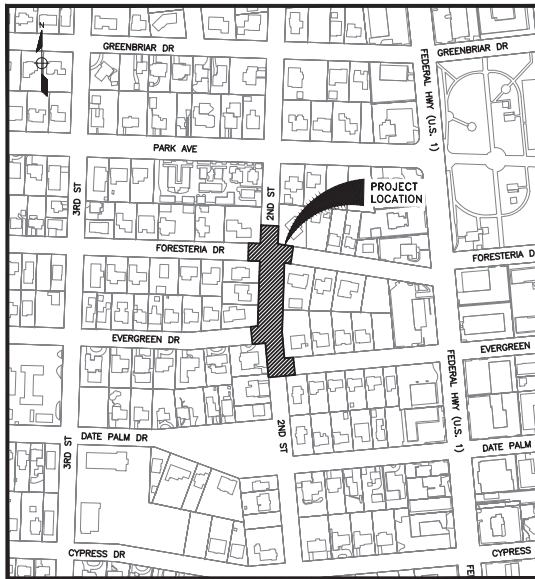
MAYOR MICHAEL O'ROURKE
VICE- MAYOR KIMBERLY GLAS-CASTRO
COMMISSIONER ERIN FLAHERTY
COMMISSIONER JOHN LINDEN
COMMISSIONER ROGER MICHAUD



CONTRACT DRAWINGS FOR

DIVISION E SECOND STREET GREEN INFRASTRUCTURE

AUGUST 2022
100% DESIGN

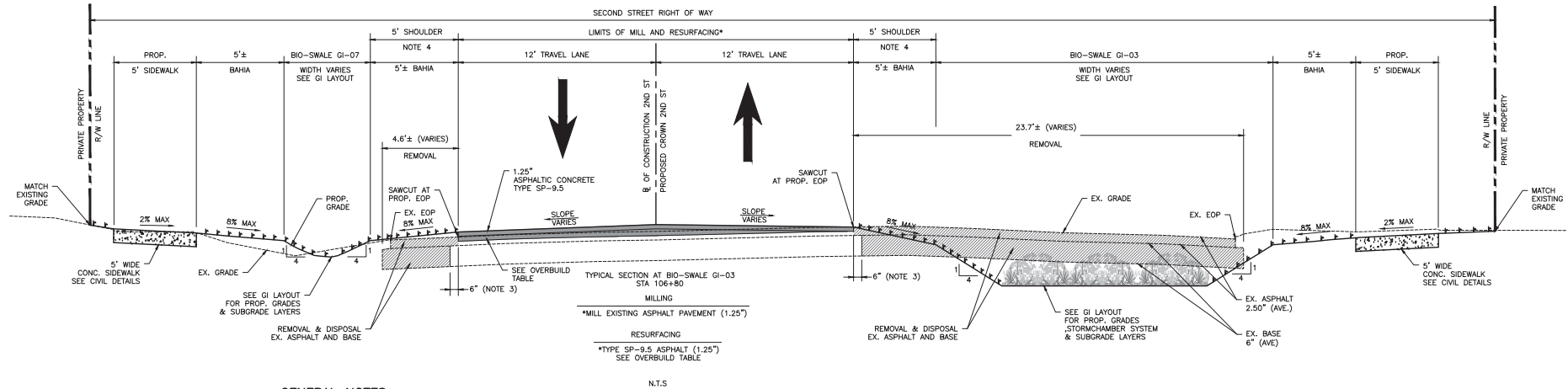
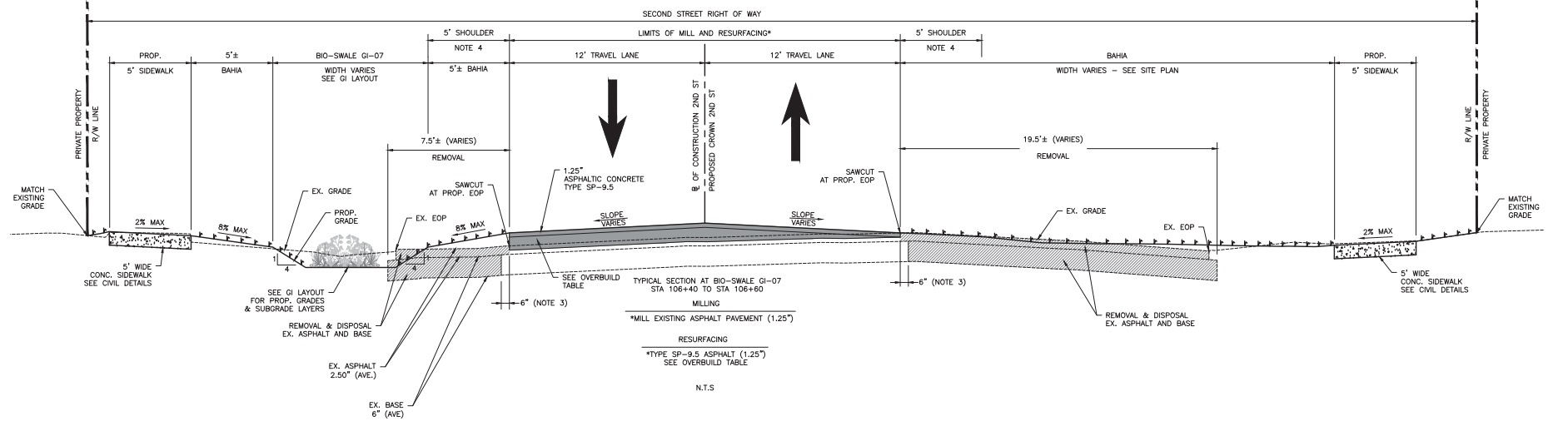


SITE LOCATION MAP
SCALE: 1" = 200'



100% DESIGN

NO.	DESCRIPTION	BY	DATE
REVISIONS			
TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS STORMWATER IMPROVEMENT PROGRAM - DIVISION E SECOND STREET GREEN INFRASTRUCTURE			
COVER SHEET			
GENERAL			
SCALE	AS SHOWN	DRAWN	MRM
CLIENT	G004	CHECKED	MRM
CONTRACT	D00401	SUBMITTED	WRMA
SURVEYED	JESA		
DATE	8/8/2022	RECOMMENDED	
CADD FILE	UPSW-0001		

**GENERAL NOTES:**

- ALL MATERIAL USED WITHIN THE ROADWAY MUST MEET FDOT SPECIFICATIONS AND BE SUPPLIED FROM A FDOT CERTIFIED MINING OPERATION AND ASPHALT PLANT. ASPHALT MIX SHALL NOT CONTAIN MORE THAN 30% RECLAIMED ASPHALT PAVEMENT (R.A.P.).
- CONTRACTOR SHALL TAKE CARE TO COVER BASE OR RESURFACE IN THE SAME WORK PERIOD IF BASE BECOMES EXPOSED DURING MILLING TO PREVENT ANY WATER INTRUSION INTO THE EXISTING BASE MATERIAL.
- COMMENCE WITH BASE MATERIAL REMOVAL A MINIMUM OF 6 INCHES BEYOND THE PROPOSED EDGE OF PAVEMENT SAWCUT.
- STABILIZE TOP 6 INCHES OF SHOULDER TO 50 P.S.I. F.B.V.
- ALL STRIPING AND DELINEATION TO CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) LATEST EDITION.
- ALL CROSSWALK SIGNS AND ADVANCED PAVEMENT MESSAGES SHALL BE DESIGNED AND INSTALLED PER FDOT STANDARD INDEX NO. 17346.
- REFERENCE THE 2020 FDOT 600 SERIES FOR ALL REQUIRED AND APPLICABLE MOT PLANS.

- REFER TO "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", FOR CLEAR ZONES, CHAPTER 3, TABLE 3-12.
- ALL WORK FOR THIS PROJECT SHALL BE COMPLETED WITHIN AND FROM THE EXISTING RIGHT OF WAY.
- THE POSTED DESIGN SPEED FOR 2ND STREET IS 25 MPH.
- TOWN OF LAKE PARK SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL OF PRIVATE LANDSCAPE AND ABOVE GROUND APPURTENANCES PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITIES ARE TO REMAIN UNLESS OTHERWISE INDICATED ON PLANS.
- CONTRACTOR SHALL ADJUST ALL VALVE AND GRADE RINGS AND COVERS TO MATCH PROPOSED GRADE. CONTRACTOR SHALL COORDINATE ANY METER, GRADE RING, VALVE OR UTILITY ADJUSTMENTS WITH SEACOAST UTILITY AUTHORITY INSPECTOR A MINIMUM OF 48 HOURS IN ADVANCE.
- ALL EXISTING UTILITY POLES AND GUY ANCHORS ARE TO REMAIN.
- NOTIFY OWNER'S REPRESENTATIVE 72 HOURS PRIOR TO MOBILIZATION.

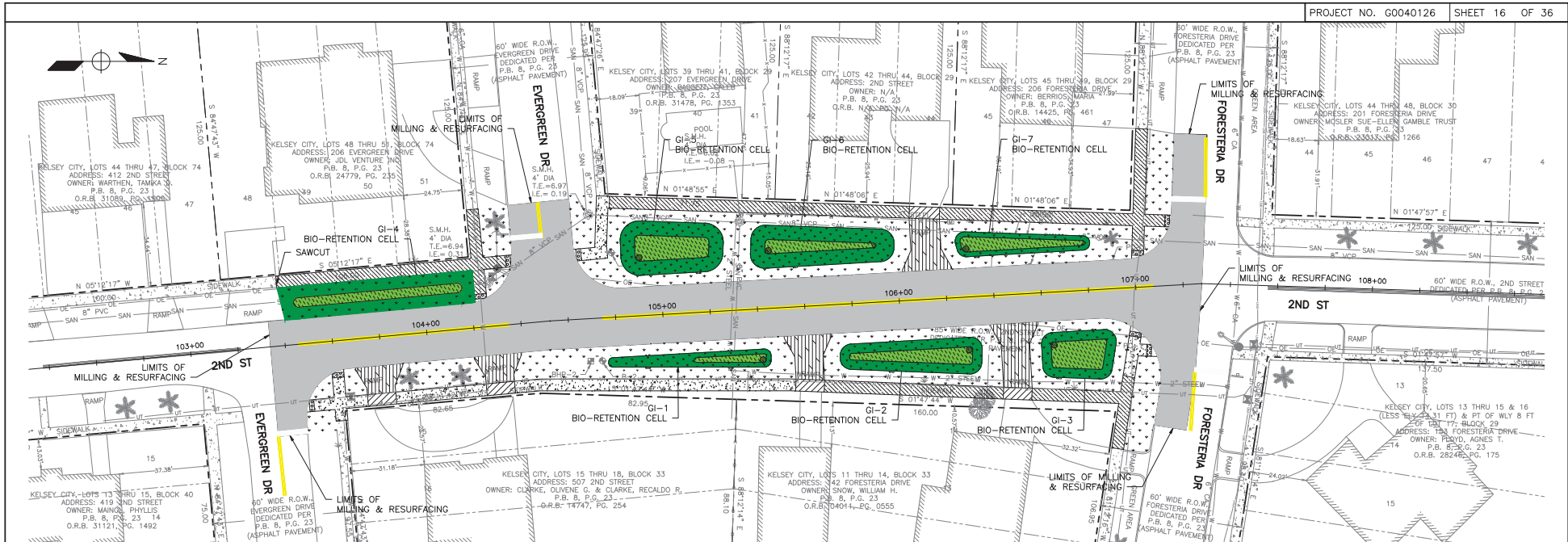
REDUCTION
VERIFICATION
SCALE

10 INCHES

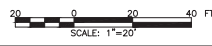
100% DESIGN

NO.	DESCRIPTION	BY	DATE
REVISIONS			
TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS STORMWATER IMPROVEMENT PROGRAM - DIVISION E SECOND STREET GREEN INFRASTRUCTURE			
TYPICAL SECTIONS SHEET 3			
CIVIL			
SCALE	AS SHOWN	DRAWN	MRM
CLIENT ID	G004	CHECKED	MRM
CONTRACT ID	G00401	SUBMITTED	WRMA
SURVEYED	JESA		
DATE	8/8/2022		
CADD FILE	LP004-C003		
		RECOMMENDED	

C-3

**GENERAL NOTES:**

- ALL ELEVATIONS WHERE SHOWN REFERENCE VERTICAL DATUM NAVD 88 AND NAD 83 FLORIDA EAST ZONE HORIZONTAL DATUM.
- LOCATIONS OF EXISTING BURIED UTILITIES ARE SHOWN AS APPROXIMATE. CONTRACTOR SHALL PERFORM FIELD LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION PRIOR TO START OF CLEARING AND DEMOLITION OF EXISTING STRUCTURES OR PAVEMENT. CALL SUNSHINE 811 48 HOURS PRIOR TO MOBILIZATION OR EXCAVATION ON SITE.
- ACCESS EXISTING DRAINAGE AND UTILITY EASEMENTS AS NECESSARY FOR ACCESS TO STORMWATER AND UTILITIES LINES.
- ALL STRIPING AND DELINEATION TO CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) LATEST EDITION.
- ALL CROSSWALK SIGNS AND ADVANCED PAVEMENT MESSAGES SHALL BE DESIGNED AND INSTALLED PER FDOT STANDARD INDEX NO. 17346.
- REFERENCE THE 2020 FDOT 600 SERIES FOR ALL REQUIRED AND APPLICABLE MOT PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST VALVE AND GRADE RINGS AND COVERS TO MATCH PROPOSED GRADE.
- REFER TO "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", FOR CLEAR ZONES, CHAPTER 3, TABLE 3-12.
- ALL WORK FOR THIS PROJECT SHALL BE COMPLETED WITHIN AND FROM THE EXISTING RIGHT OF WAY.
- THE DESIGN SPEED FOR 2ND STREET IS 25 MPH.
- TOWN OF LAKE PARK SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL OF PRIVATE LANDSCAPE AND ABOVE GROUND APPURTENANCES PRIOR TO CONSTRUCTION.
- FIRE HYDRANT RELOCATION SHALL BE COORDINATED AND COMPLETED BY THE TOWN OF LAKE PARK IN CONJUNCTION WITH SEACOAST UTILITIES PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITY POLES AND GUY ANCHORS ARE TO REMAIN.
- NOTIFY OWNER'S REPRESENTATIVE 72 HOURS PRIOR TO MOBILIZATION.

**EXISTING FEATURES LEGEND**

88.10	EXISTING SPOT ELEVATION
W	WATER
GAS	GAS
GAS ABANDONED	GAS ABANDONED
UE	UNDERGROUND ELECTRIC
OE	OVERHEAD ELECTRIC
IR	IRRIGATION
STM	STORMWATER
FM	SANITARY GRAVITY SEWER
SM	SANITARY FORCE MAIN
UT	UNDERGROUND TELEPHONE
OT	OVERHEAD TELEPHONE
UT	UNDERGROUND TELEPHONE
COMM	UNDERGROUND COMMUNICATION
UF	UNDERGROUND FIBER OPTICS
TOB	TOP OF BANK
TOE	TOE OF BANK
X	FENCE
SF	SILT FENCE
UDS	UNDER DRAIN SOLID
UDP	UNDER DRAIN PERFORATED
	STORMWATER CATCH BASIN
	STORMWATER MANHOLE
	ELECTRICAL MANHOLE
	SANITARY MANHOLE
	TELECOMMUNICATIONS MANHOLE
	WATERMAIN ACCESS MANHOLE
	LIGHT POLE
	METER WATER/ELECTRIC
	GATE VALVE
	BACKFLOW PREVENTER
	GAS UTILITY VALVE
	GAS INSTRUMENTATION
	CABLE HANDHOLE
	STREET/STOP SIGN
	HYDRANT

LEGEND:

	PROP. SWALE
	PROP. BIORETENTION MEDIA
	PROP. RESURFACED ASPHALT ROADWAY
	PROP. 4" THICK CONCRETE REMOVE & REPLACE
	PROP. 4" THICK CONCRETE NEW CONSTRUCTION
	PROP. 6" THICK CONCRETE SIDEWALK
	PROP. 6" THICK CONCRETE DRIVEWAY
	PROP. GRASS RESTORATION

**100% DESIGN**

NO.	DESCRIPTION	BY	DATE
REVISIONS			
TOWN OF LAKE PARK DEPARTMENT OF PUBLIC WORKS STORMWATER IMPROVEMENT PROGRAM - DIVISION E SECOND STREET GREEN INFRASTRUCTURE			
PROPOSED GREEN INFRASTRUCTURE BIO-SWALE PLAN			
CWL			
SCALE	AS SHOWN	DRAWN	MRM
CLIENT ID	G004	CHECKED	MRM
CONTRACT ID	G00401	SUBMITTED	WRMA
SURVEYED	JESA		
DATE	8/8/2022	RECOMMENDED	
CADD FILE	UPSW-C012		



CROSS SECTION - LOCATION 104+00.00

PLANT PALETTE |



BUTTONBUSH



DWARF COCOPLUM



WIREGRASS



SAND CORDGRASS



SWAMP MILKWEED



CANNA LILY



CHALKY BROOMSEDGE
BLUESTEM



BLUE FLAG IRIS



LEAVENWORTH'S TICKSEED



MUHLY GRASS



DWARF FAKAHATCHEE GRASS



CROSS SECTION - LOCATION 105+00.00

PLANT PALETTE |



BUTTONBUSH



DWARF COCOPLUM



WIREGRASS



SAND CORDGRASS



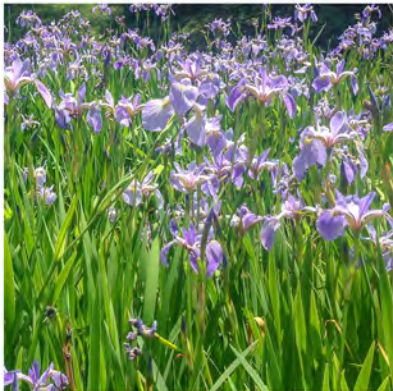
SWAMP MILKWEED



CANNA LILY



CHALKY BROOMSEDGE
BLUESTEM



BLUE FLAG IRIS



LEAVENWORTH'S TICKSEED



MUHLY GRASS



DWARF FAKAHATCHEE GRASS



BIOSWALE / RAIN GARDEN



BIOSWALE / RAIN GARDEN



Town of Lake Park Library Board

Agenda Request Form

Meeting Date: April 11, 2023

Originating Department: Special Events

Agenda Title: Centennial Arbor Day Ceremony

Approved by Town Manager: _____ **Date:** _____

Cost of Item: \$0.00 **Funding Source:** _____

Account Number: _____ **Finance Signature:** _____

Advertised:

Date: _____ **Newspaper:** _____

Attachments: Centennial Arbor Day Ceremony Flyer, Buttonwood Tree Photo, Christmas Palm Tree Photo

Please initial one:

_____ Yes I have notified everyone
 X Not applicable in this case

Summary Explanation/Background:

The Town of Lake Park will host a ceremony in Kelsey Park on Friday, April 28 from 10:00 am – 11:00 am in honor of National Arbor Day. At this time, staff would like the Town's Tree Board to select a tree to be planted in the park. This year's options are a Buttonwood and a Christmas Palm.

Recommended Motion: I move to have a _____ planted in Kelsey Park in honor of National Arbor Day and the Town of Lake Park's Centennial.



