CITY PLANNING BOARD

BOARD AGENDA

Planning Board Regular Meeting - Thursday, September 17, 2026 - 2:00 p.m.
City Hall - City Commission Chambers, 100 North U.S. #1, Fort Pierce, Florida

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

4. **CONSIDERATION OF ABSENCES**

5. **APPROVAL OF MINUTES**

   a. Minutes from the August 10, 2026, Planning Board meeting

6. **NEW BUSINESS**

   a. **PD2025-00006**
   Final Planned Development
   West Orange
   Parcel ID(s): 2407-211-0001-000-0; 2407-212-0001-000-3;
   2407-231-0000-000-5; 2407-241-0001-000-3

   b. **PD2025-00004**
   Final Planned Development
   Privilege Development
   3315 Sunrise Boulevard

c. **PZZAM2026-00002**
Zoning Atlas Map Amendment
Willow Lakes Rezoning
10050 W. Midway Road

d. **Determination of Zoning Category - Data Center**

7. **COMMENTS FROM THE PUBLIC**

Any person who wishes to comment on any subject may be heard at this time. Please limit your comments to three (3) minutes or less, as directed by the Chair, as this section of the Agenda is limited to thirty minutes. The Planning Board will not be able to take any official actions under Comments from the Public. Speakers will address the Board and the Public with respect. Inappropriate language will not be tolerated.

8. **DIRECTOR'S REPORT**

9. **BOARD COMMENTS**

10. **ADJOURNMENT**

Any person seeking to appeal any decision by the Planning Board with respect to any matter considered at this meeting is advised that a record of proceedings is required in any such appeal and that such person may need to insure that a verbatim record of the proceedings is made including the testimony and evidence upon which the appeal is to be based.
Persons who require special accommodations under the Americans with Disabilities Act (ADA) should contact (772) 467-3729, at least five (5) days prior to the meeting. Persons who are hearing or speech impaired may use the Florida Relay System by dialing 711.

Planning Board - 2:00 PM **5. a.**

Meeting Date: 09/17/2026

Re: Planning Board Minutes 8/10/26

Submitted For: Kev Freeman, Planning Director, Planning Department

Information

SUBJECT:

Minutes from the August 10, 2026, Planning Board meeting

Attachments

Planning Board Minutes 8/10/26

Form Review

Form Started By: Alicia Rosenthal Started On: 08/21/2026 12:55 PM

Final Approval Date: 08/21/2026

D R A F T

CITY OF FORT PIERCE
PLANNING BOARD

Planning Board Minutes

OF THE REGULAR MEETING OF THE FORT PIERCE CITY PLANNING BOARD HELD ON MONDAY, AUGUST 10, 2026, IN FORT PIERCE CITY HALL, COMMISSION CHAMBERS, 100 NORTH US HIGHWAY 1, FORT PIERCE, FLORIDA.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Present:	Christopher Widing; Johanna Gromek; Krista Storey; Clayton Johnson; Nichelle Clemons; Anton Kreisl, Chair
Absent:	Alexander Edwards
Staff Present:	Sara Hedges, City Attorney
	Kev Freeman, Planning Director
	Vennis Gilmore, Historic Preservation Senior Planner
	Bridgette Romer, Planner
Attendees:	Stephanie Heidt, Deputy Executive Director, Treasure Coast Regional Planning Council

4. CONSIDERATION OF ABSENCES

a. August 10, 2026, and July 13, 2026

Motion was made by Nichelle Clemons, and seconded by Krista Storey to unexcuse the absence of Mr. Edwards from the July 13, 2026, meeting.

AYE: Johanna Gromek, Krista Storey, Clayton Johnson, Nichelle Clemons, Christopher Widing, Chair Anton Kreisl
Passed

Motion was made by Nichelle Clemons, and seconded by Johanna Gromek to excuse Mr. Edwards from the August 11, 2026, meeting.

AYE: Christopher Widing, Johanna Gromek, Krista Storey, Clayton Johnson, Nichelle Clemons, Chair Anton Kreisl
Passed

5. APPROVAL OF MINUTES

a. Minutes from the July 13, 2026 meeting

Motion was made by Nichelle Clemons, and seconded by Christopher Widing to approve the minutes from the July 13, 2026, meeting.

AYE: Christopher Widing, Johanna Gromek, Krista Storey, Clayton Johnson, Nichelle Clemons, Chair Anton Kreisl
Passed

6. **HEARING OF THE LOCAL PLANNING AGENCY**

a. **PZTXA2026-00001**
2026 Comprehensive Plan Evaluation and Appraisal Review Transmittal

Ms. Heidt gave an overview of the Comprehensive Plan. She reviewed the vision and the local issues that stood out. Ms. Heidt said there are two comprehensive planning periods, a 10-year and 20-year, and since the plan will be adopted in 2026, the two comprehensive planning periods were changed to 2036 and 2046. She noted, in order to change the planning period dates, a linear interpolation had to be done. Ms. Heidt said the Functional Map Classification came back from the Florida Commerce review because there was no map for 2021, and they were not sure if something more restrictive would be created.

Ms. Heidt stated that in January 2026, the Comprehensive Plan was submitted to Florida Commerce, and it came back in March 2026 with a letter stating that the proposed amendments were more restrictive and burdensome, making them null and void ab initio. The planning timeline, and the future land use and infrastructure elements had to be changed, and they thought the functional classification might be potentially more restrictive, but they were not sure. Ms Heidt reviewed the updates made to all the elements and what would be included in the August 2026 submittal. Ms. Heidt listed the next steps, and she explained that once all the comments are addressed from the submittal to Florida Commerce, the City Commission will hold an adoption hearing.

Chair Kreisl asked if the effective date would still be 2026. He also asked if additional comments were expected from the other reviewing agencies. Ms. Clemons asked if changes are needed after the review by the state if the Evaluation and Appraisal Report (EAR) amendment needed to come back to the Planning Board. Mr. Widing asked if the EAR was still in the draft stage and if so, would it need to come back to the Planning Board again. Ms. Heidt explained that every seven (7) years the city is required to do an appraisal. Ms. Storey asked for clarification on the process for adoption.

Motion was made by Nichelle Clemons, and seconded by Christopher Widing to forward a recommendation of approval of the 2026 EAR Amendment to the City Commission.

AYE: Clayton Johnson, Nichelle Clemons, Christopher Widing, Johanna Gromek, Krista Storey, Chair Anton Kreisl
Passed

b. **PZANN2026-00003**
Voluntary Annexation
Juanita Avenue Annexation
Parcel ID: 1433-701-0335-000-2

Mr. Freeman said the voluntary annexation will also be looking at the Future Land Use and Zoning and there will be three separate motions. He said the 1.9 acre vacant, undeveloped residential lot is just west of 19th Street. Mr. Freeman said the current County Future Land Use is Residential Urban (RU) and the proposed City Future Land Use is Low Density Residential (RL). The current County Zoning is Residential, Single-Family-4 (RS-4) and the proposed City Zoning is Single-Family Low Density Residential (R-1). He said the proposed Future Land Use is the lowest that can be applied in the city. Mr. Freeman noted the city zoning is comparable to the St. Lucie County zoning. Mr. Freeman said there are three companion ordinances. He said the city is trying to support the infill of lots coming into the city to get a more unified service area and development pattern. Mr. Freeman said the contiguity, compactness and enclave prevention were looked at as well as the comprehensive plan consistency analysis.

Mr. Freeman explained on the Future Land Use map that the majority of the properties in the city are low density Future Land Use and the surrounding county properties Future Land Use is residential urban. He explained the difference is the county allows 5 units per acre and the city allows 6.5 units per acre. Mr. Freeman reviewed the Future Land Use Map Amendment designation comprehensive plan consistency analysis.'

Mr. Freeman said the county and city zoning are very similar as far as what they do and don't allow. He stated they both allow up to 4 units per acre.

Mr. Freeman said public facilities, level of service, transportation and drainage were also looked at.

He concluded with staff findings on the Annexation, Future Land Use and Rezoning.

Chair Kreisl asked if the lot size conformed to the current ordinance. Ms. Storey asked if the property owner owns other lots in the area.

Dror Tregar, the applicant, said he would comply with all the setbacks, and he has the right design for the lot.

Chair Kreisl said this is a text book annexation, and he is happy the city is making progress with annexations.

Motion was made by Christopher Widing, and seconded by Nichelle Clemons to forward a recommendation of approval of the annexation to the City Commission of Ordinance No. 26-016, annexing approximately 0.19 acres identified as Parcel ID 1433-701-0335-000-2 into the territorial limits of the City of Fort Pierce, based upon the findings contained in the staff report.

AYE: Christopher Widing, Johanna Gromek, Krista Storey, Clayton Johnson, Nichelle Clemons, Chair Anton Kreisl
Passed

Motion was made by Krista Storey, and seconded by Nichelle Clemons to forward a recommendation of approval to the City Commission for Ordinance No. 26-017, assigning the subject property a City of Fort Pierce Future Land Use designation of Low Density Residential (RL), based upon the findings contained in the staff report.

AYE: Nichelle Clemons, Christopher Widing, Johanna Gromek, Krista Storey, Clayton Johnson, Chair Anton Kreisl
Passed

Motion was made by Krista Storey, and seconded by Nichelle Clemons to forward a recommendation of approval to the City Commission for Ordinance No. 26-018, assigning the subject property a City of Fort Pierce zoning designation of Single-Family Low Density Residential (R-1), based upon the findings contained in the staff report.

AYE: Johanna Gromek, Krista Storey, Clayton Johnson, Nichelle Clemons, Christopher Widing, Chair Anton Kreisl
Passed

7. NEW BUSINESS

The annexation and rezoning was presented with the Future Land Use on Item 6b.

8. **COMMENTS FROM THE PUBLIC**

There were no comments from the public.

9. **DIRECTOR'S REPORT**

Mr. Freeman discussed Causeway Cove and the pending approvals from outside agencies.

Mr. Freeman informed the Board of the upcoming annexation meeting with staff and FPUA to talk about service area and the priority of annexations. He said there are annexation agreements that are confirmed and ready to go. Mr. Freeman said the city will look at the annexation's impact on the tax roll and city services. He said the City Commission wants to focus on the Kings Highway corridor. Mr. Freeman said a system will need to be put in place to start accessing which properties to annex.

Mr. Freeman made the Board aware of new developments coming forward.

10. BOARD COMMENTS

Chair Kreisl stated he had concerns about the amount of time staff is utilizing for affordable housing projects like Causeway Cove. He said the city needs to consider increasing fees for the exceptional amount of time spent.

Chair Kreisl asked if an undeveloped approved Planned Development could come in with an Affordable Housing site plan and not have to be reviewed by the Planning Board or City Commission. Mr. Freeman said more analysis needs to be done.

Mr. Johnson asked what the penalty would be if the applicant doesn't comply with the affordable housing statutory compliance.

Ms. Storey asked for the Affordable Housing application fee.

Ms. Gromek asked if there had been any pushback from the City regarding the state's Live Local Act.

Mr. Freeman said they have received inquiries from developers to look at other zoning categories, which staff have determined that do not conform with the Live Local requirements, including commercial use by right.

Chair Kreisl introduced the new Planning Board member, Johanna Gromek and she spoke a little bit about herself.

11. ADJOURNMENT

Planning Board - 2:00 PM **6. a.**

Meeting Date: 09/17/2026

Re: PD2025 - 00006 West Orange Phase 1,2,3

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

PD2025-00006
Final Planned Development
West Orange
Parcel ID(s): 2407-211-0001-000-0; 2407-212-0001-000-3;
2407-231-0000-000-5; 2407-241-0001-000-3

SUMMARY:

Review and recommendation to the City Commission of an application for a **Final Planned Development (PD) Site Plan and associated Development Agreement** for approximately **56.62 acres** within the previously approved **84.8-acre West Orange Planned Development**, approved by Ordinance No. 23-013.

The proposed Final PD includes **450 townhome units** distributed across two residential phases. **Phase 1** consists of approximately **29.47 acres** with **256 townhomes**, a clubhouse, swimming pool, pocket parks, and associated recreational amenities. **Phase 2** consists of approximately **22.69 acres** with **194 townhomes**. A third area, **Phase 3**, consists of approximately **4.25 acres** reserved for future commercial development. The current application does not authorize vertical development of Phase 3; a separate Final PD approval and amendment to the Development Agreement will be required before commercial development may proceed.

The site plan includes an internal private roadway network, gated primary access from **Orange Avenue/SR 68**, emergency access, pedestrian sidewalks and connections, a school bus stop/turnaround, landscaping and buffering, stormwater management facilities, and utility infrastructure.

The application also establishes phasing, infrastructure, and Certificate of Occupancy requirements intended to ensure that required transportation, drainage, utilities, pedestrian facilities, and recreational amenities are completed in coordination with development.

The request represents implementation of the previously approved West Orange Master PD for the 56.62-acre Final PD area while retaining Ordinance No. 23-013 as the governing approval for the overall development.

RECOMMENDATION:

Staff recommends that the Planning Board recommends **APPROVAL, WITH (26) CONDITIONS,** of the West Orange Final Planned Development and associated Development Agreement for the approximately 56.62-acre Final PD property, subject to adoption of the Final PD Ordinance, compliance with Ordinance No. 23-013, the approved Final PD Site Plan, the Development Agreement, resolution of the remaining coordination items identified in this report, and all applicable City and agency requirements.
Staff further recommend that the approval expressly recognize that the present Final PD authorizes the detailed development program for Phases 1 and 2 and establishes Phase 3 as a future commercial tract requiring separate Final PD approval before vertical development.

ALTERNATIVES:
Approve with Alternative Conditions

OR

Deny the request

RESPONSIBLE STAFF:
Kev Freeman, Planning Director

COORDINATED WITH:
Technical Review Committee

Fiscal Impact

Budgeted Y/N: N
OTHER INFORMATION:
None - potential additional recenue to General Services

Attachments

Staff Presentation
Staff Report
Draft ORD
Draft Development Agreement
Location Map
Site Plan
Master PD Site Plan
Landscape Plan
Preliminary Engineering
Traffic Impact Analysis
FDOT Pre-app
Environmental Assessment
Tree Survey
Tree Mitigation

Lighting Plan
Photometrics
Utilities & Wastewater
Stormwater Maintenance
Utilities & Wastewater
Narrative
Design Narrative
Statement of PD Benefits
Legal Description
Deed Documents
TOPO & Survey
TRC Comments
Applicant Response

Form Review

Form Started By: Kev Freeman
Started On: 09/11/2026 08:19 AM
Final Approval Date: 09/11/2026

CITY OF FORT PIERCE

CITY COMMISSION

SEPTEMBER 17th, 2026

WEST ORANGE FINAL PD SITE PLAN AND PHASING (1,2 & 3)

APPLICANT

REDTAIL DG. Tod Mowery. Email todm@redtaildg.com

PROPERTY OWNER(S)

Orange Avenue Development II LLC.

PARCEL ID #(S):

2407-211-0001-000-0;
2407-212-0001-000-3;
2407-231-0000-000-5;
2407-241-0001-000-3

BACKGROUND

The West Orange Planned Development was originally approved by the City Commission on February 21, 2023, through Ordinance No. 23-013, establishing Planned Development zoning and a Preliminary Overall Master Plan for approximately 84.8 acres.

The current application represents the next stage of implementation and seeks Final PD approval for approximately 56.62 acres within the larger Master PD.

SUMMARY

The proposed Final PD for 56.62 acres of the original 84.8 acres Master PD includes 450 townhome units distributed across two residential phases.

Phase 1 consists of approximately 29.47 acres with 256 townhomes, a clubhouse, swimming pool, pocket parks, and associated recreational amenities.

Phase 2 consists of approximately 22.69 acres with 194 townhomes.

Phase 3, consists of approximately 4.25 acres reserved for future commercial development. The current application does not authorize vertical development of Phase 3; a separate Final PD approval and amendment to the Development Agreement will be required.

SUMMARY

Ordinance No. 23-013 remains the governing Master PD zoning approval for the approximately 84.8-acre West Orange Planned Development. The proposed Final PD Development Agreement implements the current 56.62-acre Final PD and expressly provides that it does not supersede Ordinance No. 23-013 except to the extent expressly authorized by the Final PD Ordinance.

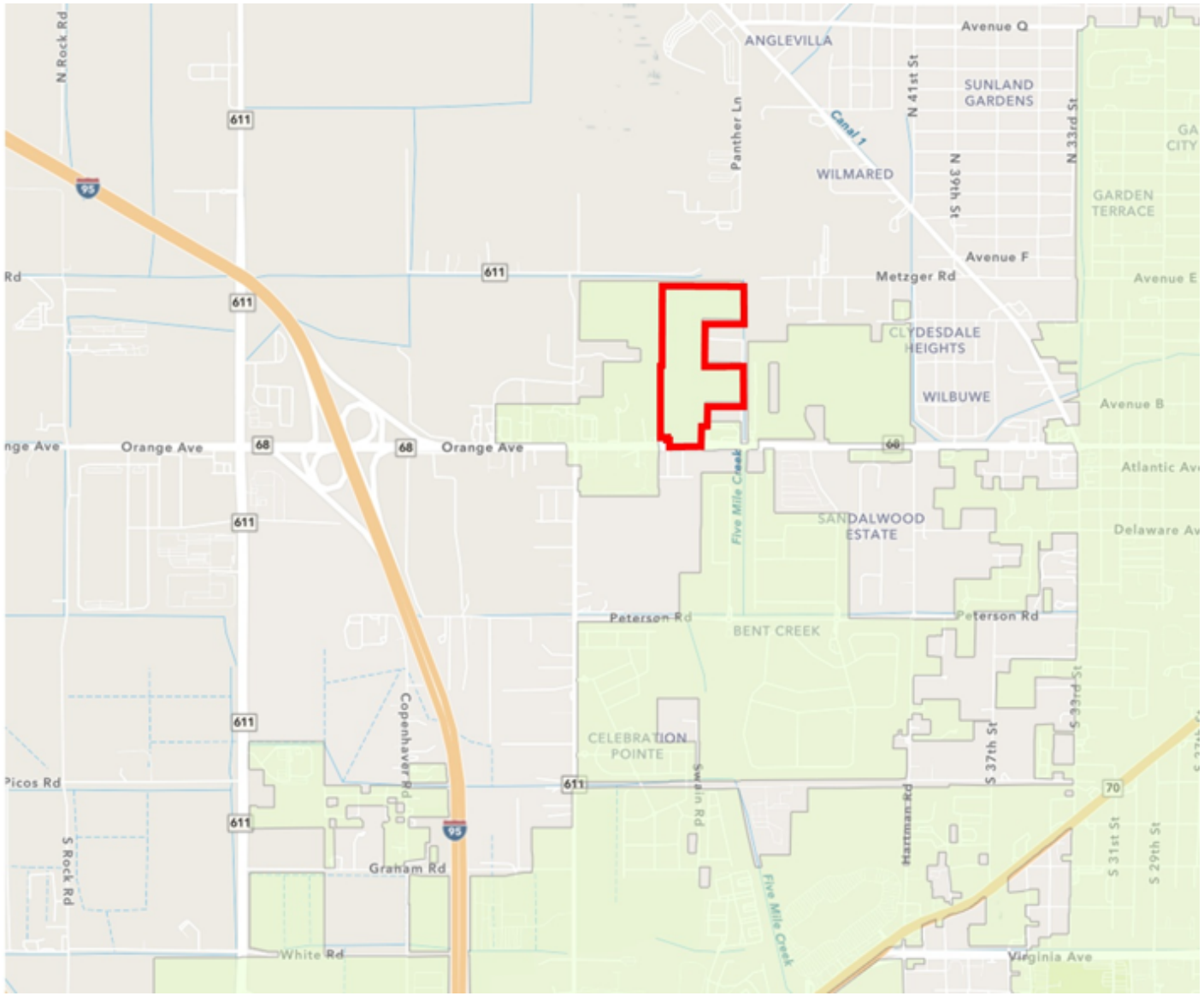
The Development Agreement further provides that, where an unresolved conflict exists between the Final PD Development Agreement and Ordinance No. 23-013, the more restrictive applicable requirement controls unless otherwise determined by the City. There is no prior executed development agreement being amended by the present instrument; Ordinance No. 23-013 and its incorporated exhibits and conditions remain in effect except where expressly modified through the Final PD Ordinance.

LOCATION

PROPERTY LOCATION

Municipal Limits

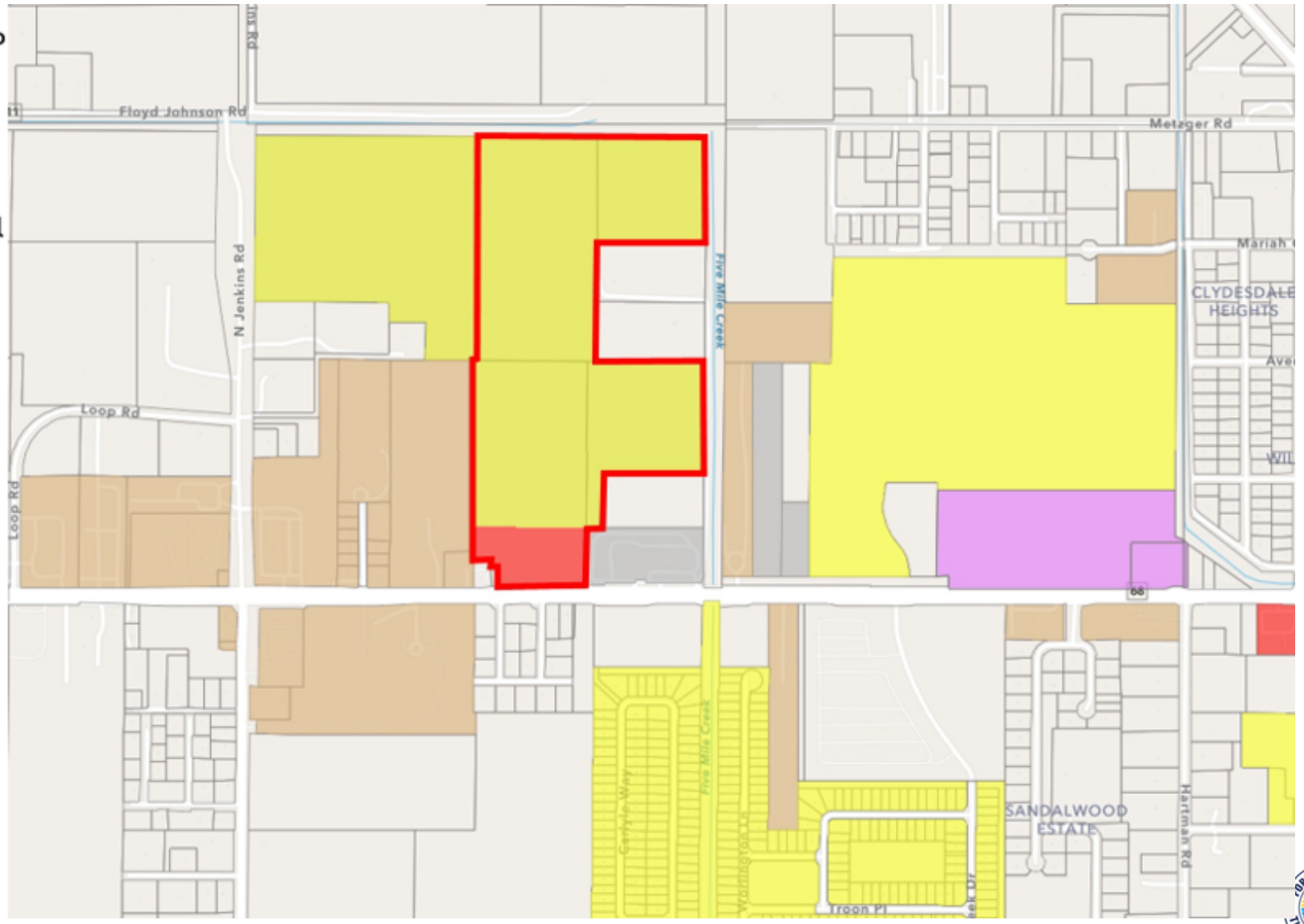
Unincorporated



FUTURE LAND USE

FUTURE LAND USE MAP

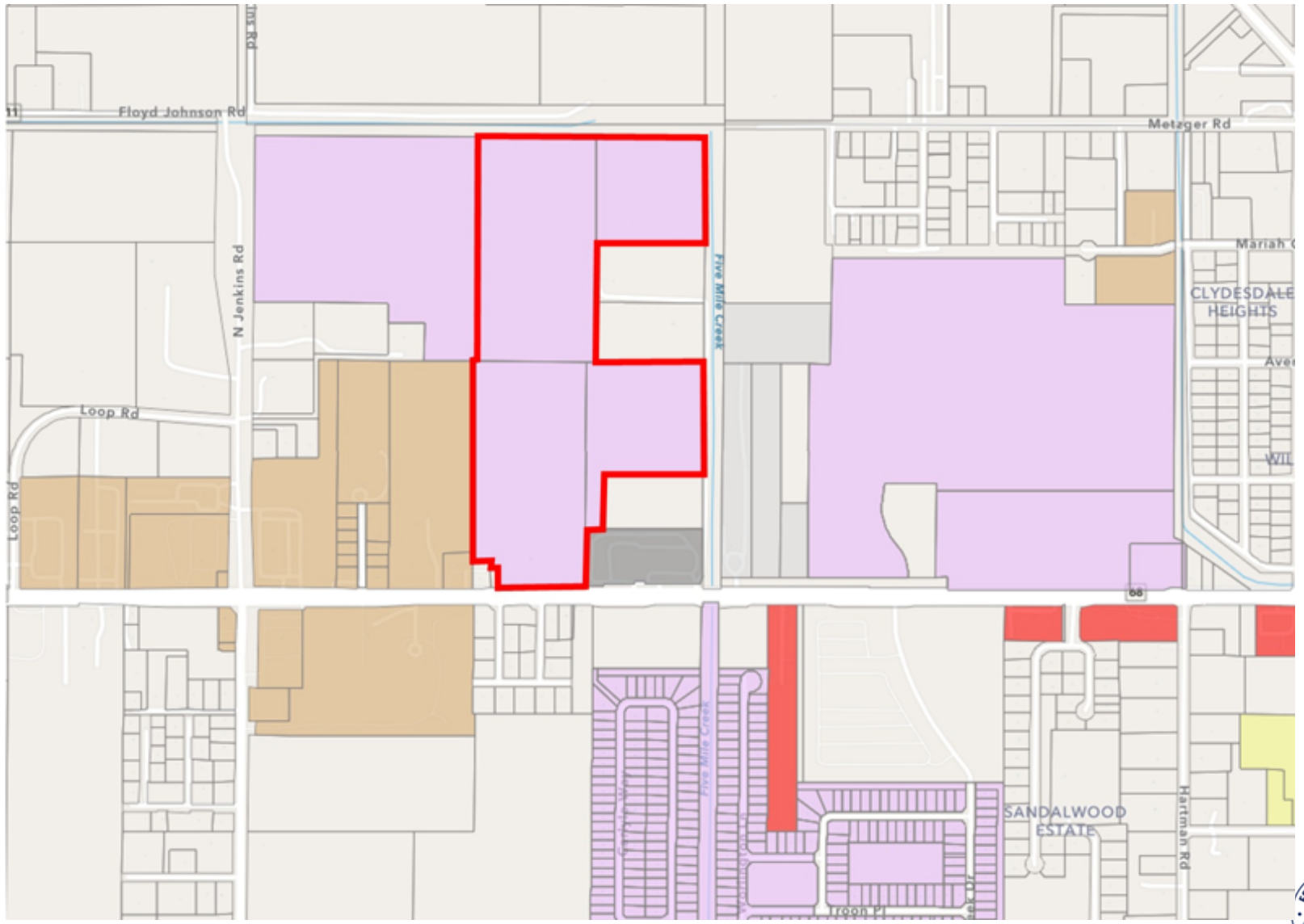
FLU: Residential High & General Commercial



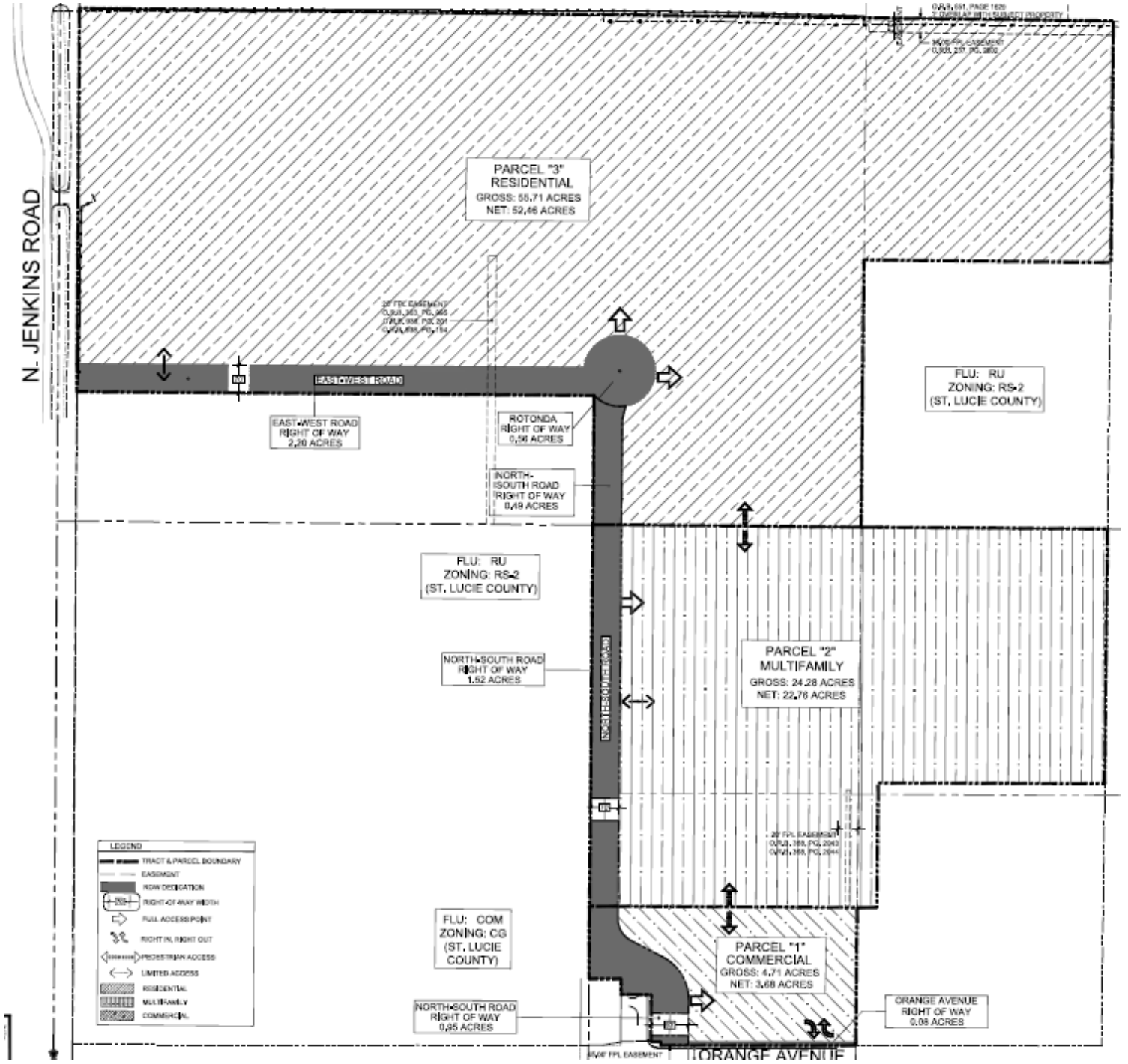
ZONING

ZONING

ZONING: West Orange PD (Phase 1)



MASTER PD SITE PLAN PLAN



WEST ORANGE PD

PROPOSED SITE PLAN

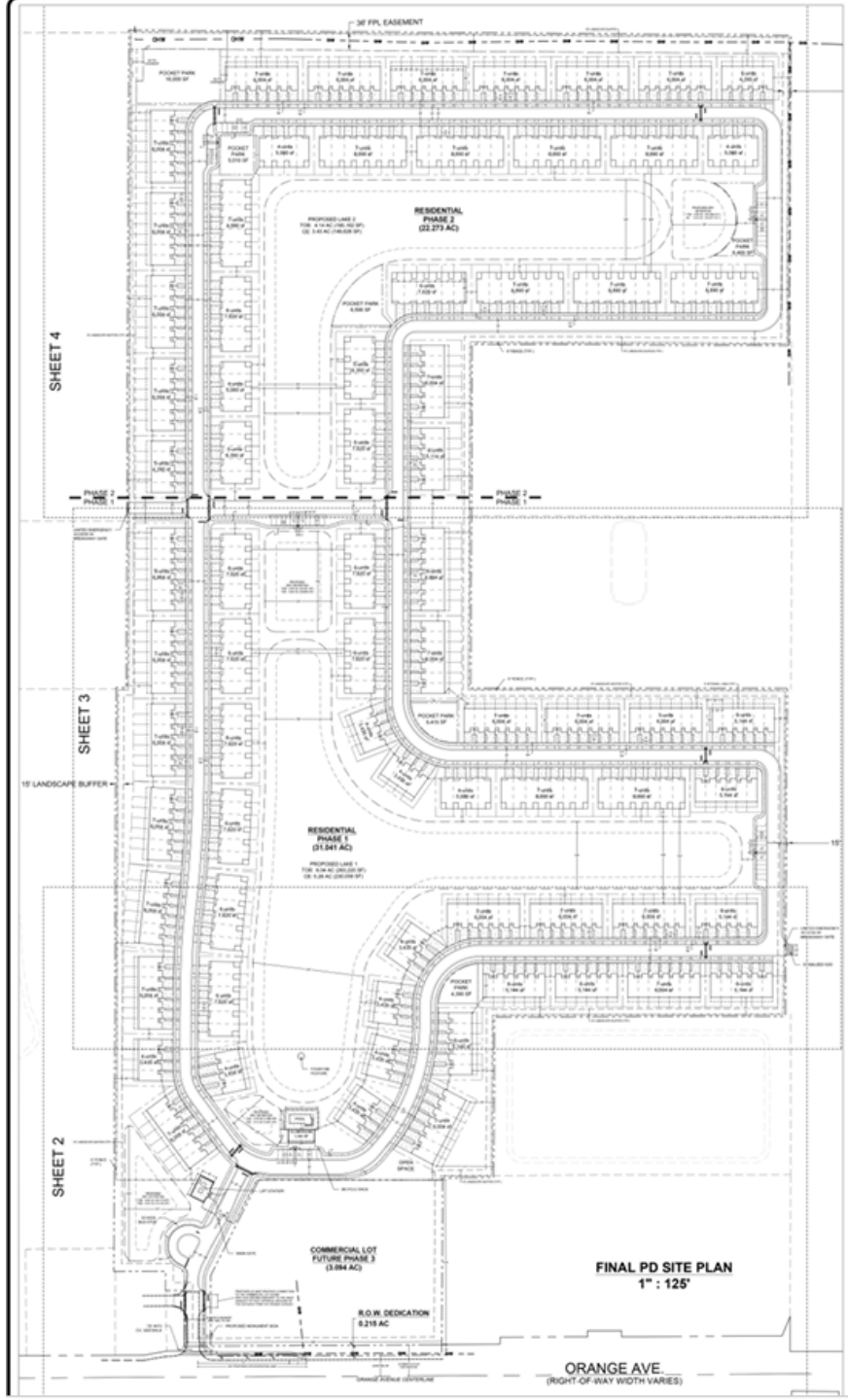
The site plan includes an internal private roadway network, gated primary access from Orange Avenue/SR 68, emergency access, pedestrian sidewalks and connections, a school bus stop/turnaround, landscaping and buffering, stormwater management facilities, and utility infrastructure.

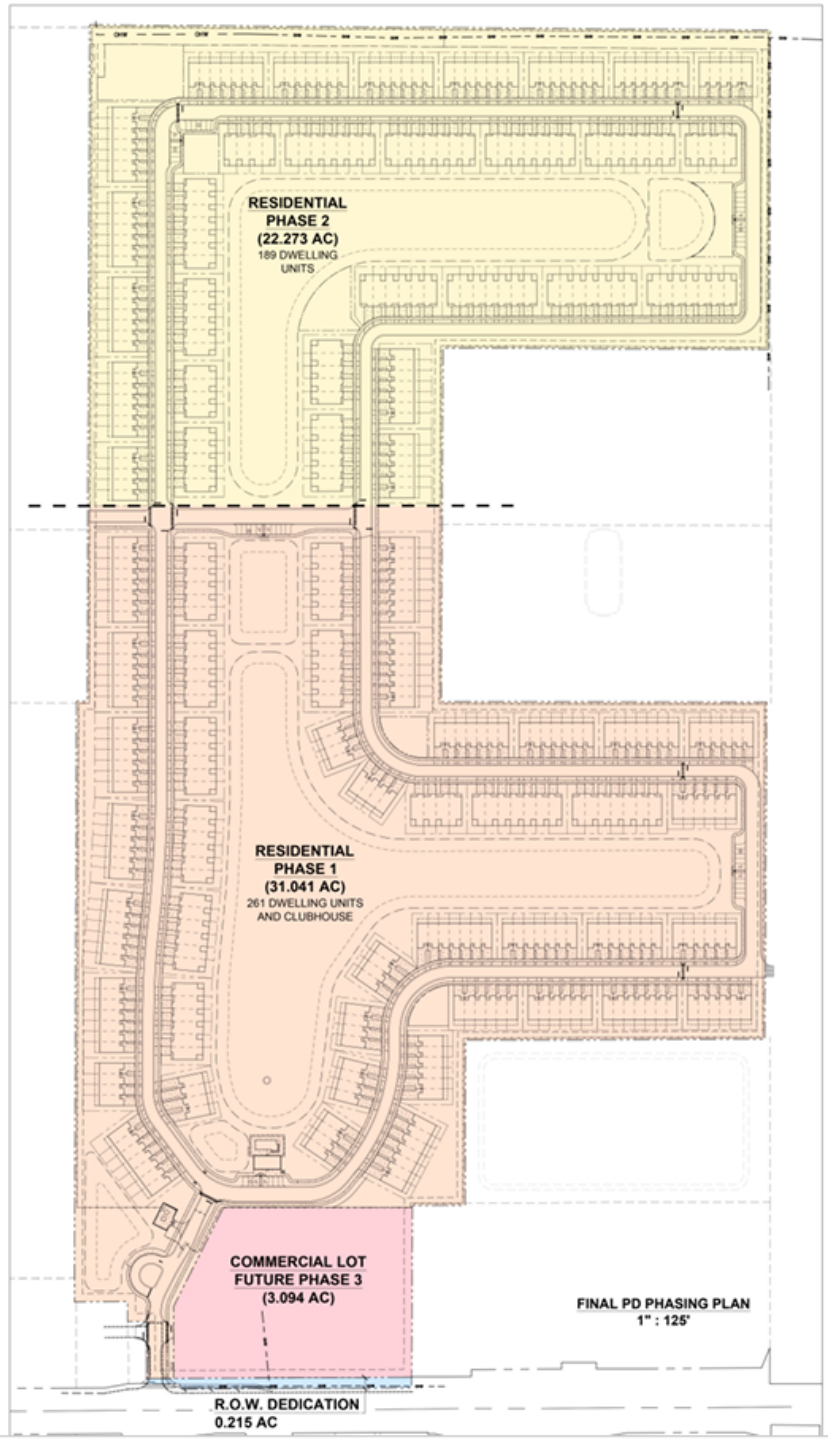
The application also establishes phasing, infrastructure, and Certificate of Occupancy requirements intended to ensure that required transportation, drainage, utilities, pedestrian facilities, and recreational amenities are completed in coordination with development.

The request represents implementation of the previously approved West Orange Master PD for the 56.62-acre Final PD area while retaining Ordinance No. 23-013 as the governing approval for the overall development.

SITE PLAN

AND PHASING PLAN





RECOMMENDATION

Staff recommend that the Planning Board recommends **APPROVAL, WITH (26) CONDITIONS**, of the West Orange Final Planned Development and associated Development Agreement for the approximately 56.62-acre Final PD property, subject to adoption of the Final PD Ordinance, compliance with Ordinance No. 23-013, the approved Final PD Site Plan, the Development Agreement, resolution of the remaining coordination items identified in this report, and all applicable City and agency requirements.

Staff further recommend that the approval expressly recognize that the present Final PD authorizes the detailed development program for Phases 1 and 2 and establishes Phase 3 as a future commercial tract requiring separate Final PD approval before vertical development.

ALTERNATIVE RECOMMENDATION

Approve with Alternative Conditions

OR

Deny the request

CONDITIONS OF APPROVAL (1-7)

1. Conformance with West Orange Master PD. Development shall remain consistent with Ordinance No. 23-013 and the approved West Orange Master PD except as expressly modified through the Final PD Ordinance.

2. Approved Plans. Development shall occur substantially in accordance with the approved Final PD Site Plan, Phasing Plan, landscape/irrigation plans, engineering, utility and stormwater plans, Development Agreement and other approved documents.

3. Development Phasing. Phase 1: ±29.47 acres / 256 townhomes; Phase 2: ±22.69 acres / 194 townhomes; Phase 3: ±4.25 acres reserved for future commercial development.

4. Phase 3 Commercial Development. Current Final PD approval does not authorize vertical development of Phase 3. Separate Final PD approval and Development Agreement amendment are required before Phase 3 development.

5. Unity of Title / Parcel Combination. Because the property is not proposed to be platted, a Unity of Title shall be recorded and the required parcel combination completed before the applicable Building Permit.

6. Comprehensive Plan Policy 7.4.11. Before the Phase 1 clubhouse building permit, plans shall show the communal building is hurricane hardened and equipped with generator and accessory fuel storage.

7. FDOT Access Approval. Before development permits affecting SR 68/Orange Avenue, obtain all required FDOT access, right-of-way, drainage and related permits and comply with the October 10, 2025 FDOT pre-application letter or successor determination.

CONDITIONS OF APPROVAL (8-14)

8. Orange Avenue / SR 68 Access Improvements. Construct the approved primary access, westbound right-turn lane, eastbound median modification, pavement/bicycle-lane improvements and other FDOT-required improvements before the first residential CO unless otherwise approved.

9. Driveway Throat and Gate Stacking. Provide a minimum 100-foot driveway throat from ultimate right-of-way to first conflict point. Any gate/call box/gate house must be at least 100 feet from ultimate right-of-way with a pre-gate turnaround.

10. Left-Turn Queue Analysis. Before final FDOT access approval, demonstrate that the existing eastbound left-turn lane and affected adjacent left-turn lanes provide adequate queue storage or construct FDOT-required modifications.

11. Limitation on Additional SR 68 Access. No additional direct driveway connection to SR 68 may be established between the approved full-access driveway and the eastern property boundary unless expressly authorized by FDOT.

12. FDOT Right-of-Way and Drainage. Provide FDOT-required right-of-way dedication for transportation improvements and drainage mitigation for impacts to FDOT right-of-way in accordance with applicable criteria and permits.

13. Change in Development Intensity. Any modification increasing trip generation beyond the 450-townhome analysis shall demonstrate continued FDOT compliance and, where required, renewed pre-application review.

14. Jenkins Road Overlay / Interconnectivity. Preserve the western interconnection for future connectivity with the remaining Master PD property unless otherwise approved by the City. Final engineering shall confirm no adopted future roadway corridor is obstructed.

CONDITIONS OF APPROVAL (15-20)

15. Phase 1 Infrastructure. Before the first residential CO in Phase 1, the lift station, wastewater infrastructure, primary and emergency access, school bus stop/turnaround, applicable stormwater facilities and pedestrian connections shall be completed, operational and approved, unless otherwise accepted by the City.

16. Recreational Amenities. Phase 1 clubhouse, pool, associated recreational open space and Phase 1 pocket parks shall be completed, approved and available no later than CO for the 50th Phase 1 dwelling unit.

17. Pedestrian / ADA Improvements. A continuous accessible pedestrian route shall be available to each occupied residential building. Required sidewalks, ADA ramps, detectable warnings and signage shall comply with approved plans and City standards.

18. Landscaping, Tree Mitigation and Buffering. Landscaping, buffering, irrigation, tree preservation and mitigation shall be completed under approved plans and City requirements. Final tree mitigation shall be resolved at DPCR/permitting.

19. Environmental Documentation. Formal wetland jurisdictional determination and required protected-species survey/habitat documentation shall be submitted and accepted at DPCR/permitting. Required agency permits and mitigation shall be completed before disturbance of regulated areas.

20. Stormwater and Drainage. Stormwater facilities serving each phase shall be constructed under approved plans and City, SFWMD and NSLRWCD permits and operational prior to occupancy of dependent areas.

CONDITIONS OF APPROVAL (21-26)

21. Solid Waste. Final roadside collection arrangements shall be approved by the City's applicable Solid Waste function before residential occupancy.

22. Technical Document Reconciliation. Before applicable development permits, reconcile the Final PD plans, Stormwater Management Report and supporting documents to consistently identify Phase 3 commercial acreage and final phasing.

23. Traffic Impact Analysis Correction. Correct or supplement the TIA to consistently identify Orange Avenue/SR 68 and Vista Court as the principal project access and remove inconsistent references to Okeechobee Road.

24. Amenity Trigger. Conform Exhibit 4 of the Development Agreement to Section 5 by specifying the 50th Phase 1 dwelling unit as the recreational-amenity completion threshold.

25. Environmental Conditions from Ordinance No. 23-013. Conditions 4, 5 and 6 of Exhibit D to Ordinance No. 23-013 remain applicable unless satisfied or expressly modified through amendment to the Final PD Ordinance.

26. Material Modifications. Any material modification to the approved Final PD shall be processed under Section 125-212 and other applicable City Code provisions.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

PLANNING BOARD STAFF REPORT

West Orange Planned Development - Final PD SITE PLAN (PHASED)

Application PD2025-00006

Planning Board Date	September 17, 2026
Staff Reviewer	Kevin Freeman, Planning Director
Applicant / Owner	Orange Avenue Development II, LLC
Agent	Tod Mowrey, Redtail DG
Location	4918 & 5220 Orange Avenue; north side of Orange Avenue (SR 68), east of Jenkins Road
Parcel Identification Nos. (4)	2407-211-0001-000-0; 2407-212-0001-000-3; 2407-231-0000-000-5; 2407-241-0001-000-3
Final PD Area (Phasing)	Approximately 56.62 acres
Master PD Area	Approximately 84.8 acres
Existing Zoning	Planned Development West Orange (PD)
Future Land Use	Residential High (RH) and General Commercial (GC), as applicable to the approved Master PD
Master PD Approval	Ordinance No. 23-013, approved February 21, 2023
Request	Final Planned Development Site Plan approval (Major Amendment to the PD approval) and associated Development Agreement

REQUEST AND PROJECT SUMMARY

Orange Avenue Development II, LLC requests approval of a Final Planned Development for approximately 56.62 acres within the previously approved West Orange Planned Development. The larger Master PD encompasses approximately 84.8 acres and was approved by City Commission through Ordinance No. 23-013 on February 21, 2023. The current application advances detailed Final PD approval for four parcels and establishes the development program, phasing, infrastructure obligations, and conditions applicable to the 56.62-acre Final PD property.

Phase	Approx. Acreage	Development Program	Current Approval Status
Phase 1	29.47 acres	256 townhome units; clubhouse, pool, pocket parks and associated amenities	Included in current Final PD
Phase 2	22.69 acres	194 townhome units	Included in current Final PD
Phase 3	4.25 acres	Future commercial development	Separate Final PD required before vertical development

The residential component therefore comprises 450 townhome units across Phases 1 and 2. Phase 3 is reserved for future commercial development and is not receiving Final PD Site Plan approval for vertical construction through the present action.

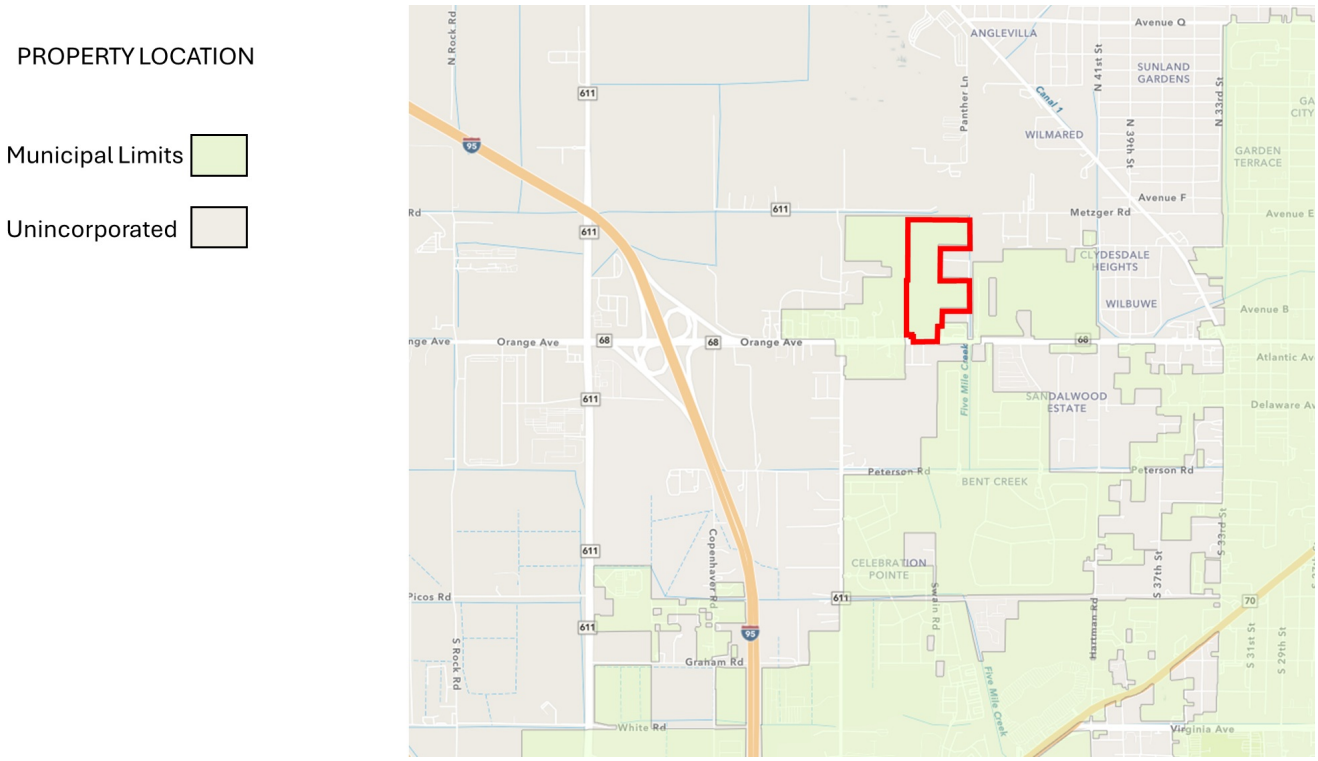


Figure 1. Property location within the City of Fort Pierce.

BACKGROUND

Ordinance No. 23-013 remains the governing Master PD zoning approval for the approximately 84.8-acre West Orange Planned Development. The proposed Final PD Development Agreement implements the current 56.62-acre Final PD and expressly provides that it does not supersede Ordinance No. 23-013 except to the extent expressly authorized by the Final PD Ordinance.

The Development Agreement further provides that, where an unresolved conflict exists between the Final PD Development Agreement and Ordinance No. 23-013, the more restrictive applicable requirement controls unless otherwise determined by the City. There is no prior

executed development agreement being amended by the present instrument; Ordinance No. 23-013 and its incorporated exhibits and conditions remain in effect except where expressly modified through the Final PD Ordinance.

SITE CONTEXT, FUTURE LAND USE AND ZONING

The site is located along Orange Avenue east of Jenkins Road, within the municipal limits of the City of Fort Pierce and within a broader planned growth area. Surrounding uses include residential, agricultural, commercial and developing suburban properties.

FUTURE LAND USE MAP

FLU: Residential High & General Commercial

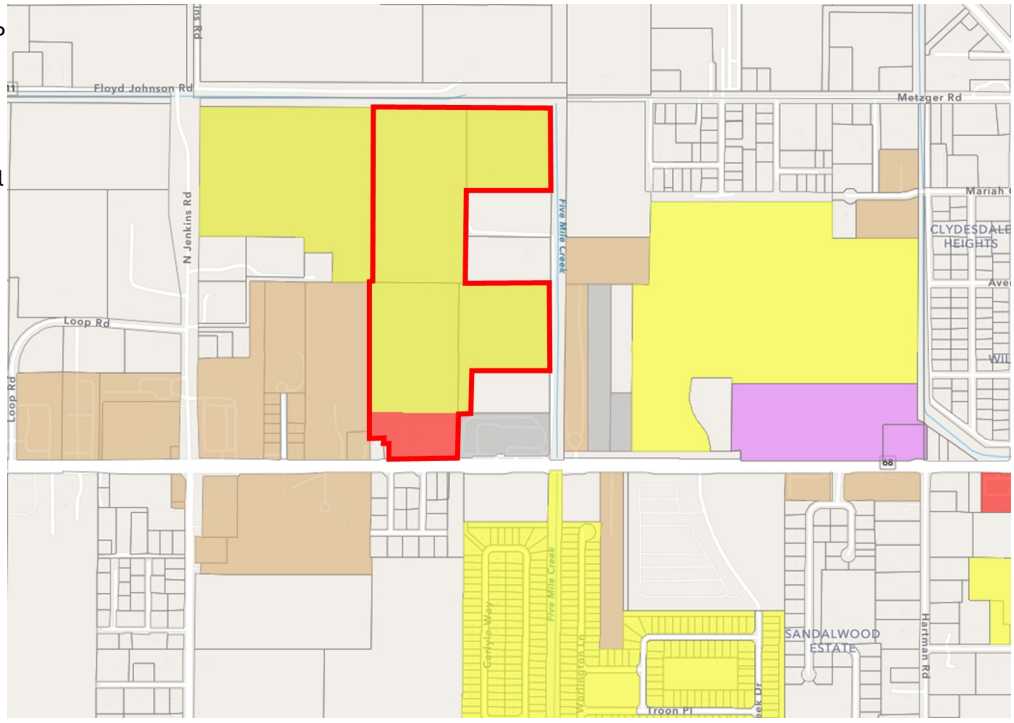


Figure 2. Future Land Use Map - subject property includes Residential High and General Commercial designations

COMPREHENSIVE PLAN CONSISTENCY

The proposal is generally consistent with the City of Fort Pierce Comprehensive Plan and applicable growth-management requirements. The proposed residential density is approximately 7.89 dwelling units per acre across the residential development area as presented by the applicant and is within the Residential High Future Land Use. The development provides a compact residential form, internal circulation, centralized amenities and a future commercial component.

Comprehensive Plan Policy 7.4.11. The policy requires residential developments in excess of 100 dwelling units to provide a community clubhouse, recreation center or similar communal building that is “hurricane hardened” and equipped with a generator and accessory fuel storage system to supply power during prolonged outages. The clubhouse is included within Phase 1.

Staff finds that the Final PD generally implements the land-use framework established by the Master PD, subject to the Development Agreement, conditions of approval, final engineering, and continued compliance with applicable Comprehensive Plan policies.

ZONING

ZONING: West Orange PD (Phase 1)

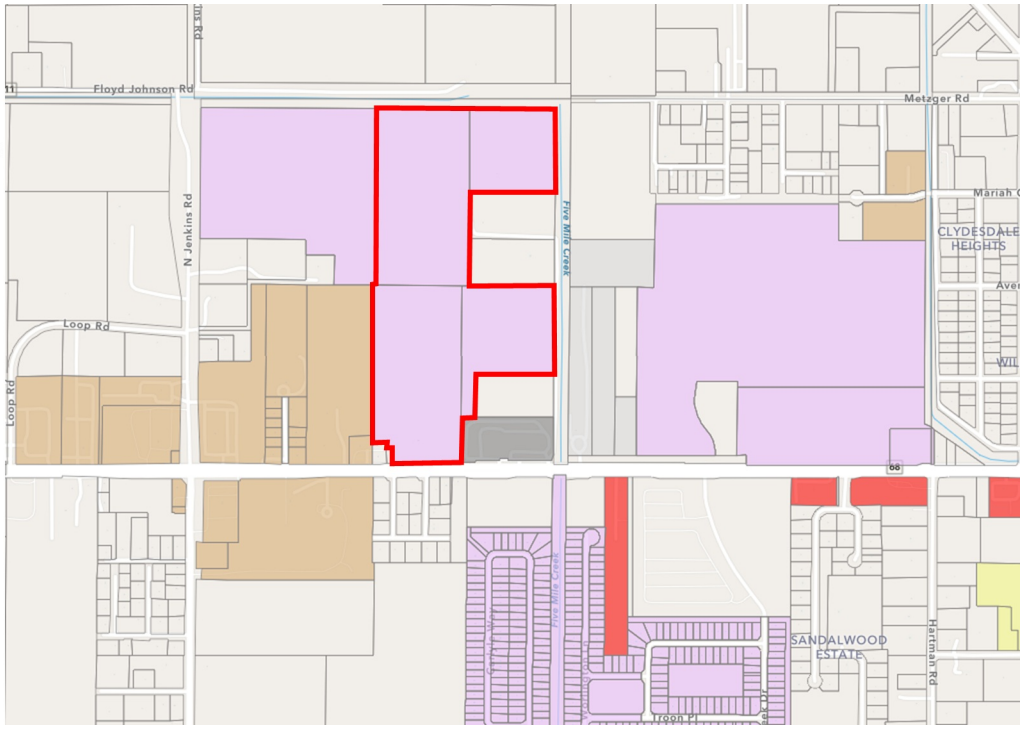


Figure 3. Zoning Map - subject property is zoned Planned Development (source: initial TRC staff report).

LAND DEVELOPMENT CODE AND SITE DESIGN

The property is zoned Planned Development and the request represents implementation of the approved Master PD through Final PD review. The current materials provide a phasing plan, detailed site design, architectural program, internal circulation, parking, sidewalks, landscaping, lighting, stormwater facilities and recreational amenities.

The architectural design narrative describes a two-story attached townhome community using a contemporary Florida vernacular approach with stucco and siding materials, articulated rooflines, front-entry garages and coordinated amenity architecture. Proposed townhome plans generally range from approximately 1,466 to 1,632 square feet of conditioned space and include three-bedroom configurations, single-car garages and covered outdoor living areas.

PHASING AND DEVELOPMENT TIMING

The Development Agreement establishes formal phasing and occupancy milestones. Phase 1 consists of approximately 29.47 acres and 256 townhomes together with the clubhouse, pool and Phase 1 amenities. Phase 2 consists of approximately 22.69 acres and 194 townhomes. Phase 3 consists of approximately 4.25 acres reserved for future commercial use.

Phase	Development Commencement	Infrastructure Milestone	Final Completion
Phase 1	Within 120 days of issuance of first development permit	Prior to Final CO for 50% of Phase 1 units	December 31, 2032
Phase 2	Any time after commencement of Phase 1	Prior to Final CO for 50% of Phase 2 units	December 31, 2032
Phase 3	Separate Final PD required	To be established with separate Final PD	To be determined

Each residential phase must include the infrastructure, utility systems, drainage improvements, roadway improvements, fire protection, pedestrian facilities, landscaping, buffering and other improvements necessary to adequately serve that phase. No Certificate of Occupancy may be issued unless infrastructure necessary to safely and adequately serve the occupied portion of the applicable phase is completed, operational and approved by the applicable reviewing authority.

TRANSPORTATION

Traffic Impact Analysis

The Traffic Impact Analysis prepared by JFO Group evaluates the 450-townhome development pursuant to the St. Lucie TPO Standardized Traffic Impact Study methodology. The analysis estimates approximately 2,795 daily trips, including 170 AM peak-hour trips (41 entering / 129 exiting) and 223 PM peak-hour trips (138 entering / 85 exiting).

The principal project access is proposed at Orange Avenue (SR 68) and Vista Court. The analysis indicates that the intersection is projected to operate at approximately LOS A during the AM peak period and LOS B during the PM peak period. The existing eastbound left-turn lane was determined to provide sufficient storage for anticipated project demand, while a westbound right-turn lane is recommended. The TIA concludes that significantly impacted roadway links are expected to remain within adopted Level of Service standards.

FDOT District Four Pre-Application Review

FDOT District Four conducted a pre-application review on October 9, 2025, for modification of the existing full-access driveway along the north side of SR 68, approximately 1,440 feet east of North Jenkins Road. The October 10, 2025 FDOT letter identifies the project as West Orange, 5220 Orange Avenue, approximately 57 acres, with 450 townhome units. FDOT conceptually approved the request subject to access-management conditions; the letter expressly states that it is not a permit approval.

Key FDOT requirements include a minimum 100-foot driveway throat from the ultimate right-of-way line to the first conflict point; a minimum 100-foot gate/call-box setback and pre-gate turnaround if gated; a right-turn lane meeting Florida Design Manual requirements and accommodating a buffered bicycle lane; queue-length analysis for the eastbound left-turn lane

and affected adjacent left-turn lanes; extension/alignment of the eastbound median nose; no additional direct driveway connections to SR 68 between the approved access and the eastern property line; drainage mitigation within State right-of-way; and right-of-way dedication if required to construct the improvements.

The FDOT pre-application letter is valid through October 10, 2026. Final access, drainage, right-of-way and related engineering plans remain subject to FDOT permitting.

Jenkins Road Overlay / Future Interconnectivity

No mapped Jenkins Overlay roadways traverse the Final PD property and that the proposed Final PD remains consistent with the approved Preliminary PD plan. The applicant further states that Road A and Metzger Road are separated from the property by North St. Lucie River Water Control District lands/canal constraints and do not directly touch the project property.

The applicant proposes three access/interconnectivity elements: (1) the primary gated access on Orange Avenue; (2) an emergency-only eastern connection to the NSLRWCD service road using stabilized sod and a break-away gate; and (3) a western connection intended to preserve future interconnectivity with the remaining westerly portion of the Master PD when that property develops.

EXHIBIT C
Proposed Residential Phase (in blue) overlapped over the approved preliminary site plan

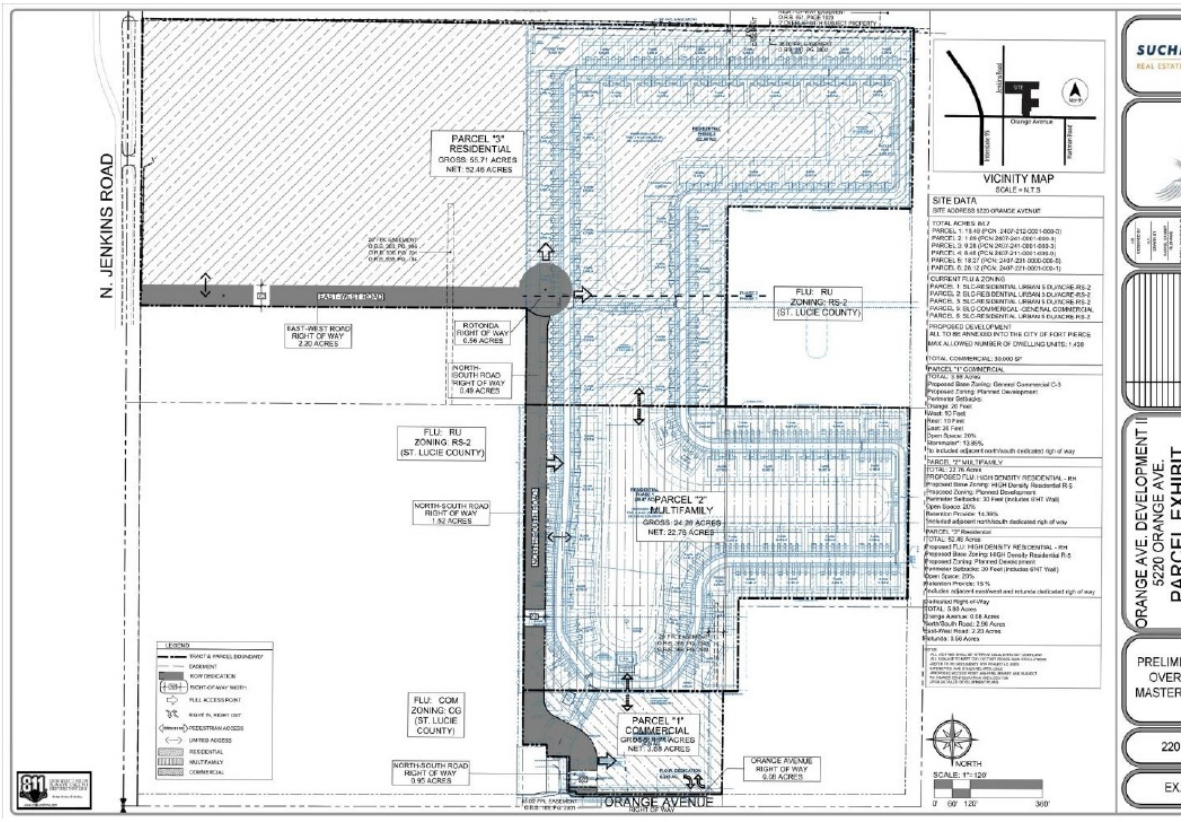


Figure 5. Applicant Exhibit C - proposed residential phase overlaid on the approved Preliminary Overall Master Plan.

Staff assessment: the applicant response and exhibits provide a reasonable basis to distinguish the Final PD property from the mapped Road A and Metzger Road corridors and demonstrate an effort to preserve westward PD interconnectivity and will be subject to continued coordination with St. Lucie County and confirmation during final engineering that the Final PD does not obstruct an adopted future roadway corridor and that the western interconnection shown on the approved Final PD is preserved unless otherwise approved by the City.

STORMWATER MANAGEMENT

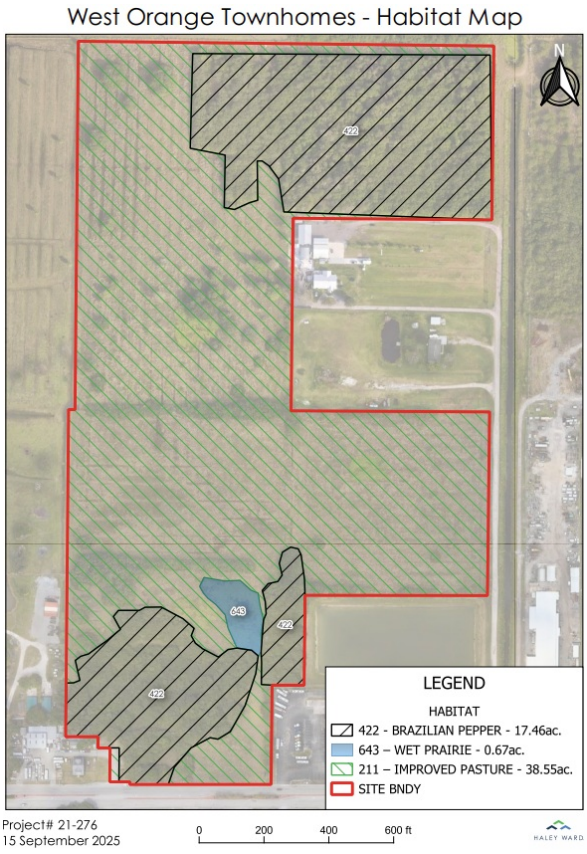
The Stormwater Management Report prepared by Haley Ward evaluates water quality treatment, attenuation, design storms, discharge limitations, control structures, minimum road and parking elevations, minimum finished-floor elevations, perimeter berms, irrigation, dewatering, maintenance and operation.

The project ultimately discharges toward the North St. Lucie River Water Control District system, including Canal No. 29. The report identifies the East Belcher Canal drainage basin and the impaired C-25/Belcher Canal as the receiving system for water-quality treatment analysis.

Stormwater Parameter	Reported Design / Result
Nitrogen load reduction	95%
Phosphorus load reduction	98%
Maximum allowable NSLRWCD discharge volume	9.40 acre-feet
Proposed discharge volume	4.56 acre-feet
Proposed minimum roadway / parking elevation	16.00 NAVD
Proposed minimum finished-floor elevation	17.50 NAVD
Minimum perimeter berm	14.50 NAVD (detailed drainage section)

The consultant concludes that the project meets applicable state and local stormwater management requirements for water quality and quantity. The initial TRC review and applicant response both recognize that final drainage review and NSLRWCD/SFWMD permitting remain required at DPCR. The Development Agreement also requires stormwater facilities serving each phase to be operational before occupancy of areas dependent on those facilities.

ENVIRONMENTAL AND SITE CONSTRAINTS



The consultant reported that the site is predominantly disturbed/improved pasture and that no gopher tortoises or burrows, sandhill cranes or nests, or other state-listed species were observed during the assessment. The initial report identified one wetland area and required further environmental documentation at DPCR.

The habitat map submitted with the initial review depicts approximately 38.55 acres of improved pasture, approximately 17.46 acres of Brazilian pepper and approximately 0.67 acre of wet prairie. These mapped acreages should be read together with the formal jurisdictional determination and final engineering because wetland boundaries and regulatory jurisdiction are subject to agency confirmation.

A tree inventory containing 118 protected trees and tree mitigation, wetland jurisdictional determination, gopher tortoise survey and wood stork habitat assessment are conditioned as DPCR items. The

April 2026 applicant response expressly acknowledges that formal wetland determination will be provided at DPCR.

UTILITIES, INFRASTRUCTURE, PEDESTRIAN FACILITIES AND AMENITIES

Water, wastewater, electricity and gas services are available, and adequate infrastructure capacity exists, subject to final utility design and provider approvals. The Development Agreement requires water, wastewater and other utility infrastructure necessary to serve each occupied portion of the development to be completed, operational and approved before occupancy.

The Phase 1 lift station and associated wastewater infrastructure must be operational before issuance of the first residential Certificate of Occupancy within Phase 1. The school bus stop and turnaround must also be completed and available before the first residential Certificate of Occupancy unless an alternative milestone or configuration is approved in writing by the City and applicable school transportation authority.

A continuous accessible pedestrian route must be available to each occupied residential building, with all sidewalks and pedestrian improvements within each residential phase completed before the final residential Certificate of Occupancy for that phase. The applicant response states that sidewalks are now provided on both sides of the entrance road and ADA ramps/signage have been incorporated.

The Phase 1 clubhouse, swimming pool, associated recreational open space and Phase 1 pocket parks must be completed and available for use no later than issuance of the Certificate of Occupancy for the 50th dwelling unit within Phase 1. The clubhouse must also demonstrate compliance with Comprehensive Plan Policy 7.4.11 regarding hurricane hardening, generator capacity and accessory fuel storage.

LANDSCAPING, BUFFERING, COMMON AREAS AND SOLID WASTE

The applicant proposes perimeter landscaping, internal landscaping, open space and enhanced buffering. The applicant narrative identifies an approximately 36-foot landscape buffer in areas affected by overhead utility lines and a generally improved 15-foot-wide landscape buffer along property lines. The applicant response states that the landscape plans were updated to mirror the site plan near on-street parking areas.

The Development Agreement requires common open space, recreational areas, landscaping, buffering, stormwater facilities, private streets, sidewalks, entry features and other common improvements to be continuously maintained by the applicant, property owners' association, community development district or other City-approved entity.

The applicant response indicates an intent to use roadside solid-waste service and acknowledges the need for Solid Waste approval. Final collection arrangements should therefore be confirmed with the City's Solid Waste function before occupancy.

FUTURE COMMERCIAL PHASE 3

Approximately 4.25 acres are identified in the current Final PD Development Agreement for future commercial development. Approval of the present Final PD does not constitute Final PD Site Plan approval or authorization for vertical development of Phase 3. Before development of Phase 3, the applicant or successor must submit and obtain approval of a separate Final PD Site Plan and amend the Development Agreement to address the approved commercial program, development standards, infrastructure obligations, development timing and additional conditions.

STAFF FINDINGS

1. The proposed Final PD implements the previously approved West Orange Master PD for approximately 56.62 acres without replacing the Master PD approval for the remaining property.

2. The residential component consists of 450 townhomes in two residential phases, with approximately 4.25 acres reserved for future commercial development requiring separate Final PD approval.

3. The proposed residential pattern, architectural character, open-space system and amenities establish a coordinated residential community generally consistent with Planned Development review and the approved West Orange Master PD.

4. The request is consistent with the Comprehensive Plan and Land Development Code.

5. Comprehensive Plan Policy 7.4.11 applies to the proposed clubhouse and requires hurricane hardening, a generator and accessory fuel storage.

6. The TIA concludes that significantly impacted roadway segments are expected to operate within adopted LOS standards. FDOT has conceptually approved the proposed SR 68 access configuration subject to specified conditions; a final FDOT permit is still required.

8. The Stormwater Management Report concludes that the system can comply with applicable water-quality and water-quantity requirements, subject to final engineering and SFWMD/NSLRWCD permitting.

9. Environmental conditions remain subject to formal wetland determination, tree mitigation and protected-species documentation at DPCR/permitting.

10. The Development Agreement establishes enforceable infrastructure and Certificate-of-Occupancy triggers intended to prevent occupancy before necessary roads, utilities, drainage, emergency access and related facilities are operational.

11. Conditions of Ordinance No. 23-013 that are not expressly modified by the Final PD Ordinance remain applicable.

RECOMMENDATION

Staff recommends that the Planning Board recommends **APPROVAL, WITH (26) CONDITIONS,** of the West Orange Final Planned Development and associated Development Agreement for the approximately 56.62-acre Final PD property, subject to adoption of the Final PD Ordinance, compliance with Ordinance No. 23-013, the approved Final PD Site Plan, the

Development Agreement, resolution of the remaining coordination items identified in this report, and all applicable City and agency requirements.

Staff further recommend that the approval expressly recognize that the present Final PD authorizes the detailed development program for Phases 1 and 2 and establishes Phase 3 as a future commercial tract requiring separate Final PD approval before vertical development.

RECOMMENDED CONDITIONS OF APPROVAL

1. *Conformance with The West Orange Master PD.* development shall remain consistent with Ordinance No. 23-013 and the approved West Orange Master PD except as expressly modified through the Final PD Ordinance.

2. *Approved Plans*. Development shall occur substantially in accordance with the approved Final PD Site Plan, Phasing Plan, landscape and irrigation plans, engineering plans, utility plans, stormwater plans, Development Agreement and other approved development documents.

3. *Development Phasing*. Phase 1 shall consist of approximately 29.47 acres and 256 townhome units; Phase 2 shall consist of approximately 22.69 acres and 194 townhome units; and Phase 3 shall consist of approximately 4.25 acres reserved for future commercial development.

4. *Phase 3 Commercial Development*. Approval of the present Final PD shall not constitute Final PD Site Plan approval for Phase 3. A separate Final PD application and amendment to the Development Agreement shall be required prior to vertical development of Phase 3.

5. *Unity of Title and Parcel Combination*. Because the property is not proposed to be platted, prior to issuance of the applicable Building Permit a Unity of Title shall be recorded and the required parcel combination completed in accordance with the Development Agreement.

6. *Comprehensive Plan Policy 7.4.11*. Prior to issuance of the building permit for the Phase 1 clubhouse, plans shall demonstrate that the communal building is hurricane hardened and equipped with a generator and accessory fuel storage system consistent with Comprehensive Plan Policy 7.4.11.

7. *FDOT Access Approval.* Prior to issuance of development permits for improvements affecting SR 68/Orange Avenue, the applicant shall obtain all required FDOT access, right-of-way, drainage and related permits and comply with the October 10, 2025 FDOT District Four pre-application letter, or an approved successor determination.

8. *Orange Avenue/SR 68 Access Improvements*. The applicant shall construct the approved primary access, westbound right-turn lane, eastbound median modification, associated pavement/bicycle-lane improvements and other improvements required by FDOT prior to the first residential Certificate of Occupancy unless a different milestone is expressly approved by FDOT and accepted in writing by the City.

9. *Driveway Throat and Gate Stacking*. The project driveway shall provide a minimum 100-foot throat depth measured from the ultimate right-of-way line to the first conflict point. If a gate, call box or gate house is installed, it shall be located at least 100 feet from the ultimate right-of-way line and a turnaround shall be provided prior to the gate, consistent with FDOT requirements.

10. *Left-Turn Queue Analysis.* Prior to final FDOT access approval, the applicant shall demonstrate through an accepted traffic analysis that the existing eastbound left-turn lane and affected adjacent left-turn lanes provide adequate queue storage or shall construct modifications required by FDOT.

11. *Limitation on Additional SR 68 Access.* No additional direct driveway connection to SR 68 shall be established between the approved full-access driveway and the eastern property boundary unless expressly authorized by FDOT.

12. *FDOT Right-of-Way and Drainage*. The applicant shall provide right-of-way dedication required by FDOT to construct the approved transportation improvements and shall provide drainage mitigation for impacts to FDOT right-of-way in accordance with applicable criteria and permits.

13. *Change in Development Intensity*. Any modification increasing trip generation beyond that evaluated for 450 townhomes shall require demonstration of continued compliance with FDOT requirements and, where required, renewed pre-application review.

14. *Jenkins Road Overlay / Interconnectivity*. The western interconnection shown for future connectivity with the remaining West Orange Master PD property shall be preserved unless otherwise approved by the City. Final engineering shall confirm that the approved Final PD does not obstruct an adopted future roadway corridor identified through applicable Jenkins Road Overlay coordination.

15. *Phase 1 Infrastructure*. Before the first residential Certificate of Occupancy within Phase 1, the Phase 1 lift station and associated wastewater infrastructure, permanent primary vehicular access, required emergency access, school bus stop/turnaround, applicable stormwater facilities and required pedestrian connections shall be completed, operational and approved, except where an alternative milestone is expressly authorized by the applicable reviewing authority and accepted by the City.

16. *Recreational Amenities*. The Phase 1 clubhouse, swimming pool, associated recreational open space and Phase 1 pocket parks shall be completed, approved and available for use no later than issuance of the Certificate of Occupancy for the 50th dwelling unit within Phase 1.

17. *Pedestrian / ADA Improvements*. A continuous accessible pedestrian route shall be available to each occupied residential building. Required sidewalks, ADA ramps, detectable warnings and signage shall be installed in accordance with the approved plans and applicable City standards.

18. *Landscaping,* Tree Mitigation and Buffering. Landscaping, buffering, irrigation, tree preservation and mitigation shall be completed in accordance with approved plans and applicable City requirements. Final tree mitigation shall be resolved at DPCR/permitting.

19. *Environmental Documentation*. A formal wetland jurisdictional determination and any required protected-species survey or habitat documentation, including items identified in the initial TRC review, shall be submitted and accepted at DPCR/permitting. Required agency permits and mitigation shall be completed before disturbance of regulated areas.

20. *Stormwater and Drainage*. Stormwater facilities necessary to serve each phase shall be constructed in accordance with approved plans and City, SFWMD and NSLRWCD permits and shall be operational prior to occupancy of areas dependent upon those facilities.

21. *Solid Waste*. Final roadside collection arrangements shall be approved by the City's applicable Solid Waste function before residential occupancy.

22. *Technical Document Reconciliation*. Prior to issuance of applicable development permits, the Final PD plans, Stormwater Management Report and supporting documents shall be reconciled to consistently identify the approved Phase 3 commercial acreage and final development phasing.

23. *Traffic Impact Analysis Correction*. The TIA shall be corrected or supplemented to identify Orange Avenue/SR 68 and Vista Court consistently as the principal project access and to eliminate inconsistent references to Okeechobee Road.

24. *Amenity Trigger*. Exhibit 4 of the Development Agreement shall be conformed to Section 5 to specify the 50th Phase 1 dwelling unit as the recreational-amenity completion threshold.

25. *Environmental Conditions from Ordinance No. 23-013*. Conditions 4, 5 and 6 of Exhibit D to Ordinance No. 23-013 shall remain applicable unless the City determines that such conditions have been satisfied or expressly modifies them through an amendment to the Final PD Ordinance.

26. *Material Modifications*. Any material modification to the approved Final PD shall be processed in accordance with Section 125-212 and other applicable provisions of the City Code.

ORDINANCE NO. 26-NNN

AN ORDINANCE BY THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA; APPROVING A MAJOR AMENDMENT TO THE WEST ORANGE PLANNED DEVELOPMENT APPROVED BY ORDINANCE NO. 23-013; APPROVING A FINAL PLANNED DEVELOPMENT SITE PLAN AND PHASING PLAN FOR FOUR (4) PARCELS GENERALLY LOCATED AT 4918 AND 5220 ORANGE AVENUE, CONTAINING APPROXIMATELY 56.62 ACRES OF LAND, MORE OR LESS; APPROVING A FINAL PD DEVELOPMENT AGREEMENT; PROVIDING CONDITIONS OF DEVELOPMENT; CONFIRMING THAT ORDINANCE NO. 23-013 REMAINS THE GOVERNING MASTER PD APPROVAL EXCEPT AS EXPRESSLY MODIFIED HEREIN; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR REPEAL OF ORDINANCES OR PARTS THEREOF IN CONFLICT; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on February 21, 2023, the City Commission approved Ordinance No. 23-013, granting Planned Development zoning approval for the development known as the West Orange Planned Development and approving a Preliminary Overall Masterplan for approximately 84.8 acres (the “Master PD”); and

WHEREAS, the Master PD property comprises five (5) parcels totaling approximately 84.8 acres; and

WHEREAS, Orange Avenue Development II, LLC (the “Applicant”) has submitted a Final Planned Development (“Final PD”) Site Plan application for approximately 56.62 acres of the Master PD, consisting of Parcel Identification Nos. 2407-241-0001-000-3, 2407-231-0000-000-5, 2407-212-0001-000-3, and 2407-211-0001-000-0 (the “Final PD Property”); and

WHEREAS, the Final PD Property is generally located at 4918 and 5220 Orange Avenue, on the north side of Orange Avenue (State Road 68), east of Jenkins Road, within the City of Fort Pierce, Florida; and

WHEREAS, the submitted Final PD Phasing Plan divides the Final PD Property into three (3) phases: Phase 1 consisting of approximately 29.47 acres and 256 townhome dwelling units together with the clubhouse and associated amenities; Phase 2 consisting of approximately 22.69 acres and 194 townhome dwelling units; and Phase 3 consisting of approximately 4.25 acres reserved for future commercial development; and

WHEREAS, approval of the present Final PD Site Plan does not constitute Final PD Site Plan approval or authorization for vertical development of Phase 3, and a separate Final PD Site Plan and amendment to the Final PD Development Agreement shall be required prior to development of Phase 3; and

WHEREAS, Ordinance No. 23-013 requires approval of a Final PD Site Plan as a Major Amendment and requires a development phasing schedule identifying the number of phases and approximate dates when construction of the project and each phase will begin and be completed; and

WHEREAS, pursuant to City Code Section 125-212, the Final PD is subject to a Development Agreement negotiated between the Applicant and the City to establish specific terms, phasing requirements, infrastructure obligations, development standards, and continuing obligations applicable to the Final PD Property; and

WHEREAS, the Final PD Development Agreement provides that Ordinance No. 23-013 shall remain the governing Master PD zoning approval for the approximately 84.8-acre West Orange Planned Development and that the Final PD approval shall not supersede Ordinance No. 23-013 except to the extent expressly authorized by this Ordinance; and

WHEREAS, subject to the conditions and limitations contained in this Ordinance, the Final PD Site Plan, the Final PD Phasing Plan, and the Final PD Development Agreement, the Final PD Property is consistent with the City's Comprehensive Plan and applicable land development regulations.

NOW, THEREFORE, BE IT ORDAINED by the City Commission of the City of Fort Pierce, Florida as follows:

SECTION 1. The preceding "whereas" clauses are ratified and incorporated as the legislative intent of this Ordinance.

SECTION 2. The Final Planned Development Site Plan and Phasing Plan for the approximately 56.62-acre Final PD Property consisting of Parcel Identification Nos. 2407-241-0001-000-3, 2407-231-0000-000-5, 2407-212-0001-000-3, and 2407-211-0001-000-0, legally described in Exhibit "A," are hereby approved as a Major Amendment to the West Orange Planned Development, subject to the Final PD Site Plan at Exhibit "B," the Final PD Phasing Plan at Exhibit "C," the Final PD Development Agreement at Exhibit "D," and the Special Conditions of Development at Exhibit "E," all attached hereto and incorporated herein.

SECTION 3. The West Orange Final PD Development Agreement at Exhibit "D," attached hereto and incorporated herein, is approved. The Agreement shall run with the Final PD Property and shall bind the Applicant and its successors and assigns in accordance with its terms.

SECTION 4. Ordinance No. 23-013 remains the governing Master PD zoning approval for the approximately 84.8-acre West Orange Planned Development. This Ordinance implements Final PD approval for the approximately 56.62-acre Final PD Property and does not supersede Ordinance No. 23-013 except to the extent expressly provided herein. In the event of a conflict between this Ordinance, the Final PD Development Agreement, the Final PD Site Plan, and Ordinance No. 23-013, the more restrictive applicable requirement shall control unless the conflict is expressly resolved by this Ordinance or otherwise determined by the City in accordance with applicable law.

SECTION 5. Phase 3, consisting of approximately 4.25 acres reserved for future commercial development, is not approved for vertical development by this Ordinance. Prior to development of Phase 3, the Applicant or successor in interest shall obtain approval of a separate Final PD Site Plan in accordance with Section 125-212 of the City Code and Ordinance No. 23-013, and the Final PD Development Agreement shall be amended to address the approved commercial development, development standards, infrastructure obligations, development timing, and any additional conditions established through Final PD review.

SECTION 6. This Ordinance does not create any right on the part of the Applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City for issuance of the permit if the Applicant fails to obtain requisite approvals or fulfill obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

SECTION 7. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause, or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance, which shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

SECTION 8. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 9. This Ordinance shall become effective immediately upon final passage.

APPROVED AS TO FORM & CORRECTNESS:

_____
City Attorney

STATE OF FLORIDA
COUNTY OF ST. LUCIE

WE, THE UNDERSIGNED, Mayor Commissioner and the City Clerk of the City of Fort Pierce, Florida, do hereby certify that the foregoing and above Ordinance No. 26-NNN was duly advertised in accordance with applicable law; a copy of said Ordinance was made available at the office of the City Clerk to the public upon request; said Ordinance was duly introduced, read by title only, and passed on first reading by the City Commission of the City of Fort Pierce, Florida, on _____, 2026; and was duly introduced, read by title only, and passed on second and final reading on _____, 2026, by the City Commission of the City of Fort Pierce, Florida.

IN WITNESS WHEREOF, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this ___ day of _____, 2026.

_____
Linda Hudson
Mayor Commissioner

ATTEST:

_____
City Clerk
(City Seal)

EXHIBIT A

LEGAL DESCRIPTION

[TO BE INSERTED FROM THE APPROVED SURVEY / LEGAL DESCRIPTION FOR THE 56.62-ACRE FINAL PD PROPERTY]

PARCEL IDENTIFICATION NOS.:

2407-241-0001-000-3
2407-231-0000-000-5
2407-212-0001-000-3
2407-211-0001-000-0

EXHIBIT B

FINAL PD SITE PLAN

[Attach the approved Final PD Site Plan, Redtail DG Project No. 25-137, dated October 28, 2025, or the final approved revision thereof.]

EXHIBIT C

FINAL PD PHASING PLAN

[Attach the approved Final PD Phasing Plan, Redtail DG Project No. 25-137, dated October 28, 2025, or the final approved revision thereof.]

EXHIBIT D

WEST ORANGE FINAL PD DEVELOPMENT AGREEMENT

[Attach the executed West Orange Final PD Development Agreement approved concurrently with this Ordinance.]

EXHIBIT E

SPECIAL CONDITIONS OF DEVELOPMENT

1. **Conformance with Master PD Approval.** Development shall remain consistent with Ordinance No. 23-013, the Preliminary Overall Masterplan titled “Orange Ave. Development II, Parcel Exhibit Orange Ave. PD Plan,” prepared by Redtail DG and dated June 11, 2022, and the West Orange Development Criteria Requirements incorporated into Ordinance No. 23-013, except as expressly modified by the approved Final PD.

2. **Final PD and Approved Plans.** Development of the Final PD Property shall occur substantially in accordance with the approved Final PD Site Plan, Phasing Plan, landscape and irrigation plans, construction plans, utility plans, stormwater plans, and other development orders approved by the City. Material modifications shall be processed in accordance with Section 125-212 and other applicable provisions of the City Code.

3. **Phase 3 Commercial Development.** The approximately 4.25-acre Phase 3 commercial tract is reserved for future commercial development only. Approval of the present Final PD shall not constitute Final PD Site Plan approval for development of Phase 3. Prior to development of Phase 3, a separate Final PD Site Plan shall be approved and the Final PD Development Agreement shall be amended to incorporate the approved commercial development, development standards, infrastructure obligations, and development schedule.

4. **Development Phasing.** Development shall proceed in accordance with the approved Phasing Plan and Development Timeline incorporated into the Final PD Development Agreement. Phase 1 shall consist of approximately 29.47 acres and 256 townhome units; Phase 2 shall consist of approximately 22.69 acres and 194 townhome units; and Phase 3 shall consist of approximately 4.25 acres reserved for future commercial development. No phase shall proceed contrary to the infrastructure and Certificate of Occupancy milestones established by the Agreement.

5. **Unity of Title and Parcel Combination.** Prior to issuance of any Building Permit, a Unity of Title shall be recorded with the St. Lucie County Clerk of Court and the required Parcel Combination shall be completed with the St. Lucie County Property Appraiser for the property or phase required to be held in unified control.

6. **Addressing.** Following completion of the required Unity of Title and parcel combination, a General Address Request Form shall be submitted to the Planning Department for the newly created Parcel ID and for each proposed building and residential unit, as applicable.

7. **Common Areas and Continuing Maintenance.** All common open space, recreational areas, landscaping, buffering, stormwater facilities, private streets, sidewalks, entry features, and other common improvements shall be continuously maintained by the Applicant, property owners’ association, community development district, or other entity approved by the City. Applicable declarations, covenants, or other instruments shall bind successors in title to obligations concerning completion, operation, and maintenance of the development.

8. **Landscape and Irrigation.** Landscaping and irrigation shall be installed and maintained in accordance with the approved Final PD landscape and irrigation plan and Section 125-314 of the City Code. Required landscaping and buffering associated with each phase shall be completed prior to the final Certificate of Occupancy for that phase, except where an earlier milestone is established by the approved plans or the Final PD Development Agreement.

9. **Stormwater and Drainage.** Stormwater management and drainage improvements necessary to serve each phase shall be constructed in accordance with the approved plans and all applicable City and agency permits and shall be operational prior to issuance of Certificates of Occupancy within the area dependent upon those facilities.

10. **Utilities and Lift Station.** Water, wastewater, and other utility infrastructure necessary to serve each occupied portion of the development shall be completed, operational, and approved by the applicable utility provider prior to issuance of Certificates of Occupancy. The Phase 1 lift station and associated wastewater infrastructure shall be operational prior to issuance of the first residential Certificate of Occupancy within Phase 1.

11. **Vehicular Access and Orange Avenue Improvements.** The Applicant shall complete the required Orange Avenue right-of-way dedication, deceleration lane, primary access, and emergency access improvements in accordance with the approved Final PD Site Plan, applicable FDOT approvals, and the milestones established in the Final PD Development Agreement. Approximately 0.215 acres shall be dedicated for Orange Avenue right-of-way widening prior to issuance of the first building permit for vertical construction within Phase 1, unless alternative timing is approved in writing by the City and FDOT.

12. **Pedestrian Improvements.** Sidewalks and pedestrian facilities shall be constructed concurrently with the applicable phase. A continuous accessible pedestrian route shall be available to each occupied residential building. All sidewalks and pedestrian improvements within a residential phase shall be completed prior to issuance of the final residential Certificate of Occupancy for that phase.

13. **School Bus Stop/Turnaround.** The school bus stop and turnaround depicted on the approved Final PD Site Plan shall be completed and available for use prior to the first residential Certificate of Occupancy within Phase 1, unless an alternative milestone or configuration is approved in writing by the City and applicable school transportation authority.

14. **Recreational Amenities.** The Phase 1 clubhouse, swimming pool, associated recreational open space, and Phase 1 pocket parks shall be completed, approved, and available for use no later than issuance of the Certificate of Occupancy for the 50th dwelling unit within Phase 1. No Certificate of Occupancy exceeding that threshold shall be issued until the required amenities are available for their intended use.

15. **Public Benefit Improvements.** Public-benefit features identified on the approved plans, including landscaping enhancements, entry and identity features, open-space amenities, recreational facilities, pedestrian connectivity improvements, stormwater improvements, and utility infrastructure, shall be installed in accordance with applicable phasing and Certificate of Occupancy milestones and thereafter maintained by the responsible entity.

16. **Infrastructure Prior to Occupancy.** No Certificate of Occupancy shall be issued unless roads, emergency access, fire protection, water, wastewater, stormwater, drainage, and other infrastructure reasonably necessary to serve the building and occupied portion of the applicable phase has been completed, is operational, and has received required approvals.

17. **Temporary Improvements.** Temporary construction access, emergency access, turnarounds, utilities, drainage, and similar facilities may be utilized only where approved by the City and other agencies having jurisdiction and shall not substitute for permanent improvements required as a condition of occupancy unless expressly authorized.

18. **Successors and Assigns.** All development, infrastructure, maintenance, phasing, and public-benefit obligations established by the Final PD Development Agreement shall run with the applicable property and shall be binding upon the Applicant and its successors and assigns.

19. **Environmental Compliance.** Nothing in this Ordinance or the Final PD Development Agreement shall be construed as waiving or modifying Conditions 4, 5, or 6 of Exhibit D to Ordinance No. 23-013 unless expressly modified by this Ordinance. Prior to final approval of the Final PD, the City shall determine whether those conditions have been satisfied or whether modification of the applicable condition through this Ordinance is required.

Instrument Prepared By:

[blank space above line reserved for recording data]

WEST ORANGE PLANNED DEVELOPMENT

FINAL PD DEVELOPMENT AGREEMENT

This FINAL PD DEVELOPMENT AGREEMENT (this "Agreement") is made and entered into this ___ day of _____, 2026, by and between ORANGE AVENUE DEVELOPMENT II, LLC, a _____ limited liability company, whose principal address is _____ (the "Applicant"), and the CITY OF FORT PIERCE, a municipal corporation of the State of Florida (the "City").

WITNESSETH:

WHEREAS, on February 21, 2023, the City Commission of the City of Fort Pierce ("City Commission") approved Ordinance No. 23-013, granting Planned Development zoning approval for the development known as West Orange Planned Development and approving a Preliminary Overall Masterplan for approximately 84.8 acres (the "Master PD"); and

WHEREAS, the Master PD property comprises five (5) parcels, Parcel Identification Nos. 2407-241-0001-000-3, 2407-231-0000-000-5, 2407-212-0001-000-3, 2407-221-0001-000-1, and 2407-211-0001-000-0, totaling approximately 84.8 acres; and

WHEREAS, the Applicant has submitted a Final PD Site Plan application for approximately 56.62 acres of the Master PD, consisting of four (4) parcels, Parcel Identification Nos. 2407-241-0001-000-3, 2407-231-0000-000-5, 2407-212-0001-000-3, and 2407-211-0001-000-0 (the "Final PD Property"); and

WHEREAS, the term "Final PD Property" refers to the entire approximately 56.62-acre area subject to this Agreement; and

WHEREAS, the Final PD Property is divided on the submitted Final PD Phasing Plan into Phase 1, Phase 2, and Phase 3, as follows: Phase 1 consists of approximately 29.47 acres and 256 townhome dwelling units together with the clubhouse and associated amenities; Phase 2 consists of approximately 22.69 acres and 194 townhome dwelling units; and Phase 3 consists of approximately 4.25 acres reserved for future commercial development; and

WHEREAS, this Agreement establishes the terms applicable to the Final PD Property while preserving the separate identity, timing, and approval requirements of Phases 1, 2, and 3; and

WHEREAS, Ordinance No. 23-013 requires approval of a Final PD Site Plan as a Major Amendment and requires the Final PD Site Plan to include a development phasing schedule identifying the number of phases and the approximate dates when construction of the project and each phase will begin and be completed; and

WHEREAS, the Planned Development Final PD Site Plan requires a Development Agreement to comply with Section 125-212 Planned Development Zone (PD) to include additional and specific terms related to the Final PD approval and the negotiations between the parties; and

WHEREAS, subject to the conditions and limitations contained in the approving ordinance, Final PD Site Plan, and this Agreement, the Final PD Property is consistent with the City's Comprehensive Plan and applicable land development regulations; and

WHEREAS, the City Commission adopted Ordinance No. 26-_____ (the "Final PD Ordinance"), approving the Final PD Site Plan and this Agreement, subject to the conditions contained therein.

NOW, THEREFORE, the parties do hereby agree as follows:

1. Recitals; Governing Approvals; Defined Terms. The above recitals are true and correct and are incorporated herein. Ordinance No. 23-013 remains the governing Master PD zoning approval for the approximately 84.8-acre West Orange Planned Development. This Agreement implements the Final PD approval for the approximately 56.62-acre Final PD Property and does not supersede Ordinance No. 23-013 except to the extent expressly authorized by the Final PD Ordinance. In the event of a conflict between this Agreement and the Final PD Site Plan, this Agreement shall control. In the event of a conflict between this Agreement and Ordinance No. 23-013 that is not expressly resolved by the Final PD Ordinance, the more restrictive applicable requirement shall control unless otherwise determined by the City.

2. Duration of Agreement. This Agreement shall be effective upon the effective date of the Final PD Ordinance, shall run with the land comprising the Final PD Property, and shall bind the parties and their successors and assigns for an initial term of ten (10) years, unless amended, extended, or terminated in accordance with this Agreement and applicable law.

3. Phasing Requirements and Development Timeline. The Final PD Property shall be developed in three (3) phases as shown on the Final PD Phasing Plan and subject to the following Development Timeline:

Phase	Approx. Acreage	Development	Commencement	Infrastructure Completion	Final CO / Completion
Phase 1	29.47	256 townhomes; clubhouse, pool and Phase 1 amenities	Within 120 days of issuance of the first development permit	Prior to issuance of Final CO for 50% of Phase 1 units	December 31, 2032
Phase 2	22.69	194 townhomes	Anytime after Commencement of Phase 1	Prior to issuance of Final CO for 50% of Phase 2 units	December 31, 2032
Phase 3	4.25	Future commercial development	Separate Final PD required	TBD	TBD

The completed table shall constitute the Development Timeline required by Ordinance No. 23-013.

A. Each residential phase shall include all infrastructure, utility systems, drainage improvements, stormwater facilities, roadway improvements, fire protection systems, pedestrian facilities, landscaping, buffering, and related improvements necessary to adequately serve that phase.
B. No Certificate of Occupancy shall be issued for a dwelling unit unless all infrastructure necessary to safely and adequately serve that dwelling unit and the occupied portion of the applicable phase has been completed, operational, and approved by the applicable reviewing authority, except as expressly permitted by the City.
C. Temporary construction access, turnarounds, drainage facilities, utilities, and emergency access may be permitted where specifically approved by the City and other applicable agencies.
D. The Applicant shall construct all on-site and off-site improvements required by the approved development orders in accordance with the approved Final PD Site Plan, construction plans, Development Timeline, and this Agreement.

E. Reasonable adjustments to sequencing may be approved by the City where they do not materially alter approved entitlements, defer infrastructure required to serve occupied development, or modify an express Certificate of Occupancy trigger contained in this Agreement.

4. Future Commercial Development - Phase 3. Phase 3 consists of approximately 4.25 acres designated for future commercial development on the approved Final PD Phasing Plan. Approval of this Agreement and the present Final PD Site Plan shall not constitute Final PD Site Plan approval or authorization for vertical development of Phase 3. Prior to development of Phase 3, the Applicant or successor in interest shall submit and obtain approval of a separate Final PD Site Plan for Phase 3 in accordance with Section 125-212 of the City Code, Ordinance No. 23-013, and other applicable requirements. Approval of development within Phase 3 shall also require an amendment to this Agreement addressing the approved commercial development, applicable development standards, infrastructure obligations, development timing, and any additional conditions established through Final PD review.

5. Phase 1 Amenities. The clubhouse, swimming pool, associated recreational open space, and those pocket parks identified on the approved Final PD Site Plan as serving Phase 1 shall be constructed, receive all required approvals, and be available for their intended use no later than issuance of the Certificate of Occupancy for the **50**th dwelling unit within Phase 1.

6. Phase 1 Infrastructure Timing. Prior to issuance of the first residential Certificate of Occupancy within Phase 1, the lift station and associated wastewater infrastructure necessary to serve Phase 1; the permanent primary vehicular access and required emergency access improvements; the school bus stop and turnaround area shown on the approved Final PD Site Plan, unless an alternative milestone is approved in writing by the City and applicable school transportation authority; and those sidewalks and pedestrian connections necessary to provide a continuous accessible route from each occupied residential building to the Phase 1 internal pedestrian circulation system shall be completed, operational, and accepted or otherwise approved for use by the applicable reviewing authority. Remaining internal sidewalks within Phase 1 may be constructed concurrently with corresponding residential buildings and roadway segments; provided that all Phase 1 sidewalks and pedestrian improvements shall be completed prior to issuance of the final residential Certificate of Occupancy for Phase 1.

7. Public Benefit and Required Improvements. The Applicant acknowledges that approval of the Planned Development is based in part upon the provision of public benefits and enhanced development features associated with the Project. Public benefit features and required improvements identified on the approved plans shall be installed in accordance with the specific phasing and Certificate of Occupancy milestones established by this Agreement and approved development orders and thereafter maintained by the responsible property owners' association or other approved entity.

A. The Applicant shall dedicate approximately 0.215 acres for the Orange Avenue right-of-way widening shown on the Final PD Site Plan. The dedication shall be completed prior to issuance of the first building permit for vertical construction within Phase 1, unless alternative timing is approved in writing by the City and FDOT.
B. The deceleration lane and other Orange Avenue access improvements shown on the approved plans shall be constructed in accordance with applicable FDOT approvals and prior to issuance of the first residential Certificate of Occupancy, unless a different milestone is expressly established by the applicable FDOT permit and accepted by the City.
C. Landscaping, buffering, entry features, open space, recreational facilities, pedestrian connectivity, stormwater improvements, and utility infrastructure shall be completed in accordance with the approved Final PD Site Plan, landscape plans, construction plans, and the phase-specific requirements of this Agreement.

8. Relationship to Prior Approvals. There is no prior executed development agreement being amended by this instrument. Ordinance No. 23-013 and its incorporated exhibits and conditions remain in effect except as expressly modified through the Final PD Ordinance in accordance with law.

9. Entire Agreement. This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements, and understanding applicable to the matters contained herein, and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior or contemporaneous representations or agreements, whether oral or written.

10. Severability. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

11. Recording. The City shall record this Agreement in the public records with the clerk of court in St. Lucie County within 14 days of the effective date of this Agreement. Failure of the City to record this Agreement shall not void this Agreement or be deemed a default.

12. Counterparts. This Agreement may be executed in any number of identical counterparts each of which shall be deemed to be an original for all purposes but all of which shall constitute one and the same instrument, and a copy of such signature received through telefax or electronic transmission shall bind the party whose signature is so received as if such signature were an original.

13. Vested Rights. The Applicant may develop the Final PD Property only in accordance with applicable laws, Ordinance No. 23-013, the Final PD Ordinance, this Agreement, the approved Final PD Site Plan, approved construction and landscape plans, and other applicable development orders. No approval granted by this Agreement shall be construed as Final PD Site Plan approval for Phase 3. The Applicant, its successors, and assigns shall have no vested rights in expired development orders. Nothing herein shall create vested rights beyond those established by applicable law and valid development approvals.

14. Sidewalk Indemnification. To the extent legally enforceable, Applicant shall indemnify, defend, and hold harmless the City from claims arising from the Applicant's design, construction, maintenance, repair, use, delay, or failure to construct sidewalks required for the Project, except to the extent caused by the City's own negligence or wrongful act. This provision shall survive expiration or termination of this Agreement.

15. Destruction. In the event that all or a portion of the Proposed Improvements should be destroyed by a storm, fire, or other common disaster, the Applicant, its grantees, successors, or assigns shall have the right to rebuild and/or repair so long as there is strict compliance with the approved master PD, final PD, final PD Site Plan), subdivision plat(s), and development orders.

16. Changes or Amendments. There shall at all times be strict adherence to the provisions of this Agreement and the approved development orders. Any change or amendment to this Agreement and/or approved development orders shall only be made in accordance with the City’s Code of Ordinances. Notwithstanding anything else in this Paragraph, the Applicant, its successors in interest or assigns, and the City may amend or terminate this Agreement without securing the consent of other property owners whose property is subject to this Agreement, unless such amendment or termination directly and materially modifies the allowable uses or entitlements of such owners’ property.

17. Jurisdiction. This Agreement shall be governed by the laws of the State of Florida, and any and all legal action arising out of this Agreement shall be instituted in St. Lucie County, Florida.

18. Successors and Assigns. This Agreement shall be binding upon the Parties hereto, their successors in interest, heirs, assigns, and personal representatives.

19. Notice. Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served as elected by the party giving the notice by any of the following methods: (i) hand delivery to the other party; (ii) delivery by commercial overnight courier service; (iii) mailed by registered or certified mail (postage prepaid), return receipt requested; or (iv) mailed by regular U.S. mail.

APPLICANT: Orange Ave. Development II, LLC, 28178 Hayes Rd., Roseville, MI 48066

CITY: City Manager City of Ft. Pierce 100 N US Hwy 1 Fort Pierce, FL 34950
With required copy to:
City Attorney City of Ft. Pierce 100 N US Hwy 1 Fort Pierce, FL 34950

Notice given in accordance with the provisions of this Section shall be deemed to be delivered and effective on the date of hand delivery; or on the second day after the date of the deposit with an overnight courier; or on the date upon which the return receipt is signed, or delivery is refused, or the notice is designated by the postal authorities as not delivered if mailed; or on the second business day after the date of mailing by regular U.S. mail. Either party may change its address for the purpose of this Section by written notice to the other party given in accordance with the provisions of this Section.

20. Conditions and Continuing Obligations. In addition to the requirements otherwise contained in this Agreement, the Applicant, its successors and assigns, shall comply with the conditions Attach at **Exhibit 4**.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be made and entered into the day and year first written. The date of this Agreement shall be the date on which this Agreement was approved by the City Commission of Fort Pierce.

APPLICANT / OWNER:
ORANGE AVENUE DEVELOPMENT II, LLC, a _____ limited liability company,
By: _____
Printed Name: _____
Title: _____

WITNESSES:

_____ _____
Print Name: _____ Print Name: _____
Address: _____ Address: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this ___ day of _____, 2026, by _____, as _____ of ORANGE AVENUE DEVELOPMENT II, LLC, on behalf of the company.

Print Name: _____
Notary Public, State of Florida
Commission No.: _____
My Commission Expires: _____

CITY OF FT. PIERCE

_____
Linda Hudson, Mayor
ATTEST:

_____
Linda W. Cox, City Clerk
APPROVED AS TO FORM AND CORRECTNESS:

_____
_____, City Attorney.

EXHIBIT 1

LEGAL DESCRIPTION]

EXHIBIT 2

FINAL PD SITE PLAN

[Attach the approved Final PD Site Plan, Redtail DG Project No. 25-137, dated October 28, 2025, or the final approved revision thereof.]

EXHIBIT 3

PHASING PLAN

[Attach the approved Final PD Phasing Plan, Redtail DG Project No. 25-137, dated October 28, 2025, or the final approved revision thereof.]

EXHIBIT 4

These conditions implement and supplement Ordinance No. 23-013, the Final PD Ordinance, the approved Final PD Site Plan, and other applicable development orders. Nothing herein shall be construed to eliminate or supersede any applicable condition of Ordinance No. 23-013 unless expressly modified by the Final PD Ordinance.

1. Conformance with Master PD Approval. Development shall remain consistent with Ordinance No. 23-013, the Preliminary Overall Masterplan titled "Orange Ave. Development II, Parcel Exhibit Orange Ave. PD Plan," prepared by Redtail DG and dated June 11, 2022, and the West Orange Development Criteria Requirements incorporated into Ordinance No. 23-013, except as expressly modified by the approved Final PD.

2. Final PD and Approved Plans. Development of the Final PD Property shall occur substantially in accordance with the approved Final PD Site Plan, Phasing Plan, landscape and irrigation plans, construction plans, utility plans, stormwater plans, and other development orders approved by the City. Material modifications shall be processed in accordance with Section 125-212 and other applicable provisions of the City Code.

3. Phase 3 Commercial Development. The approximately 4.25-acre Phase 3 commercial tract is reserved for future commercial development only. Approval of the present Final PD shall not constitute Final PD Site Plan approval for development of Phase 3. Prior to development of Phase 3, a separate Final PD Site Plan shall be approved and this Agreement shall be amended to incorporate the approved commercial development, development standards, infrastructure obligations, and development schedule.

4. Development Phasing. Development shall proceed in accordance with the approved Phasing Plan and Development Timeline incorporated into this Agreement. Phase 1 shall consist of approximately 29.47 acres and 256 townhome units; Phase 2 shall consist of approximately 22.69 acres and 194 townhome units; and Phase 3 shall consist of approximately 4.25 acres reserved for future commercial development. No phase shall proceed contrary to the infrastructure and Certificate of Occupancy milestones established by this Agreement.

5. Unity of Title and Parcel Combination. Prior to issuance of any Building Permit, a Unity of Title shall be recorded with the St. Lucie County Clerk of Court and the required Parcel Combination shall be completed with the St. Lucie County Property Appraiser for the property/phase required to be held in unified control.

6. Addressing. Following completion of the required Unity of Title and parcel combination, a General Address Request Form shall be submitted to the Planning Department for the newly created Parcel ID and for each proposed building and residential unit, as applicable.

7. Common Areas and Continuing Maintenance. All common open space, recreational areas, landscaping, buffering, stormwater facilities, private streets, sidewalks, entry features, and other common improvements shall be continuously maintained by the Applicant, property owners' association, community development district, or other entity approved by the City. Any applicable declaration, covenant, or other instrument shall bind successors in title to obligations concerning completion, operation, and maintenance of the development.

8. Landscape and Irrigation. Landscaping and irrigation shall be installed and maintained in accordance with the approved Final PD landscape and irrigation plan and Section 125-314 of the City Code. Required landscaping and buffering associated with each phase shall be completed prior to the final Certificate of Occupancy for that phase, except where an earlier milestone is established by the approved plans or this Agreement.

9. Stormwater and Drainage. Stormwater management and drainage improvements necessary to serve each phase shall be constructed in accordance with the approved plans and all applicable City and agency permits and shall be operational prior to issuance of Certificates of Occupancy within the area dependent upon those facilities.

10. Utilities and Lift Station. Water, wastewater, and other utility infrastructure necessary to serve each occupied portion of the development shall be completed, operational, and approved by the applicable utility provider prior to issuance of Certificates of Occupancy. The Phase 1 lift station and associated wastewater infrastructure shall be operational prior to issuance of the first residential Certificate of Occupancy within Phase 1.

11. Vehicular Access and Orange Avenue Improvements. The Applicant shall complete the required Orange Avenue right-of-way dedication, deceleration lane, primary access, and emergency access improvements in accordance with the approved Final PD Site Plan, applicable FDOT approvals, and the milestones established in this Agreement.

12. Pedestrian Improvements. Sidewalks and pedestrian facilities shall be constructed concurrently with the applicable phase. A continuous accessible pedestrian route shall be available to each occupied residential building. All sidewalks and pedestrian improvements within a residential phase shall be completed prior to issuance of the final residential Certificate of Occupancy for that phase.

13. School Bus Stop/Turnaround. The school bus stop and turnaround depicted on the approved Final PD Site Plan shall be completed and available for use prior to the first residential Certificate of Occupancy within Phase 1, unless an alternative milestone or configuration is approved in writing by the City and applicable school transportation authority.

14. Recreational Amenities. The Phase 1 clubhouse, swimming pool, associated recreational open space, and Phase 1 pocket parks shall be completed, approved, and available for use no later than issuance of the Certificate of Occupancy for the ___th dwelling unit within Phase 1. No Certificate of Occupancy exceeding that threshold shall be issued until the required amenities are available for their intended use.

15. Public Benefit Improvements. Public-benefit features identified on the approved plans, including landscaping enhancements, entry and identity features, open-space amenities, recreational facilities, pedestrian connectivity improvements, stormwater improvements, and utility infrastructure, shall be installed in accordance with the applicable phasing and Certificate of Occupancy milestones and thereafter maintained by the responsible entity.

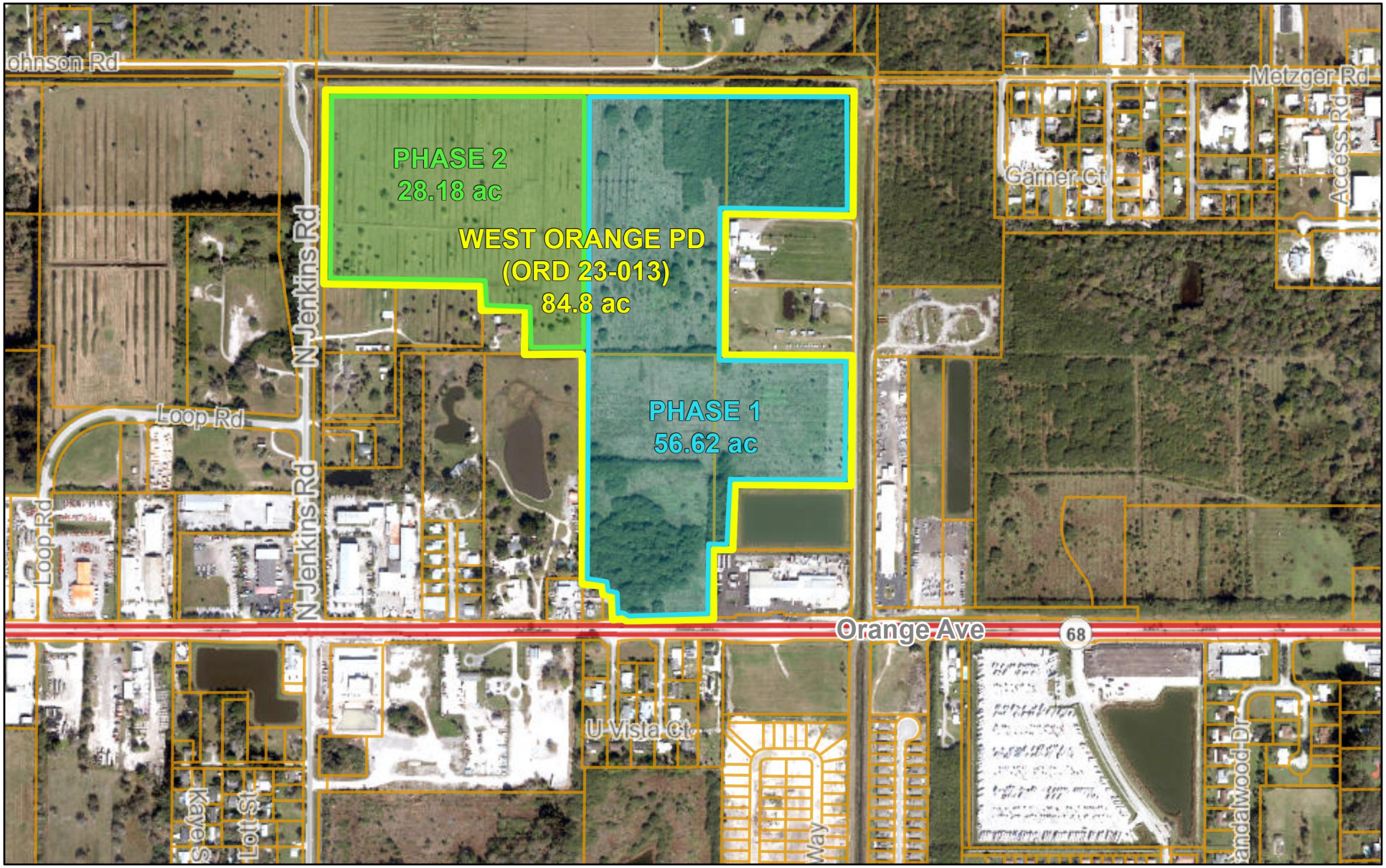
16. Infrastructure Prior to Occupancy. No Certificate of Occupancy shall be issued unless the roads, emergency access, fire protection, water, wastewater, stormwater, drainage, and other infrastructure reasonably necessary to serve the building and occupied portion of the applicable phase has been completed, is operational, and has received required approvals.

17. Temporary Improvements. Temporary construction access, emergency access, turnarounds, utilities, drainage, and similar facilities may be utilized only where approved by the City and other agencies having jurisdiction and shall not substitute for permanent improvements required as a condition of occupancy unless expressly authorized.

18. Successors and Assigns. All development, infrastructure, maintenance, phasing, and public-benefit obligations established by this Agreement shall run with the applicable property and shall be binding upon the Applicant and its successors and assigns.

19. Environmental Compliance. Nothing in this Agreement shall be construed as waiving or modifying Conditions 4, 5, or 6 of Exhibit D to Ordinance No. 23-013. Prior to final approval of the Final PD, the City shall determine whether those conditions have been satisfied or whether modification of the applicable condition through the Final PD Ordinance is required.

Aerial



5/8/2025

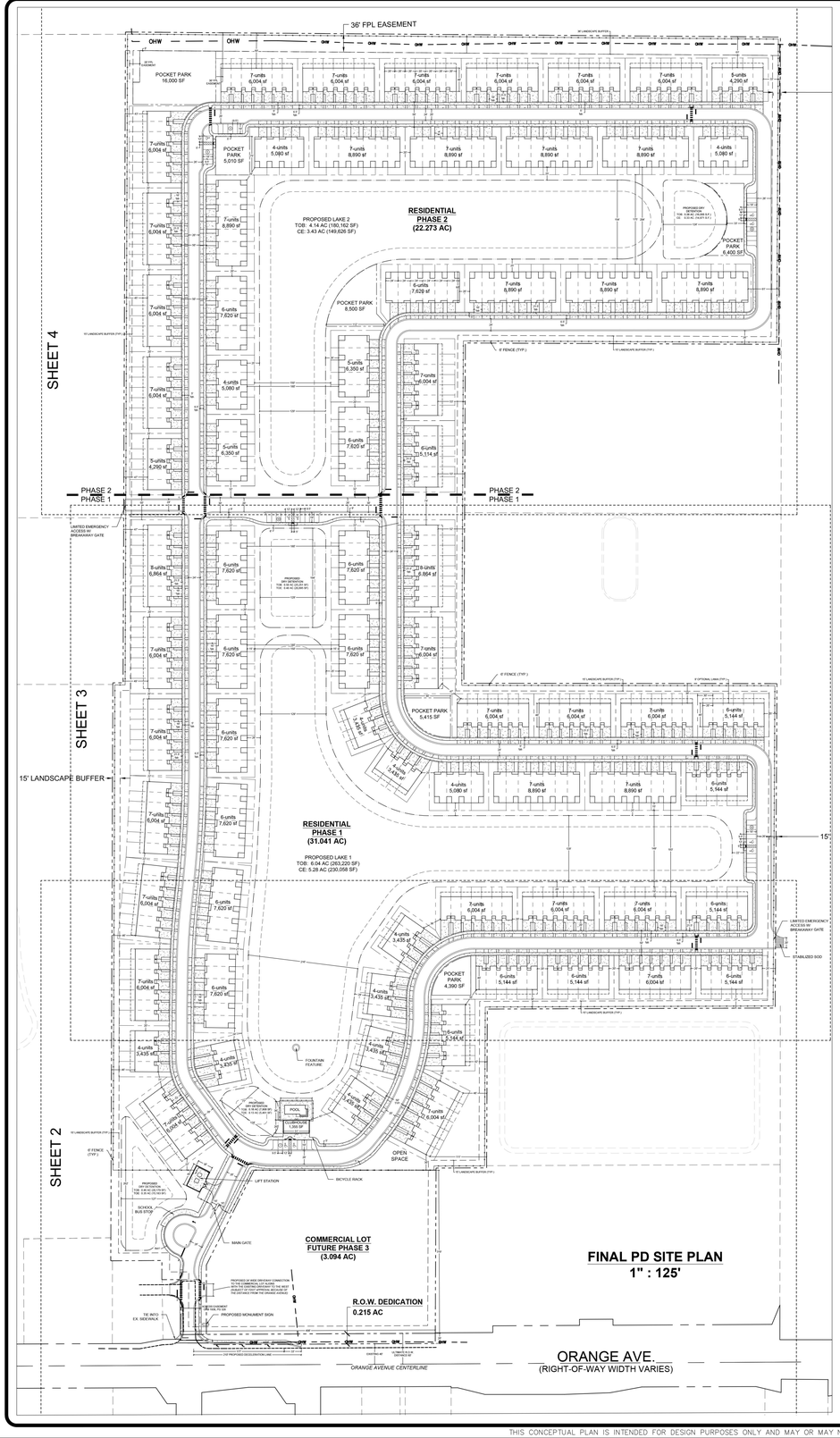
Comparable Search

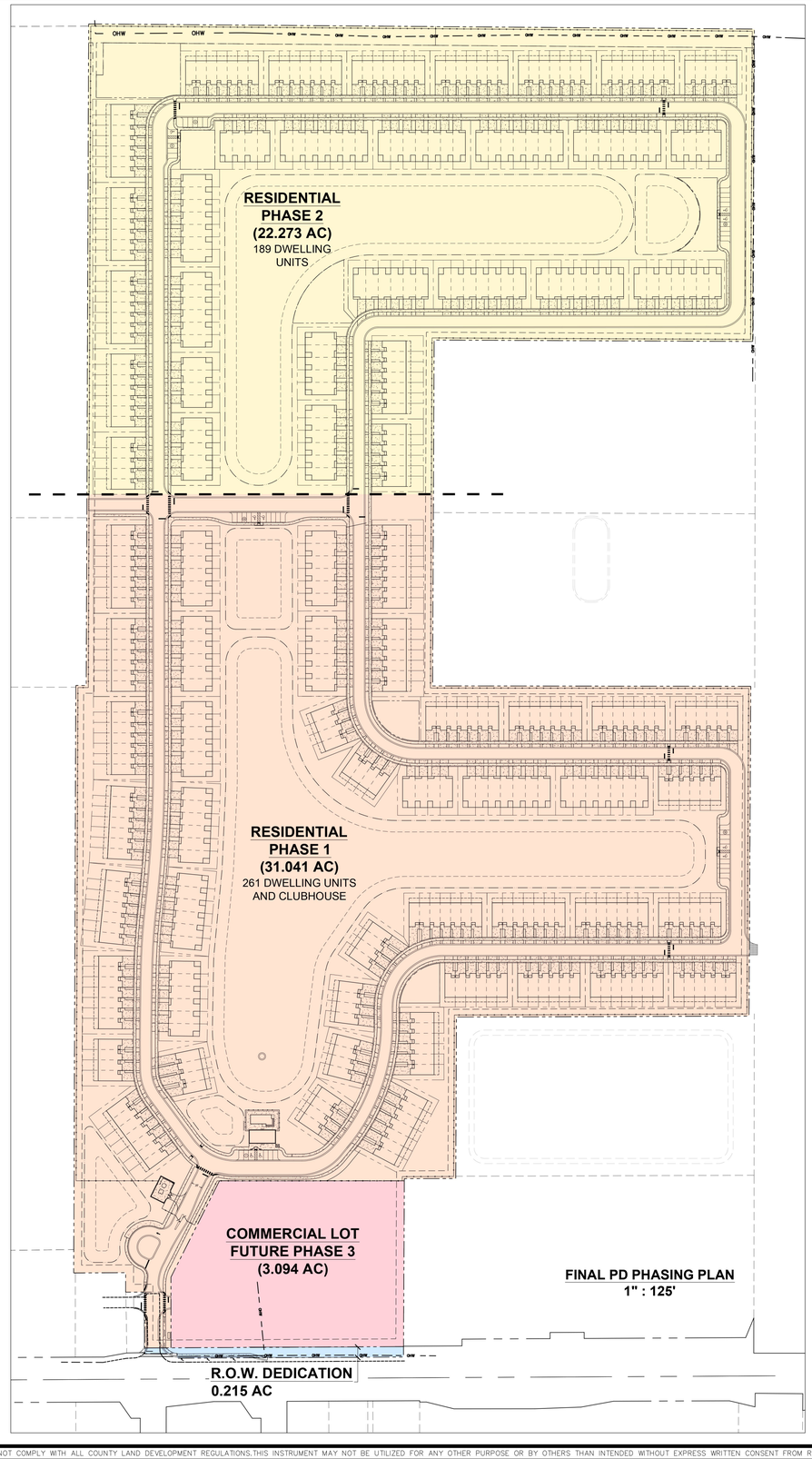
1:9,028

0 370 740 1,480 ft

0 112.5 225 450 m

Redtail







LOCATION MAP
NTS

LEGAL DESCRIPTION

PARCEL 1:
THE WEST ONE-HALF (1/2) OF THE NORTHEAST ONE-QUARTER (1/4) OF THE NORTHWEST ONE-QUARTER (1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS **RIGHT-OF-WAY** FOR CANALS, AS RECORDED IN THE PUBLIC RECORDS IN AND FOR ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:
THE EAST 50 FEET OF THE FOLLOWING DESCRIBED PROPERTY: THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR PUBLIC ROADS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 3:
THE NORTH 15 ACRES OF THE FOLLOWING DESCRIBED PROPERTY: THE EAST 1/2 OF THE SOUTHEAST 1/4 OF NORTHWEST 1/4 IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR CANALS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA. AND FURTHER LESS AND EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2015: A PORTION OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 958.299 METERS (3,845.03 FEET) TO A POINT ON A FOUND BOAT SPIKE MARKING THE WEST 1/4 CORNER OF SAID SECTION 7; SAID POINT BEING ON THE BASELINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR SECTION NO. 94070-2509; THENCE NORTH 89 DEG 42' 56" EAST ALONG THE SAID BASELINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, A DISTANCE OF 524.027 METERS (2,103.24 FEET); THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT A RIGHT ANGLE TO THE LAST DESCRIBED COURSE, A DISTANCE OF 14.668 METERS (382.77 FEET) TO THE POINT OF BEGINNING; THENCE NORTH 89 DEG 42' 56" EAST, A DISTANCE OF 171.190 METERS (561.65 FEET); THENCE NORTH 00 DEG 16' 45" EAST, A DISTANCE OF 94.835 METERS (310.48 FEET); THENCE SOUTH 89 DEG 47' 36" WEST, A DISTANCE OF 171.309 METERS (562.04 FEET); THENCE SOUTH 00 DEG 14' 26" WEST, A DISTANCE OF 94.834 METERS (310.48 FEET) TO THE POINT OF BEGINNING.

FURTHER LESS AND EXCEPTING THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1430, PAGE 1914:

A PARCEL OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTH 15 ACRES OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCLUSIVE OF RIGHTS-OF-WAY FOR CANALS, LYING SOUTHERLY OF THE FOLLOWING DESCRIBED LINE; COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 2,845.03 FEET **TO** A POINT ON A FOUND RAILROAD SPIKE MARKING THE WEST QUARTER CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASE LINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON A FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR SECTION NO. 94070-2509; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASE LINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 7, A DISTANCE OF 2,047.33 FEET; THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE, A **DISTANCE** OF 382.77 FEET TO THE POINT OF BEGINNING.

THENCE NORTH 89 DEG 47' 36" EAST, A DISTANCE OF 561.65 FEET TO THE EASTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, SAID LINE ALSO TO BE EXTENDED TO THE WESTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER.

PARCEL 4:
THE NE1-4 OF THE NE1-4 OF THE NW 1-4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, EXCEPTING ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AND DITCHES.

PARCEL 5:
THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE EAST 20' OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPTING THE EAST 50' THEREOF AND LESS RIGHT-OF-WAY FOR PUBLIC ROADS. FURTHER EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND: BEGIN 20' WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7 AND RUN THENCE NORTH 40' TO POINT OF BEGINNING; THENCE CONTINUE NORTH PARALLEL WITH THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 165' TO A POINT; THENCE TURN AND RUN EAST PARALLEL WITH THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 100' TO A POINT; THENCE TURN AND RUN SOUTH 165' TO A POINT 100' EAST OF POINT OF BEGINNING; THENCE TURN AND RUN WEST 100' TO POINT OF BEGINNING. LESS O.O.T. EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2025, OFFICIAL RECORDS OF ST. LUCIE COUNTY, FLORIDA. LESS THE WEST 1/2 OF THE CROSS EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1938, PAGE 326 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE 20 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP35 SOUTH,RANGE 40 EAST, THENCE N00°10'09"E FOR 40.00 FEET TO THE NORTH RIGHT OF WAY LINE OF ORANGE AVENUE (STATE ROAD NO. 68); THENCE N89°42'09"E ALONG SAID RIGHT OF WAY LINE OF ORANGE AVENUE FOR 54.99 FEET; THENCE N79°48'50"E FOR 45.07 FEET; THENCE N89°42'09"E

FOR 0.67 FEET TO THE POINT OF BEGINNING; THENCE N00°10'09"E FOR 119.20 FEET, THENCE N89°42'09"E FOR 74.89 FEET; THENCE S00°10'09" FOR 119.20 FEET TO SAID NORTH RIGHT OF WAY LINE OF ORANGE AVENUE; THENCE S89°10'09"W FOR 74.89 FEET TO THE POINT OF BEGINNING.

LEGEND

- OVERALL PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED CURB AND GUTTER
- PROPOSED LOT LINES
- PROPOSED STORMWATER AREA
- LANDSCAPE BUFFER
- ROADWAY CENTERLINE
- EASEMENT
- OHW — OVER HEAD WIRES
- PROPOSED CONCRETE SIDEWALK

SITE DATA

ZONING:	PLANNED DEVELOPMENT ZONE (PD)
FUTURE LAND USE:	RESIDENTIAL-HIGH (RH)
PCN:	2407-211-0001-000-0 (8.467 AC)
	2407-212-0001-000-3 (19.436 AC)
	2407-231-0000-000-5 (19.446 AC)
	2407-241-0001-000-3 (9.275 AC)
EXISTING USE:	VACANT
OWNER:	ORANGE AVENUE DEVEL II LLC
	28178 HAYES RD
	ROSEVILLE, MI 48066-2346
AGENT:	REDTAIL DG
	100 S. 2ND STREET
	FORT PIERCE, FL 34950

SITE AREAS

RESIDENTIAL	2,272,122SF	52.161 AC	92.12%
COMMERCIAL(FUTURE)	185,035 SF	4.248 AC	7.50%
ROW DEDICATION	9,386 SF	0.215 AC	0.38%
TOTAL SITE AREA	2,466,543 SF	56.624 AC	100.00%
STORMWATER POND (water level)	315,965 SF	7.254 AC	82%
DRY RETENTION	66,572 SF	1.528 AC	18%
STORMWATER AREA	382,537 SF	8.782 AC	100%

BUILDING DATA

RESIDENTIAL		
CLUBHOUSE:	1,400 SF	
TOTAL TOWNHOME UNITS:	450	100%
PIPER MODEL (20' wide):	288	64%
NASSAU BAY MODEL (24' wide):	162	36%
TOTAL DENSITY:	450/52.161 = 8.63 Du/ AC	
LOT COVERAGE	50% MAX	
COMMERCIAL		
TOTAL BLDG. COVERAGE:	TBD	

PARKING DATA

RESIDENTIAL PARKING PROVIDED
- CLUBHOUSE: 7 SPACES (INCLUDES 2 ACCESSIBLE SPACES)
- GUEST SPACES: 41 SPACES (INCLUDES 7 ACCESSIBLE SPACES)*
  **NOT INCLUDING CLUBHOUSE SPACES*

COMMERCIAL PARKING PROVIDED
TBD

PHASING SCHEDULE

PHASE I:	31.041 AC - 261 DWELLING UNITS AND CLUBHOUSE
PHASE II:	22.273 AC - 189 DWELLING UNITS
PHASE III:	3.094 AC - COMMERCIAL LOT (FUTURE DEVELOPMENT)
ROW dedication:	0.215 AC
TOTAL:	56.624 AC

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

GRAPHIC SCALE
0 125 250
1" = 125'

REDTAIL DG
p. 772.742.1555
todd@redtaildg.com

TM DESIGNED BY
AH DRAWN BY
SIT LAYOUT
1" = 125' SCALE
7/6/2026 DATE

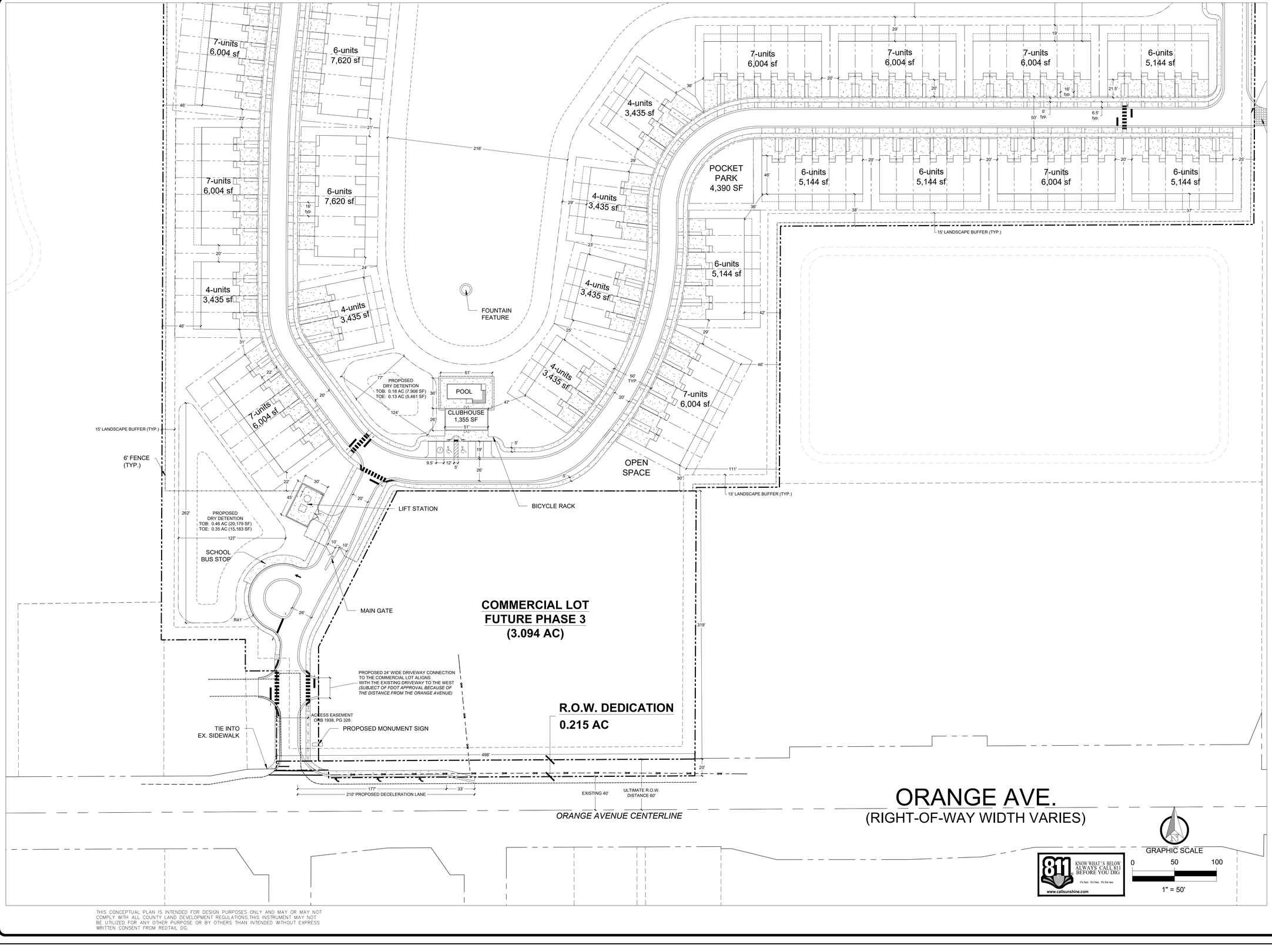
DATE	REVISION COMMENTS

WEST ORANGE PD
FINAL PD SITE PLAN
FORT PIERCE FLORIDA

25-137

1 OF 5

THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.



THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

REDTAIL DG
p. 772.742.1555
bobn@redtaildg.com

TM — DESIGNED BY
AH — DRAWN BY
SIT (2) — LAYOUT
1" = 125' — SCALE
7/6/2026 — DATE

REVISION COMMENTS — DATE

WEST ORANGE PD

FINAL PD SITE PLAN

FORT PIERCE — FLORIDA

25-137

2 OF 5

PHASE 2
PHASE 1

LIMITED EMERGENCY ACCESS W/ BREAKAWAY GATE

8-units 6,864 sf
7-units 6,004 sf
7-units 6,004 sf
7-units 6,004 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
6-units 7,620 sf
8-units 6,864 sf
7-units 6,004 sf

PROPOSED
DRY DETENTION
TOB: 0.58 AC (25,251 SF)
TOE: 0.48 AC (20,895 SF)

4-units 3,435 sf
4-units 3,435 sf
4-units 3,435 sf
4-units 3,435 sf

POCKET PARK
5,415 SF

POCKET PARK
4,390 SF

6' FENCE (TYP.)

15' LANDSCAPE BUFFER (TYP.)

9' OPTIONAL LANAI (TYP.)

7-units 6,004 sf
7-units 6,004 sf
7-units 6,004 sf
6-units 5,144 sf
4-units 5,080 sf
7-units 8,890 sf
7-units 8,890 sf
6-units 5,144 sf
7-units 6,004 sf
7-units 6,004 sf
7-units 6,004 sf
6-units 5,144 sf
6-units 5,144 sf
6-units 5,144 sf
7-units 6,004 sf
6-units 5,144 sf
6-units 5,144 sf

RESIDENTIAL
PHASE 1
(31.041 AC)

PROPOSED LAKE 1
TOB: 6.04 AC (263,220 SF)
CE: 5.28 AC (230,058 SF)

LIMITED EMERGENCY ACCESS W/ BREAKAWAY GATE

STABILIZED SOD

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

GRAPHIC SCALE
0 50 100
1" = 50'

THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

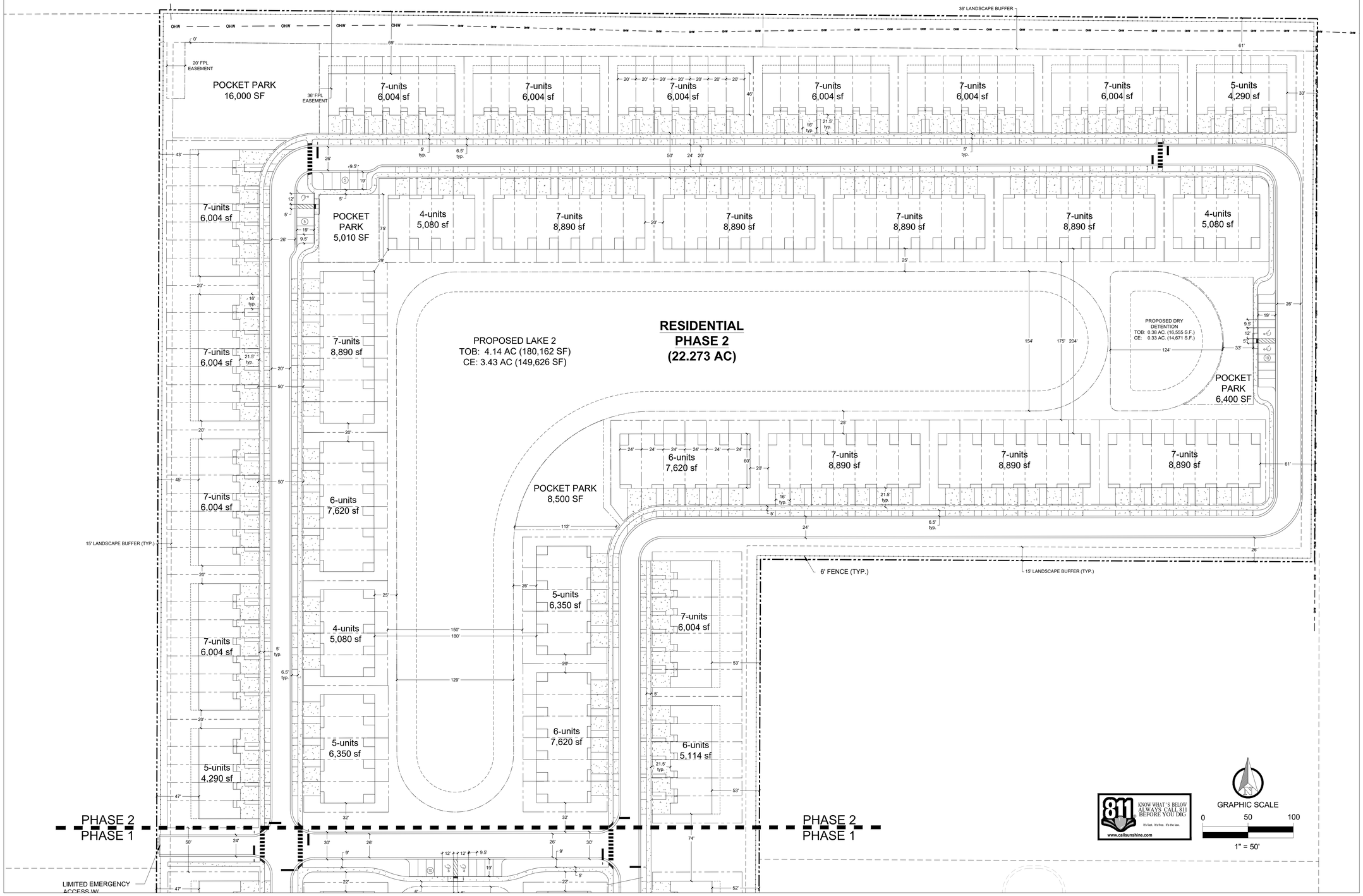
REDTAIL DG
p. 772.742.1555
bobn@redtaildg.com

TM DESIGNED BY
AH DRAWN BY
SIT (3) LAYOUT
1" = 125' SCALE
7/6/2026 DATE

REVISION COMMENTS
DATE

WEST ORANGE PD
FINAL PD SITE PLAN
FORT PIERCE FLORIDA

25-137



GRAPHIC SCALE
0 50 100
1" = 50'

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

REDTAIL DG
p. 772.742.1555
bobby@redtaildg.com

TM DESIGNED BY
AH DRAWN BY
SIT (4) LAYOUT
1" = 125' SCALE
7/6/2026 DATE

REVISION COMMENTS
DATE

WEST ORANGE PD
FINAL PD SITE PLAN
FORT PIERCE FLORIDA

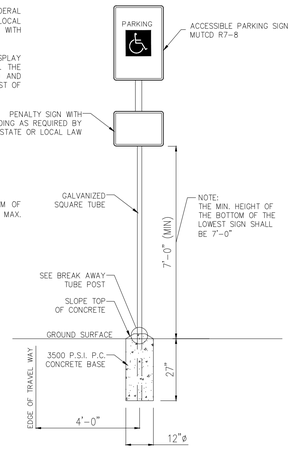
25-137

NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. THE TOP PORTION OF THE PARKING BY DISABLED PERMIT ONLY SIGN SHALL DISPLAY WHITE REFLECTIVE LEGEND AND BORDER WITH A BLUE REFLECTIVE BACKGROUND. THE BOTTOM PORTION OF THE SIGN SHALL DISPLAY AN OPAQUE BLACK LEGEND AND BORDER WITH A REFLECTIVE WHITE BACKGROUND. SIGN FABRICATION SHALL CONSIST OF ONE PANEL.
3. GALVANIZED SQUARE TUBE

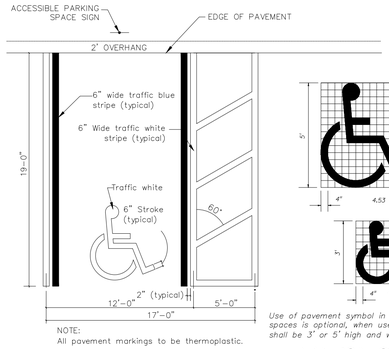
   POST TUBES – 2"x2"x3/16" 14ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

   ANCHOR TUBE – 2-1/4"x2-1/4"x3/16" 14ga
   HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B.
   STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.

   THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 27" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.



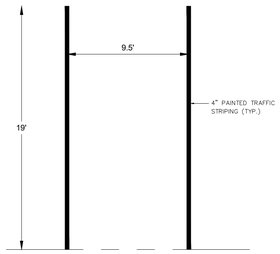
ACCESSIBLE SIGN MOUNTING AND BASE
N.T.S



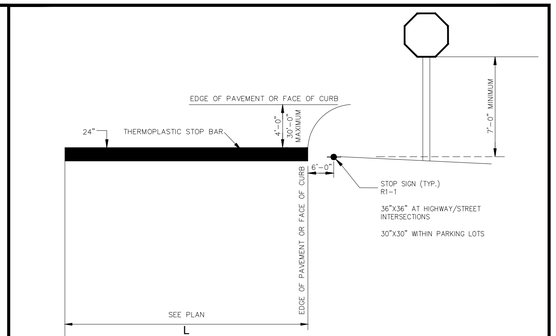
ACCESSIBLE PARKING STALL
N.T.S

Use of pavement symbol in accessible parking spaces is optional, when used the symbol shall be 3' or 5' high and white in color.

UNIVERSAL SYMBOL OF ACCESSIBILITY
N.T.S

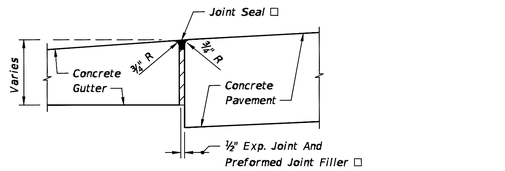


TYPICAL PARKING DETAIL
N.T.S



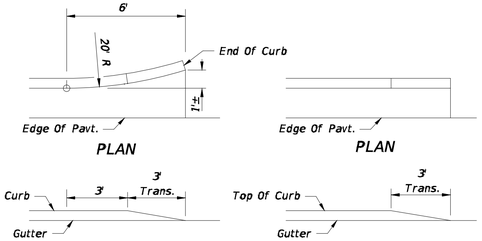
NOTES:
1. INSTALLATION OF STOP SIGNS SHALL BE IN ACCORDANCE WITH THE SECTION 28.04 OF THE MUTCD. MULTI-WAY STOP SIGNS SHALL BE PLACED ONLY IF APPLICABLE IN ACCORDANCE WITH SECTION 28.07 OF THE MUTCD. STOP SIGNS ARE USED TO INDICATE THAT TRAFFIC IS ALWAYS REQUIRED TO STOP AND SHOULD NEVER BE USED TO SLOW OR CALM TRAFFIC FLOW. STOP SIGNS SHALL BE OCTAGONAL AND AT LEAST 30 INCHES HIGH BY 30 INCHES WIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND AND CLEAR RED ELECTROCUT OVERLAY OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY.
2. A STOP BAR OR LINE IS REQUIRED AT EACH LOCATION WHERE A STOP SIGN EXISTS. THE STOP BAR SHALL CONSIST OF A SOLID 24-INCH WIDE WHITE THERMOPLASTIC LINE THAT EXTENDS ACROSS THE APPROACH LANES TO INDICATE THE POINT AT WHICH THE STOP IS INTENDED OR REQUIRED TO BE MADE.

TYPICAL STOP BAR AND SIGN LOCATION DETAIL
N.T.S



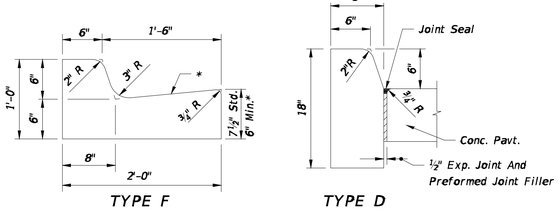
☐ *Applies to both high and low sides of pavement, low side shown.*

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT



CURB AND GUTTER TYPE F

CURB AND GUTTER ENDINGS



Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only.

CONCRETE CURB

* *When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.*

◪ *Rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.*

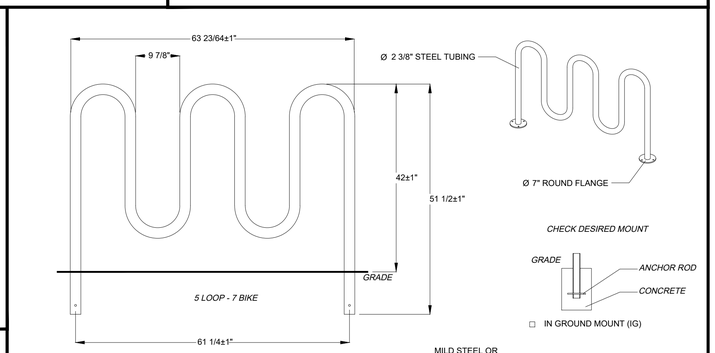
For use adjacent to concrete or flexible pavement. For details depicting usage adjacent to flexible pavement, see Sheet 2. Expansion joint, preformed joint filler and joint seal are required between curb & gutter and concrete pavement only.

CONCRETE CURB AND GUTTER DETAILS
N.T.S



WHITE LEGEND RED BACKGROUND
R1-1
30" X 30"

STOP SIGN
N.T.S



NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR (FINISH). SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

BICYCLE RACK DETAILS
N.T.S

THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

REDTAIL DG
p. 772.742.1555
bodie@redtaildg.com

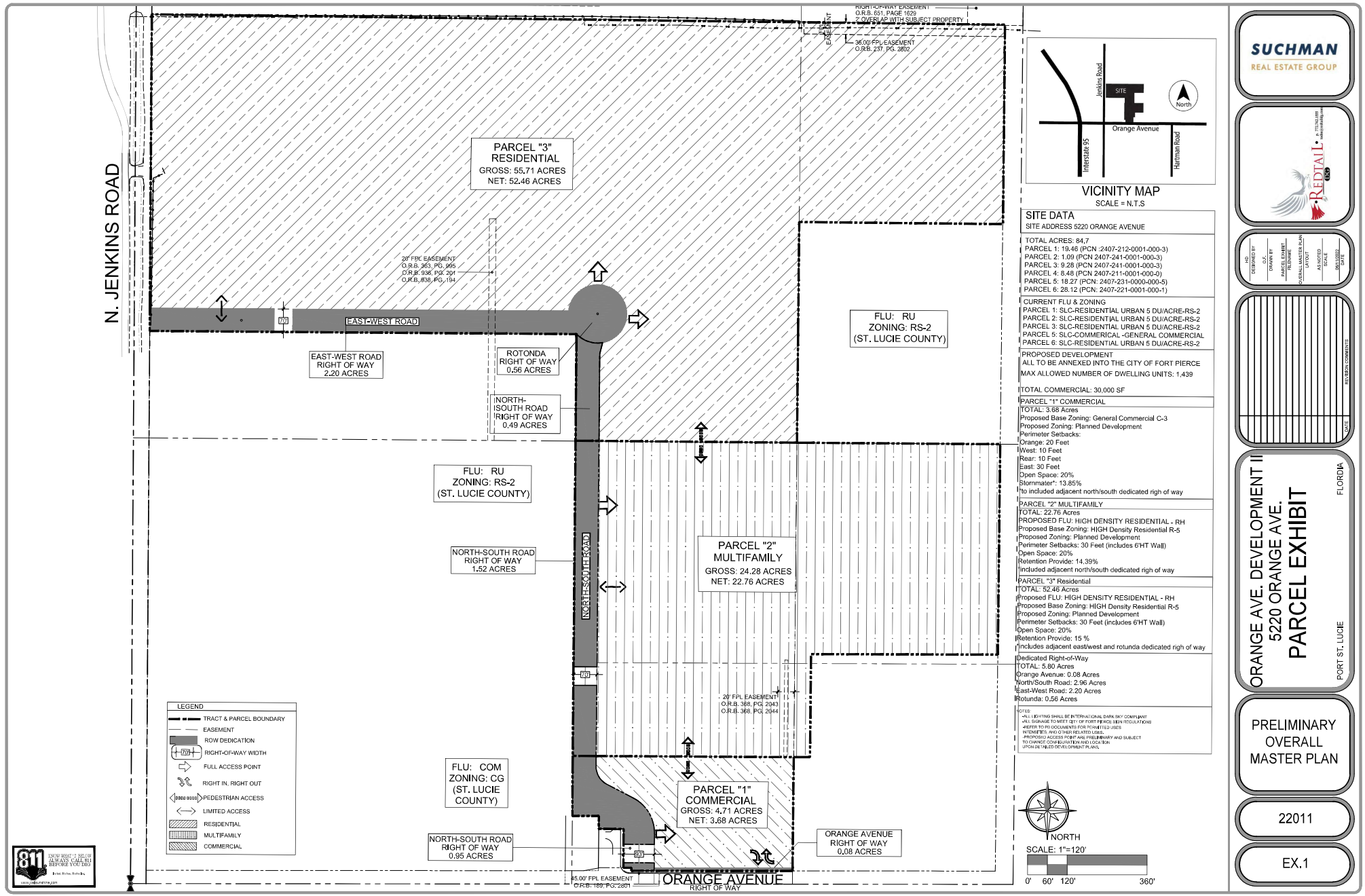
TM DESIGNED BY
AH DRAWN BY
DET LAYOUT
SCALE
7/6/2026 DATE

REVISION COMMENTS
DATE

WEST ORANGE PD
DETAILS
FLORIDA
FORT PIERCE

25-137

5 OF 5



SITE DATA

SITE ADDRESS 5220 ORANGE AVENUE

TOTAL ACRES: 84.7
PARCEL 1: 19.46 (PCN :2407-212-0001-000-3)
PARCEL 2: 1.09 (PCN 2407-241-0001-000-3)
PARCEL 3: 9.28 (PCN 2407-241-0001-000-3)
PARCEL 4: 8.48 (PCN 2407-211-0001-000-0)
PARCEL 5: 18.27 (PCN: 2407-231-0000-000-5)
PARCEL 6: 28.12 (PCN: 2407-221-0001-000-1)

CURRENT FLU & ZONING
PARCEL 1: SLC-RESIDENTIAL URBAN 5 DU/ACRE-RS-2
PARCEL 2: SLC-RESIDENTIAL URBAN 5 DU/ACRE-RS-2
PARCEL 3: SLC-RESIDENTIAL URBAN 5 DU/ACRE-RS-2
PARCEL 5: SLC-COMMERICAL -GENERAL COMMERCIAL
PARCEL 6: SLC-RESIDENTIAL URBAN 5 DU/ACRE-RS-2

PROPOSED DEVELOPMENT
ALL TO BE ANNEXED INTO THE CITY OF FORT PIERCE
MAX ALLOWED NUMBER OF DWELLING UNITS: 1,439

TOTAL COMMERCIAL: 30,000 SF

PARCEL "1" COMMERCIAL
TOTAL: 3.68 Acres
Proposed Base Zoning: General Commercial C-3
Proposed Zoning: Planned Development
Perimeter Setbacks:
Orange: 20 Feet
West: 10 Feet
Rear: 10 Feet
East: 30 Feet
Open Space: 20%
Stormwater*: 13.85%
*to included adjacent north/south dedicated righ of way

PARCEL "2" MULTIFAMILY
TOTAL: 22.76 Acres
PROPOSED FLU: HIGH DENSITY RESIDENTIAL - RH
Proposed Base Zoning: HIGH Density Residential R-5
Proposed Zoning: Planned Development
Perimeter Setbacks: 30 Feet (includes 6'HT Wall)
Open Space: 20%
Retention Provide: 14.39%
*included adjacent north/south dedicated righ of way

PARCEL "3" Residential
TOTAL: 52.46 Acres
Proposed FLU: HIGH DENSITY RESIDENTIAL - RH
Proposed Base Zoning: HIGH Density Residential R-5
Proposed Zoning: Planned Development
Perimeter Setbacks: 30 Feet (includes 6'HT Wall)
Open Space: 20%
Retention Provide: 15 %
*includes adjacent east/west and rotunda dedicated righ of way

Dedicated Right-of-Way
TOTAL: 5.80 Acres
Orange Avenue: 0.08 Acres
North/South Road: 2.96 Acres
East-West Road: 2.20 Acres
Rotunda: 0.56 Acres

NOTES:
- ALL LIGHTING SHALL BE INTERNATIONAL DARK SKY COMPLIANT
- ALL SIGNAGE TO MEET CITY OF FORT PIERCE SIGN REGULATIONS
- REFER TO PD DOCUMENTS FOR PERMITTED USES INTENSITIES, AND OTHER RELATED USES.
- PROPOSED ACCESS POINT ARE PRELIMINARY AND SUBJECT TO CHANGE CONFIGURATION AND LOCATION UPON DETAILED DEVELOPMENT PLANS.

SUCHMAN
REAL ESTATE GROUP

REDTAIL

HD DESIGNED BY
G.F. DRAWN BY
PARCEL EXHIBIT FILENAME
OVERALL MASTER PLAN LAYOUT
AS NOTED SCALE
06/11/2022 DATE

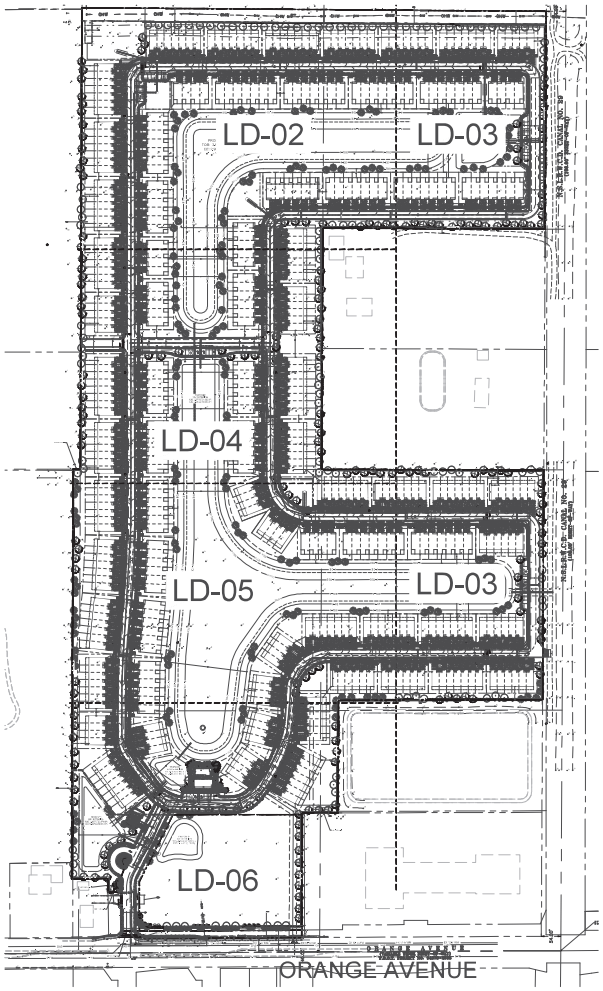
REVISION COMMENTS
DATE

ORANGE AVE. DEVELOPMENT II
5220 ORANGE AVE.
PARCEL EXHIBIT
PORT ST. LUCIE FLORIDA

PRELIMINARY
OVERALL
MASTER PLAN

22011

EX.1



Landscape Legend:

Symb	Qty	Tag	WU	Name (N) Native (F) Flowering Tree (E) Evergreen
Trees:				
	110	AR		Red Maple (N)(F) Acer rubrum, FG, 12' Ht, 5' Spr., 2.5" DBH
	74	IC		Dahoon Holly (N)(E) Ilex cassine, FG, 12' ht, 5' Spr., 2.5" DBH
	10	LI		Crape Myrtle (F) Lagerstromia indica 'Muscogee', FG, 12' Ht, 5' Spr., 2.5" DBH, Multi
	7	LI1		Crape Myrtle (F) Lagerstromia indica 'Tuscarora', FG, 12' Ht, 5' Spr., 2.5" DBH, Multi
	194	QV		Live Oak (N)(E) Quercus virginiana, FG, 12' Ht, 5' Spr., 2.5" DBH
	24	SP		Cabbage Palm (N) (3:1) Sabal palmetto, FG, 16-24' OA Ht
	177	TD		Bald Cypress Taxodium distichum, FG, 12' ht, 5' spr., 2.5" DBH
Accents:				
	12	CRI		Crinum Lily Crinum asiaticum 'Queen Emma, 7 gal, 36" oc
Shrubs:				
	837	FOR		Florida Privet (N) Forestiera segregata, 3 gal, 24" ht, 36" o.c.
	344	HAM		Dwarf Firebush (N)(F) Hamelis patens 'Compacta', 3 gal, 18" ht, 36" o.c.
	26	HIB		Hibiscus Hibiscus rosa-sinensis, Red, 3 gal, 18" ht,36" oc
	92	MUH		Muhly Grass Muhlenbergia capillaris, 3 gal, 36" oc
	806	MYR		Simpson's Stopper (N) (E) Myrcianthes fragrans, 3 gal, 24"x18", 36" o.c.
	216	SPA		Sand Cordgrass (N) Spartina patens, 3 gal, 36" oc
	28	TRI		Dwarf Fakahatchee Grass (N) Tripsacum floridana, 3 gal, 36" oc
	892	VIO		Walters Viburnum Viburnum obovatum 3 gal, 24" ht, 36" o.c.
	134	VIB		Dwarf Walters Viburnum (N) Viburnum obovatum 'Mrs Schiller', 3 gal, 24" ht, 24" o.c.
	252	ZAM		Coontie (N)(E) Zamia pumila, 3 gal, 36" oc
Groundcover:				
	70	LAN		Pineland Lantana (N) Lantana depressa, 1 gal, 6"x12", 36" o.c.
	198	LIR		Liriope Liriope muscari 'Emerald Godess', 1 gal, 12" oc
	98	PEN		Pentas Pentas lanceolata 'New Look Pink', 1 gal, 6" ht, 12" oc.
	XX sf	SOD		St. Augustine 'BitterBlue' Stenotaphrum secundatum 'Bitter Blue', weed free, laid tight

General Notes:

1. *No landscape materials other than sod grasses may be planted within a 5' radius maintenance area of any underground utility such as water meters, backflow devices, fire hydrants, sanitary sewer cleanouts, and manholes, air release valves, etc.*
2. *No Trees may be planted less than 10' from any underground utility. Minimum distance from storm sewer lines is 5' with root barrier.*
3. *No landscaping shall be planted in a manner that would adversely affect utility easements.*
4. *Sod around buildings to be St. Augustine 'Bitter Blue' sod. Sod to be weed and disease free and laid tight. All areas within in preservation areas to be seeded with Argentine Bahia grass.*
5. *Not trees to be placed within 6' of any hard surface unless root barrier will be installed along the edge of the hard surface. Root barrier to extend at least 5' in either direction from the center of the tree trunk. Refer to Sheet LD-05 for installation details.*
6. *All landscape areas to receive automatic irrigation. Irrigation to provide 100% coverage and 50% overlap. Water source to be a new well and pump.*

Landscape Data: Perimeter Buffer

					Shade Trees: 1/100 SF							Shrubs					
					Required	Provided						Required	Provided				
Perimeter	Length	Drive way	Buffer Width	Total SF		AR	LI (2:1)	LI1 (2:1)	QV	SP (3:1)	TD	Total		FOR	HAM	MYR	VIO	Total
N	1103		10	11030	37	37						37	368	80	40	79	160	359
W	2464		10	24640	82	17			44		20	81	821	204	60	293	240	797
S	497	26	10	4710	16	9	6	4	4	3		19	157	34	51		73	158
E	4406	32	10	43740	146	47			97		13	157	1458	519	100	382	419	1420
				Total	280	110	3	2	145	1	33	294	2804	837	251	754	892	2734

VUA Area

		Shade Trees: 1/100 SF						
Total Area		Required	Provided					
SF	225,559		IC	LI (2:1)	LI1 (2:1)	QV	SP (3:1)	TD	Total
Landscape Area required: 1 SF/15 SF VUA			74		3	49	20	144	
SF	15,037	150	74	0	1	49	7	144	274

Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060

72 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF AT&T CALL 1-800-252-1133

N
W E
S
Graphic Scale
Scale: 1" = 120'

REDTAIL LDA
772.742.1199
sabine@redtailLDA.com

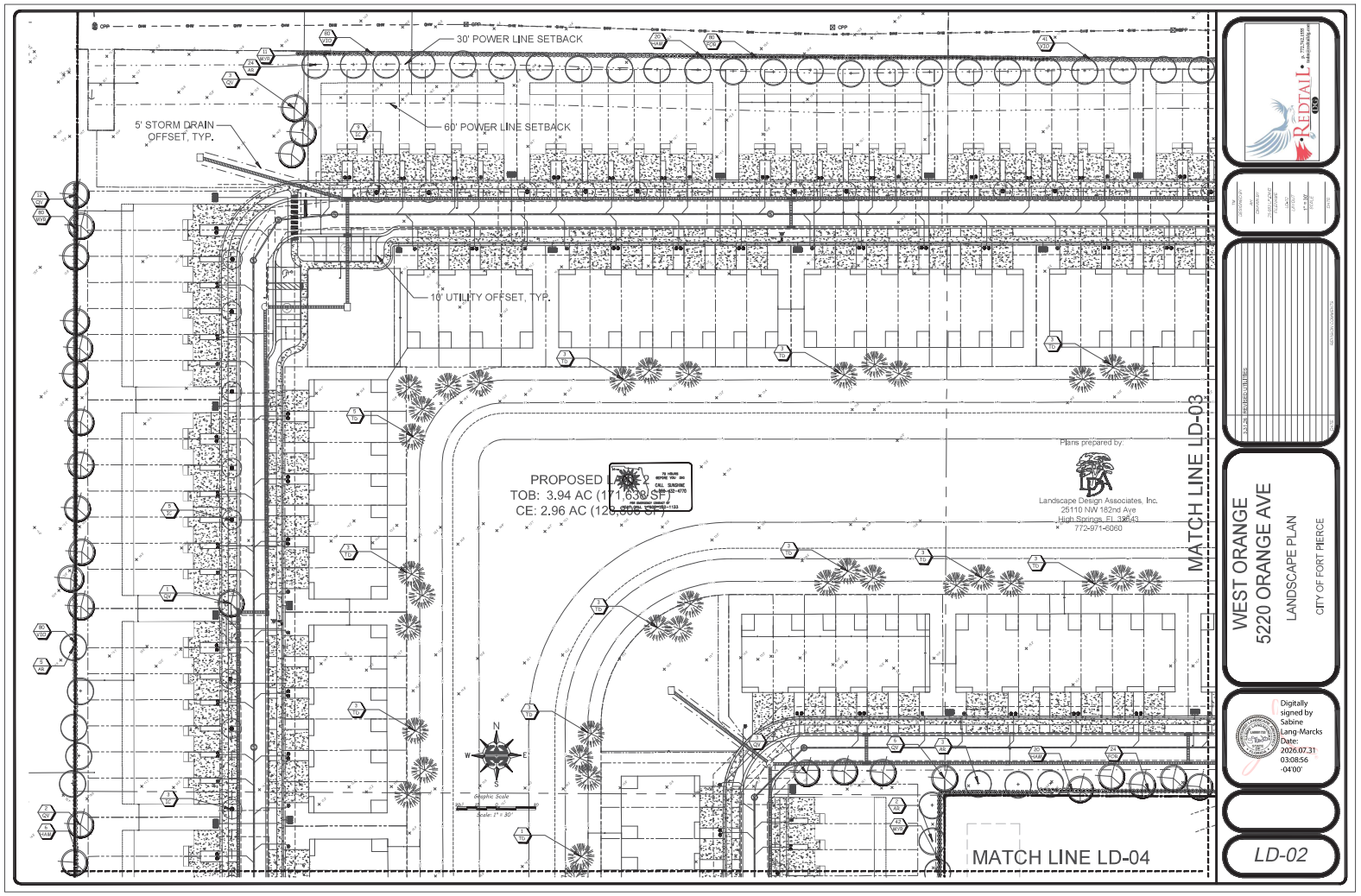
TM	2026.03.31	AMY	
21-081-LDCRE		2026.03.31	
DRAWN		CHECKED	
AMY		SMM	
SCALE		1" = 60'	
DATE		2026.3	

03.31.26	PER DRC COMMENTS

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

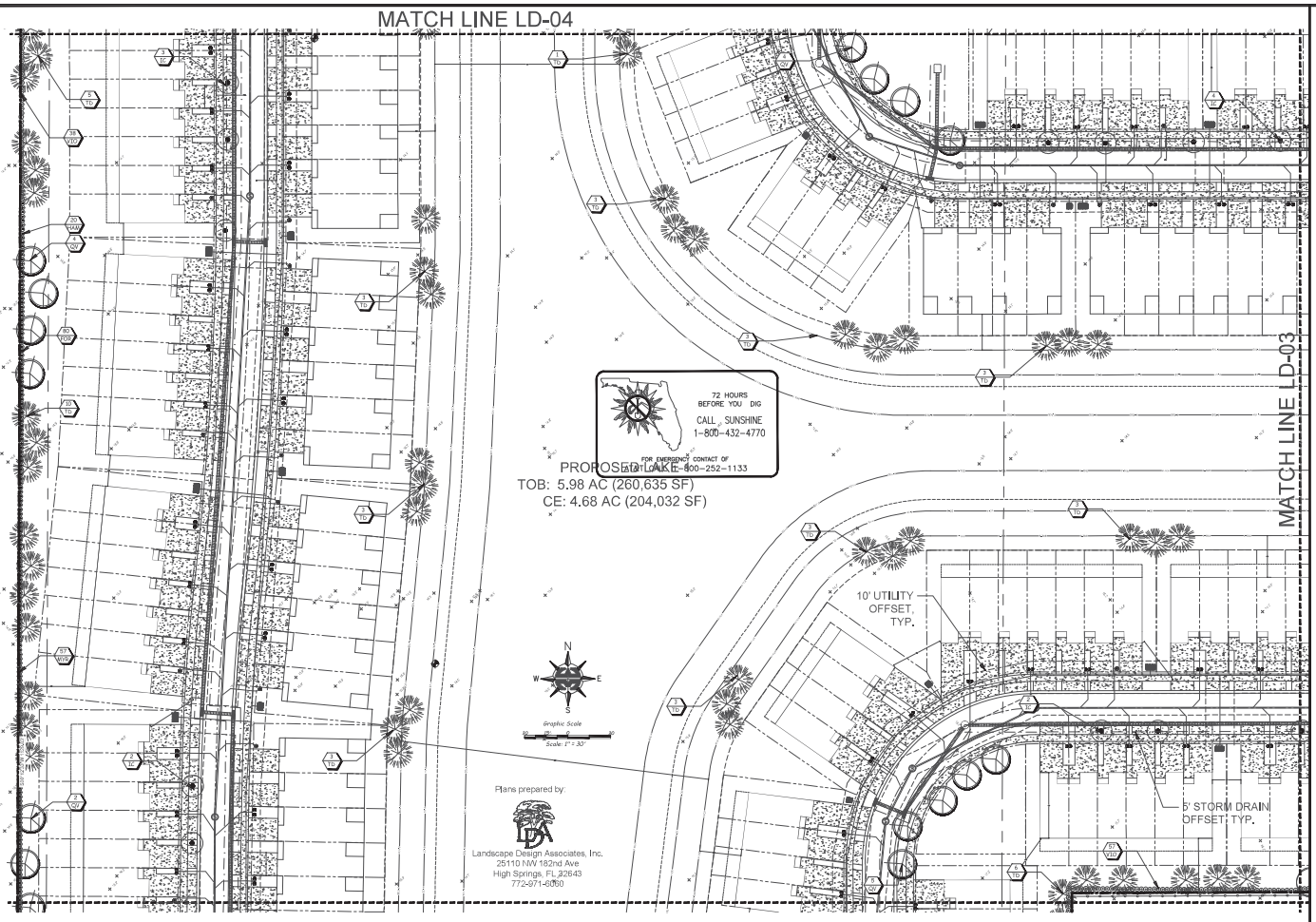
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:14 -04'00'

LD-01


30' POWER LINE SETBACK
60' POWER LINE SETBACK
5' STORM DRAIN OFFSET, TYP.
10' UTILITY OFFSET, TYP.
PROPOSED LAKE 2
TOB: 3.94 AC (171,636 SF)
CE: 2.96 AC (129,006 SF)
MATCH LINE LD-03
MATCH LINE LD-04
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:08:56 -04'00'
LD-02

MATCH LINE LD-02
5' STORM DRAIN OFFSET, TYP.
10' UTILITY OFFSET, TYP.
PROPOSED DRY RETENTION
TOB: 0.45 AC. (19,720 S.F.)
TOE: 0.28 AC. (12,150 S.F.)
MATCH LINE LD-05
72 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
772.521.1201
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:41 -04'00'
LD-03

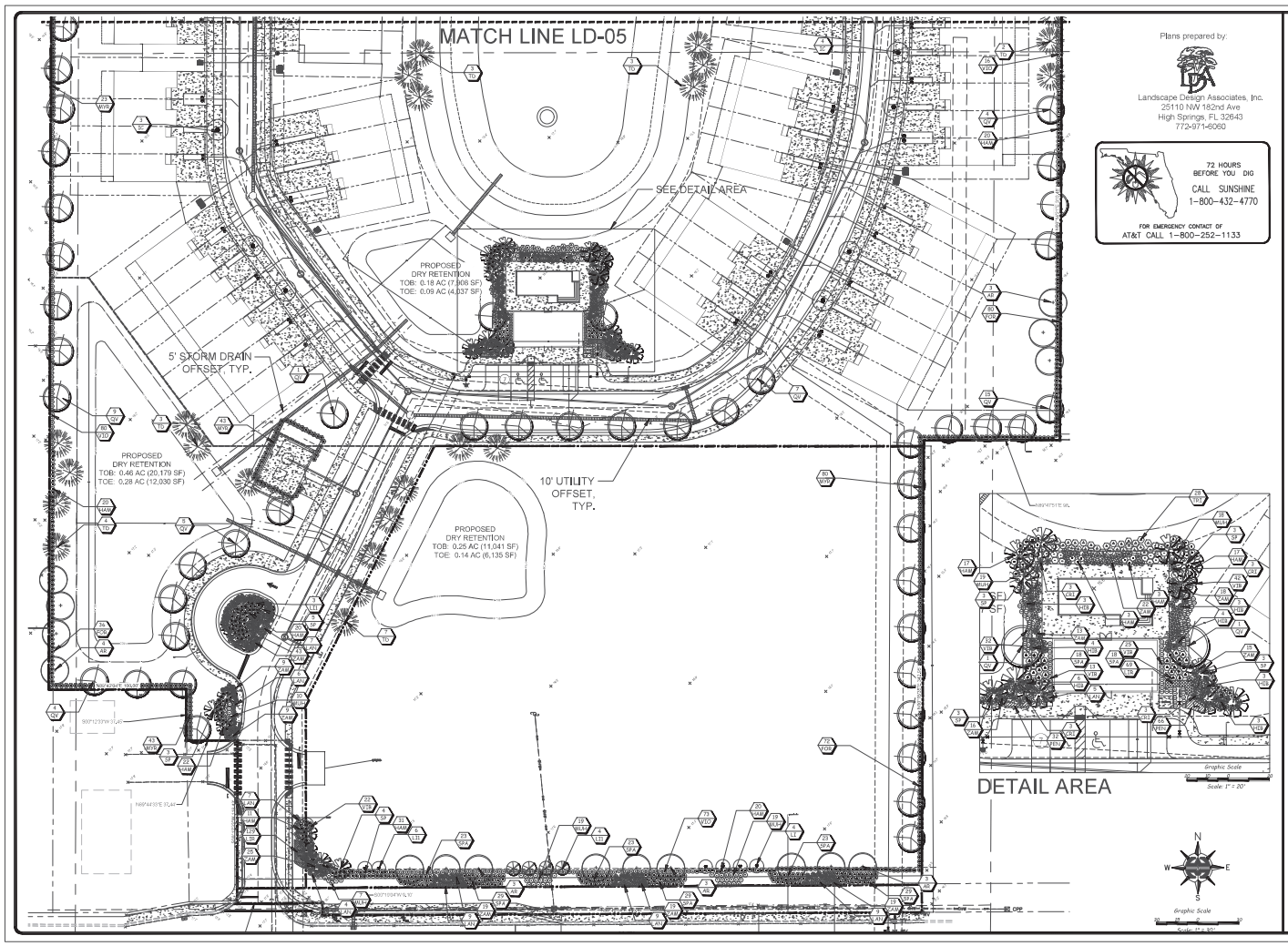
MATCH LINE LD-02
MATCH LINE LD-03
MATCH LINE LD-05
10' UTILITY
OFFSET,
TYP.
PROPOSED
DRY RETENTION
TOB: 0.57 AC (24,620 SF)
TOE: 0.39 AC (16,995 SF)
STORM DRAIN
OFFSET, TYP.
72 HOURS
BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
772.火山.1199
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:22 -04'00'
LD-04



WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:08:25 -04'00'

LD-05



Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060

72 HOURS
BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133

REDTAIL

DESIGNED BY	SL
DRAWN BY	SL
CHECKED BY	SL
DATE	2026.07.31
SCALE	1" = 30'
JOB NO.	2512
SHEET	LD-06

1	PER REVIEW COMMENTS

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:04 -04'00'

LD-06

PLANTING NOTES:

FERTILIZER

FERTILIZERS SHALL BE SLOW RELEASE, UNIFROM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURERS STATEMENT OF ANALYSIS,AND SHALL MEET THE FOLLOWING REQUIREMENTS: SIX (6) PERCENT NITROGEN,SIX (6) PERCENT PHOSPHOROUS AND SIX (6) PERCENT POTASSIUM. FERTILIZER SHALL BE APPLIED TO ALL SHRUBS (1/3 LB PER 3 GAL POT, 1/4LB PER 1 GAL POT) AND GROUNDCOVER. THE SOD STARTER FERTILIZER MIXTURE SHALL BE A 5-10-10 ANALYSIS. A 14-14-14 FERTILIZER ANALYSIS IS REQUIRED ON ALL TREES AND SHRUBS OVER 5' IN HEIGHT (1/2 LB PER 5" OF SPREAD). AGRIFORM TABLETS WITH TWENTY (20) PERCENT NITROGEN, TEN (20) PERCENT PHOSPHOROUS,FIVE (5) PERCENT POTASSIUM IN 21 GRAM SIZES SHALL BE APPLIED ALONG WITH THE FERTILIZER PROCESS (1 WITH 1 GAL PLANTS, 2 WITH 3 GAL PLANTS AND 3 TABLETS PER 7" OF TREE TRUNK CALIPER). MAGNESIUM SULFATE SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/2 LB PER INCH OF TRUNK CALIPER. MANGANESE SHALL BE APPLIED AT THE SAME RATE.

MULCH

MULCH MATERIAL SHALL BE COLORED "A" GRADE CERTIFIED RE-CYCLED MULCH AND MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT. MULCH SHALL BE APPLIED TO A MINIMUM OF 3" DEPTH IN PLANTING BEDS. MULCH SHALL NOT BE PLACED WITHIN 6" OF TREE OR PALM TRUNKS.

SOD

THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS,ABSOLUTELY TRUE TO VARIETAL TYPE,AND FREE FROM WEEDS,FUNGUS,INSECTS AND DISEASE OF ANY KIND.

SUBSTITUTIONS

NO SUBSTITUTION OF PLANT MATERIAL TYPES OR SIZES WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT OF RECORD. CONTAINER GROWN MATERIAL WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR B & B MATERIAL UNLESS PREVIOUSLY APPROVED. INTENDED SUBSTITUTIONS SHALL BE SPELLED OUT IN BID.

MEASUREMENTS

SHADE TREES: HEIGHT SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT AREA NOT TO INCLUDE ANY TERMINAL GROWTH.

PALMS: CLEAR TRUNK SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE POINT WHERE THE MATURE AGED TRUNK JOINS THE IMMATURE OR GREEN PORTION OF THE TRUNK OR HEAD.

GREY WOOD (G.W.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO TOP OF THE HARDENED TRUNK.

OVERALL HEIGHT (O.A.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE AVERAGE FROND HEIGHT.

PALMS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED.

PLANTING SOIL AND BACKFILL

TOPSOIL SHALL CONSIST OF A STABILIZED MIXTURE OF GROUND-YARD TRIMMINGS AND POSSIBLY BIOSOLIDS PROCESSED ACCORDING TO STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR THE PROCESSING AND DISTRIBUTION OF SEWAGE SLUDGE COMPOST. RECYCLED TOPSOIL SHALL ONLY BE OBTAINED FROM A STATE PERMITTED RECYCLING FACILITY WHICH IS ALSO D.O.T. CERTIFIED AND STORES PRODUCT ON A PAD WITH A CURRENT NEMATODE CERTIFICATION FROM FLORIDA DEPARTMENT OF AGRICULTURE. RECYCLED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- WEED FREE
- MOISTURE CONTENT 80% BY WEIGHT MAXIMUM.
- WATER HOLDING CAPACITY 100% BY WEIGHT MINIMUM.
- CARBON TO NITROGEN RATIO LESS THAN 25 TO 1.
- ORGANIC MATTER CONTENT 40% BY DRY WEIGHT MINIMUM
- SOLUBLE SALTS LESS THAN 3 MMHOS/CM.
- PH RANGE 7.0 - 7.9
- MINIMUM NUTRIENT LEVELS AS FOLLOWS:

MACRO NUTRIENTS: NITROGEN (N) - 1% MINIMUM, WATER INSOLUBLE NITROGEN 90% MINIMUM, PHOSPHORUS (P) - 0.5% MINIMUM, POTASSIUM (K) - 0.2% MINIMUM. AND OTHER MACRO AND MICRO NUTRIENTS. THE RECYCLED TOPSOIL SHALL CONTAIN LEVELS OF THOSE MICRO NUTRIENTS NECESSARY FOR PLANT GROWTH. THESE INCLUDE CALCIUM, MAGNESIUM, SULFUR, BORON, COPPER, IRON, MANGANESE AND MOLYBDENUM. TOPSOIL NOT MEETING THESE REQUIREMENTS WILL NOT BE ACCEPTED.

BACKFILL:

ALL NEW AND TRANSPLANTED PLANT MATERIAL (INCLUDING NEW SOD) SHALL BE PLANTED ONLY AFTER PREPARATION OF EXISTING SOIL AS FOLLOWS: SPREAD A LAYER OF 3" DEPTH OF RECYCLED TOPSOIL (AS DEFINED ABOVE) OVER THE ENTIRE PLANTING AREA. THE TOPSOIL SHALL THEN BE UNIFORMLY DISKED, TILLED OR AERIFIED INTO THE EXISTING SOIL TO A DEPTH OF 12" UNDERNEATH SHRUBS AND GROUNDCOVERS, 6" UNDERNEATH SOD AND TO A DEPTH OF 36" FOR THE TREE PITS, WITH THE FOLLOWING EXCEPTION: NO ROTOTILLING OR DISKING SHALL OCCUR CLOSER TO THE TRUNKS OF ESTABLISHED PLANTS THAN ONE HALF (1/2) THE DISTANCE OF THE CANOPY FURTHEST OUT FROM THE GRIP LINE OF THE EXISTING PLANT CANOPY. ALL PLANTS, INCLUDING HEDGES AND GROUND COVER SHALL BE PLANTED IN INDIVIDUALLY DUG HOLES AND THE MATERIAL DUG FROM THE HOLES SHALL THEN BE FURTHER MIXED WITH THE PREPARED SITE SOIL PRIOR TO BACKFILLING OF THE PLANTING HOLES AROUND THE ROOT BALLS. NO ADDITIONAL BACKFILL SOIL SHALL BE USED.

AN EXCEPTION ARE PLANTING PITS FOR CABBAGE PALMS, WHICH SHALL BE BACKFILLED WITH CLEAN NATIVE SAND ONLY.

REMOVE EXCESS MATERIAL TO PROVIDE PROPER FINISHED GRADE.

PLANT MATERIALS

TREES, PALMS, SHRUBS,GROUNDCOVERS:

PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED IN THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I & II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE NORMAL FOR THE VARIETY AND FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

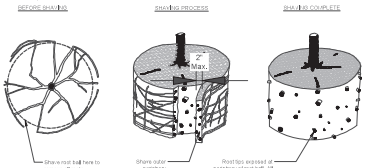
SPECIMEN MEANS AN EXCEPTIONALLY HEAVY, SYMMETRICAL, TIGHTLY KNIT PLANT, SO TRAINED OR FAVORED IN ITS DEVELOPMENT THAT FIRST APPEARANCE IS UNQUESTIONABLE AND IT IS OUTSTANDINGLY SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY.

ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND FREE OF DISEASE AND INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT, WHERE REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS OF GOOD QUALITY AND BE IN HEALTHY GROWING CONDITION. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER.

GENERAL NOTES:

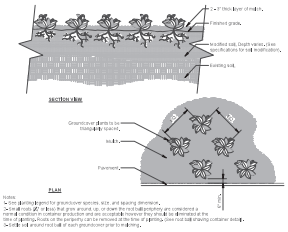
1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIMJHER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIED PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. THE LOCATIONS OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. MAJOR ADJUSTMENTS TO THE LAYOUT ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE. PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE CREWS DURING THE PERFORMANCE OF THE WORK. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROMPTLY REMOVE ALL WASTE MATERIALS, DEBRIS, UNUSED PLANT MATERIAL, EMPTY PLANT CONTAINERS AND ALL EQUIPMENT FROM THE PROJECT SITE.
18. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND REQUEST A FINAL INSPECTION. ANY ITEMS THAT ARE JUDGED INCOMPLETE OR UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. ALL LABOR AND MATERIAL FOR SOIL AMENDMENTS AND FERTILIZER THAT IS REQUIRED TO INSURE THE SUCCESSFUL ESTABLISHMENT AND SURVIVAL OF THE PROPOSED VEGETATION AS WELL AS ALL COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.
2- Shaving can be performed just prior to planting or after placing in the hole.

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

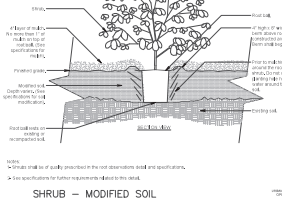
ROOT BALL SHAVING CONTAINER DETAIL



Notes:
1- The planting layout for groundcover species, size, and spacing dimension, is diagrammatic gift. The actual number of plants, size, and arrangement may differ as considered a normal condition in container production and as accepted however they should be eliminated at the time of planting. Roots on the periphery can be removed at the time of planting. Does not limit shaving container detail.
2- Limit soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

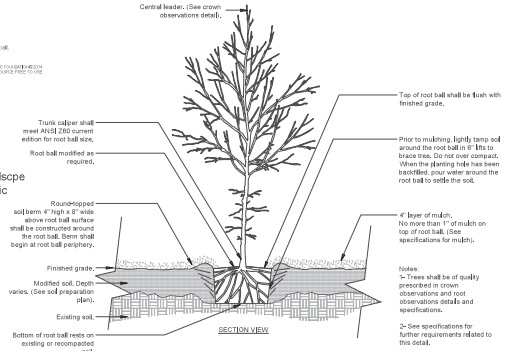
URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.
2- See specifications for further requirements related to this detail.

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

SHRUB – MODIFIED SOIL



Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.
2- See specifications for further requirements related to this detail.

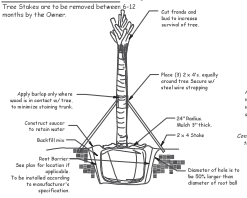
TREE w/ BERM (EXISTING SOIL MODIFIED)

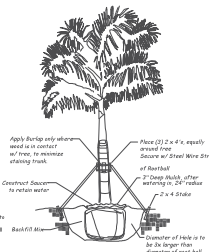
URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

Palm Planting Detail

NTS

Tree Stakes are to be removed between 6-12 months by the Owner.

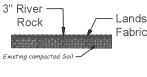




Watering Schedule			
Item	Water	Month	No. of Applications
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			45

Gravel Strip Detail

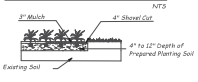
NTS



ABBREVIATIONS:
C.T.- CLEAR TRUNK
HT.- HEIGHT
O.C.- ON CENTER
Spr.- SPREAD

Planting Edge at Sod Detail

NTS



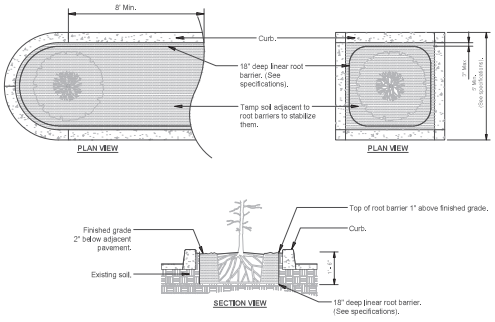
REDTAIL
p. 772.321.1391
e. admin@redtail.com

NO.	DESCRIPTION	DATE
1	PER DEVELOPER	04/07/25
2	PER COUNTY COMMENTS	05/07/25
3	PER COUNTY COMMENTS	06/06/25
4	PER COUNTY COMMENTS	07/07/25

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:33 -04'00'

LD-07

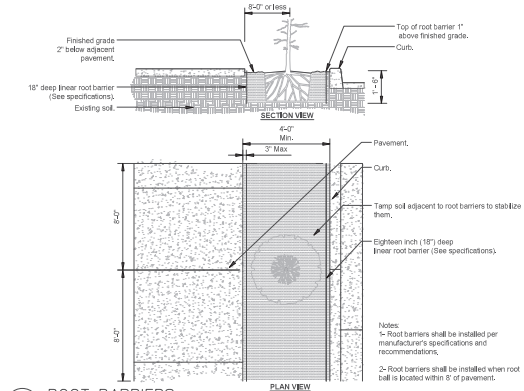


Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 6' of pavement.

ROOT BARRIERS – PARKING LOT ISLANDS

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE



S-X ROOT BARRIERS

3/8" = 1'-0"

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

L_site preparation_rootbarriers

REDTAIL LDG
p. 772.火山.1109
sales@redtailldg.com

NO	DESCRIPTION	BY	DATE
1	PRELIMINARY PLAN REVIEW	JACK	7/23/25

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:50 -04'00'

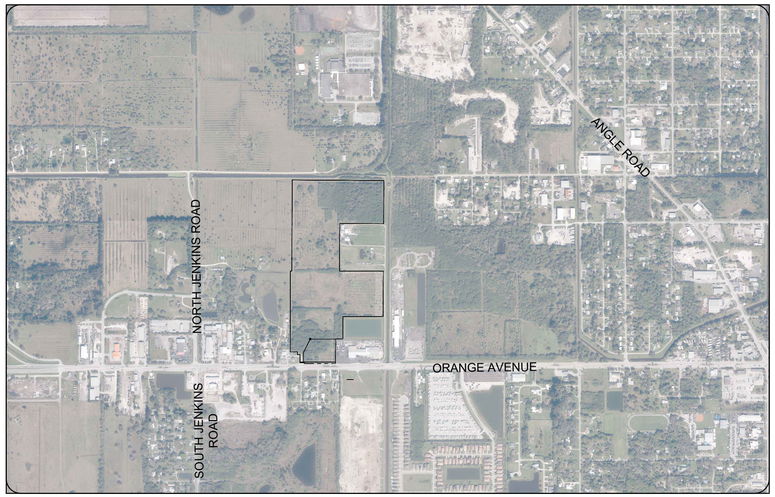
LD-08

PRELIMINARY ENGINEERING PLANS AND SPECIFICATIONS

WEST ORANGE PD

SECTION 07, TOWNSHIP 35S, RANGE 40E

CITY OF FORT PIERCE, FLORIDA

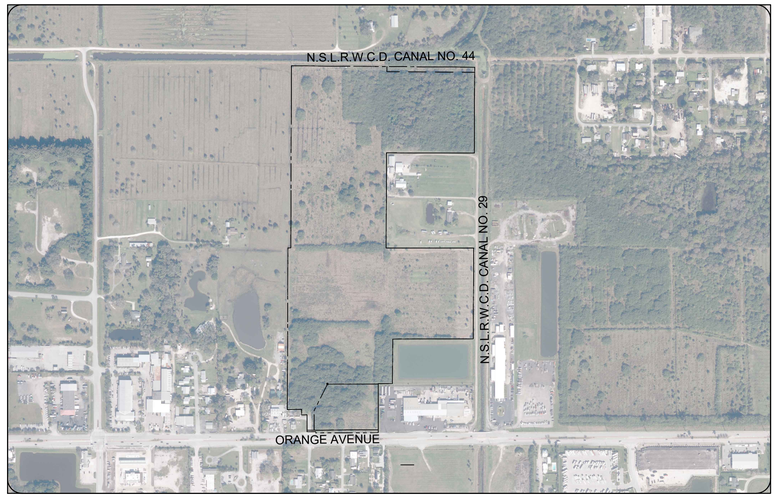


LOCATION MAP

GRAPHIC SCALE

1000 0 500 1000 2000 3000

(IN FEET)
1 inch = 1000 ft.



PROJECT AREA

GRAPHIC SCALE

500 0 250 500 1000 1500

(IN FEET)
1 inch = 500 ft.

LEGAL DESCRIPTION:

PARCEL 1:

THE WEST ONE-HALF (1/2) OF THE NORTHEAST ONE-QUARTER (1/4) OF THE NORTHWEST ONE-QUARTER (1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS RIGHT-OF-WAY FOR CANALS, AS RECORDED IN THE PUBLIC RECORDS IN AND FOR ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:

THE EAST 50 FEET OF THE FOLLOWING DESCRIBED PROPERTY: THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR PUBLIC ROADS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 3:

THE NORTH 15 ACRES OF THE FOLLOWING DESCRIBED PROPERTY, THE EAST 1/2 OF THE SOUTHEAST 1/4 OF NORTHWEST 1/4 IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR CANALS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA. AND FURTHER LESS AND EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2915:

A PORTION OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 806.208 METERS (2,645.03 FEET) TO A POINT ON A FOUND BOAT SPIKE MARKING THE WEST 1/4 CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASELINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASELINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, A DISTANCE OF 624.027 METERS (2,047.33 FEET); THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT A RIGHT ANGLE TO THE LAST DESCRIBED COURSE, A DISTANCE OF 116.668 METERS (382.77 FEET) TO THE POINT OF BEGINNING; THENCE NORTH 89 DEG 47' 56" EAST, A DISTANCE OF 171.190 METERS (561.65 FEET); THENCE NORTH 00 DEG 18' 45" EAST, A DISTANCE OF 94.635 METERS (310.48 FEET); THENCE SOUTH 89 DEG 47' 56" WEST, A DISTANCE OF 171.309 METERS (562.04 FEET); THENCE SOUTH 00 DEG 14' 26" WEST, A DISTANCE OF 94.634 METERS (310.48 FEET) TO THE POINT OF BEGINNING.

FURTHER LESS AND EXCEPTING THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1430, PAGE 1914:

A PARCEL OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTH 15 ACRES OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCLUSIVE OF RIGHTS-OF-WAY FOR CANALS. LYING SOUTHERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 2,645.03 FEET TO A POINT ON A FOUND RAILROAD SPIKE MARKING THE WEST QUARTER CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASE LINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON A FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASE LINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 7, A DISTANCE OF 2,047.33 FEET; THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE, A DISTANCE OF 382.77 FEET TO THE POINT OF BEGINNING.

THENCE NORTH 89 DEG 47' 56" EAST, A DISTANCE OF 561.65 FEET TO THE EASTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, SAID LINE ALSO TO BE EXTENDED TO THE WESTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER.

PARCEL 4:

THE NE1/4 OF THE NE1/4 OF THE NW 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, EXCEPTING ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AND DITCHES.

PARCEL 5:

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE EAST 20' OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST.

LESS AND EXCEPTING THE EAST 50' THEREOF AND LESS RIGHT-OF-WAY FOR PUBLIC ROADS.

FURTHER EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND: BEGIN 20' WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7 AND RUN THENCE NORTH 40' TO POINT OF BEGINNING; THENCE CONTINUE NORTH PARALLEL WITH THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 165' TO A POINT; THENCE TURN AND RUN EAST PARALLEL WITH THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 100' TO A POINT; THENCE TURN AND RUN SOUTH 165' TO A POINT 100' EAST OF POINT OF BEGINNING; THENCE TURN AND RUN WEST 100' TO POINT OF BEGINNING.

LESS D.O.T. EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2925, OFFICIAL RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LESS THE WEST 1/2 OF THE CROSS EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1938, PAGE 328 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE 20 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE N00°10'09"E FOR 40.00 FEET TO THE NORTH RIGHT OF WAY LINE OF ORANGE AVENUE (STATE ROAD NO. 68); THENCE N89°42'09"E ALONG SAID RIGHT OF WAY LINE OF ORANGE AVENUE FOR 54.99 FEET; THENCE N79°48'50"E FOR 45.07 FEET; THENCE N89°42'09"E FOR 0.67 FEET TO THE POINT OF BEGINNING; THENCE N00°10'09"E FOR 119.20 FEET, THENCE N89°42'09"E FOR 74.89 FEET; THENCE S00°10'09"W FOR 119.20 FEET TO SAID NORTH RIGHT OF WAY LINE OF ORANGE AVENUE; THENCE S89°10'09"W FOR 74.89 FEET TO THE POINT OF BEGINNING.

CONTAINING ##### ACRES, MORE OR LESS.

PROJECT INFORMATION

HW PROJECT NO: 25-144

PARCEL ID#: 2407-231-0000-000-5, 2407-241-0001-000-3
2407-212-0001-000-3, 2407-211-0001-000-0

ZONING INFO: PD

OWNERSHIP: ORANGE AVE DEVELOPMENT II, LLC
28178 HAYES ROAD
ROSEVILLE, MI 48066-2346

PROJECT DATUM AND COORDINATE SYSTEM:
HORIZONTAL: FLORIDA STATE PLANE NAD83 (FL83-EF)
VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

GOVERNING STANDARDS & SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, FY2024-25 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE:
https://www.fdot.gov/programmanagement/Implemented/SpecBooks
(EFFECTIVE:JULY2024-2025)

LAND DEVELOPMENT TO CONFORM TO THE CURRENT PORT SAINT LUCIE ENGINEERING DEPARTMENT STANDARDS.

UTILITY CONSTRUCTION TO CONFORM TO THE CURRENT EDITION OF THE CONSTRUCTION STANDARDS AND DETAILS.(EFFECTIVE: 2019 WITH 2024 AMENDMENT)

REVISIONS	
DATE	**COMMENT**
07-08-26	**UPDATE PRELIM ENG PLAN PER REVISED SITE PLAN BASE**
-	-
-	-
-	-
-	-
-	-
-	-

INDEX OF DRAWINGS

C-101	EXISTING CONDITIONS, DEMO, & STORMWATER POLLUTION PREVENTION PLAN
C-102	STORMWATER POLLUTION PREVENTION PLAN DETAILS
C-103, C104	PRELIMINARY PAVING, GRADING & DRAINAGE PLAN
C-105, C106	PRELIMINARY UTILITY PLAN
C-501	PAVING, GRADING & DRAINAGE DETAILS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

DATE
JULY 08, 2026

J.R. HARRISON, P.E. (DATE)
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

PROJECT No. 25-144

REV.

FILE LOCATION: P:\FL\2013\45\ORANGE_AVENUE_DEVELOPMENT_II_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE TOWNHOMES\ENGINEERING\AUTOCAD\DWGS\25-144 PRELIM ENG 8-3-26.DWG, 2026.08.31, 2:30 PM

SHEET 2

SHEET 3

SHEET 4

CYPRESS KNEE, LLC
5500 ORANGE AVE
ZONING: CG
PARCEL ID: 2407-231-0001-000-2

CYPRESS KNEE, LLC
5500 ORANGE AVE
ZONING: PD
PARCEL ID: 2407-221-0001-000-1

EXISTING EAST 1/2
CROSS ACCESS
EASEMENT
ORB 1938, PG 328

PRIMARY CONSTRUCTION ENTRANCE
INSTALL SOIL TRACKING PREVENTION
DEVICE PER DETAIL ON SHEET C-103
PORTION OF CANAL TO BE FILLED AND PIPED

INSTALL PERMIT BOX

INSTALL SILT FENCE PER
DETAIL ON SHEET C-103

20' R.O.W.
DEDICATION

20' FPL EASEMENT
O.R.B. 368, PG. 2043
O.R.B. 368, PG. 2044

ALL EXISTING ONSITE
FURROWS AND DITCHES
TO BE FILLED(TYP.)

INSTALL SILT FENCE PER
DETAIL ON SHEET C-103

PROPOSED LAKE 1
TOB: 3.0 AC (130,755 SF)
CE: 4.66 AC (202,754 SF)

PROPOSED LAKE 2
TOB: 3.92 AC (170,633 SF)
CE: 2.92 AC (127,944 SF)

ALL EXISTING ONSITE
FURROWS AND DITCHES
TO BE FILLED(TYP.)

INSTALL SILT FENCE PER
DETAIL ON SHEET C-103

N.S.L.R.W.C.D. CANAL NO. 44
(RIGHT-OF-WAY WIDTH VARIES)

ORANGE AVENUE
(VARIABLE WIDTH RIGHT-OF-WAY)
F.D.O.T. PROJECT NO. 4040-2-52

BACHDRODT RIVIERA PROPERTY, LLC.
5000 ORANGE AVE
ZONING: HI
PARCEL ID: 2407-244-0001-000-2

STATE OF FLORIDA DOT
SITE ADDRESS TBD
ZONING: CG
PARCEL ID: 2407-241-0001-010-6

CECIL J CAMPBELL & BRENDA A CAMPBELL
4910 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0002-000-6

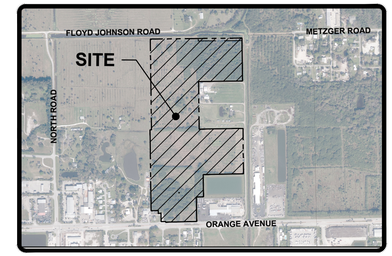
JULIO CESAR GONZALEZ VALVERDE
4914 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0001-000-9

INSTALL SILT FENCE PER
DETAIL ON SHEET C-103

N.S.L.R.W.C.D. CANAL NO. 29
(108.00' RIGHT-OF-WAY)

N 1132367.20'
E 859038.81'

N 1135019.40'
E 859053.20'



VICINITY MAP
SCALE: 1:1,000

DEMUCKING:

1. THE SUBJECT AREA PLUS AN AREA EXTENDING 5 FEET OUTSIDE PROPOSED CONSTRUCTION PERIMETERS SHOULD BE EXCAVATED AS NEEDED TO REMOVE ANY ENCOUNTERED DEEPER DEPOSITS OF ORGANIC SOIL. CARE MUST BE EXERCISED TO AVOID MIXING THE ORGANIC SOILS WITH THE UNDERLYING, SUITABLE GRANULAR MATERIALS. THE ORGANICS ARE TO BE DISPOSED OF AWAY FROM THE BUILDING AREA AS DIRECTED BY THE OWNER.
2. IN GENERAL IT IS DESIRED TO COMPLETE THE EXCAVATION AND BACKFILLING OPERATIONS IN AS SHORT A TIME AS POSSIBLE TO AVOID OPEN EXCAVATIONS. CONSIDERATION SHOULD BE GIVEN TO PROCEEDING WITH THE DEMUCKING/BACKFILLING OPERATION IN STAGES ACROSS THE SITE SO THAT NO DEEP EXCAVATIONS REMAIN OPEN OVERNIGHT. SUCH GRADUAL APPROACH MAY ALSO REDUCE DEWATERING AND SLOPE BRACING NEEDS.
3. IF THE EXCAVATION REACHES AREAS NEAR THE PROPERTY LINES, THE SLOPE OF THE EXCAVATION MAY HAVE TO BE PROTECTED WITH A BRACING SYSTEM. THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE INTEGRITY OF ADJACENT PROPERTY, AND FOR IMPLEMENTING ALL NECESSARY SAFETY MEASURES.
4. ONCE THE BOTTOM OF THE EXCAVATION IS INSPECTED AND APPROVED, BACKFILL CAN BE PLACED TO A HEIGHT OF 2 FEET ABOVE THE WATER TABLE. IF DEWATERING MEASURES APPEAR TO BE NECESSARY ON THIS SITE TO FACILITATE THE REMOVAL OF ANY ORGANIC SOILS, ALLOW THE INSPECTION OF ANY DEMUCKED AREAS, AND ALLOW THE COMPACTION OF THE BACKFILL THE CONTRACTOR SHOULD CONSIDER DEMUCKING AND AT LEAST PARTIALLY BACKFILLING SMALL SEGMENTS OF THE SITE AT A TIME TO REDUCE DEWATERING NEEDS AND DISCHARGE FLOWS.

DENSIFICATION:

1. GRANULAR BACKFILL SHOULD BE PLACED IN THE DRY AND COMPACTED WITH A VIBRATORY ROLLER. ANY SOFT, YIELDING SOILS DETECTED DURING THIS OPERATION SHOULD BE EXCAVATED AND REPLACED WITH CLEAN, COMPACTED BACKFILL THAT CONFORMS WITH THE RECOMMENDATIONS BELOW. SUFFICIENT PASSES SHOULD BE MADE DURING THE COMPACTION OPERATIONS TO PRODUCE DRY DENSITIES NOT LESS THAN 98 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY OF THE COMPACTED MATERIAL TO DEPTHS OF 1 FOOT BELOW THE COMPACTED SURFACE. IN ANY CASE, THE AREA SHOULD RECEIVE NOT LESS THAN 10 OVERLAPPING PASSES, HALF OF THEM IN EACH OF TWO PERPENDICULAR DIRECTIONS, IF POSSIBLE. THE INITIAL PASSES MAY HAVE TO BE GIVEN WITHOUT VIBRATIONS, AND THEN WITH THE LOWEST POSSIBLE VIBRATION SETTING SO AS TO ALLOW THE TRAFFIC OF THE VIBRATING ROLLER. AN ADDITIONAL SIX INCH LIFT MAY BE ADDED TO THE INITIAL LIFT IF THE TRAFFIC OF THE ROLLER IS MADE DIFFICULT BY HIGH PORE PRESSURE CONDITIONS.
2. WE RECOMMEND THAT THE SITE PREPARATION CONTRACTOR CLOSELY MONITOR THE VIBRATIONS PRODUCED DURING THE VIBRATORY ROLLER COMPACTION OPERATIONS SO THAT THEY DO NOT ADVERSELY AFFECT ANY NEARBY STRUCTURES.
3. AFTER THE EXCAVATION AREA HAS BEEN PROOFROLLED AND TESTED TO VERIFY THAT THE DESIRED DRY DENSITY HAS BEEN OBTAINED, THE AREA MAY BE FILLED TO THE DESIRED GRADES. ALL FILL MATERIAL SHOULD CONFORM TO THE RECOMMENDATIONS BELOW. IT SHOULD BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS. EACH LAYER SHOULD BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98 PERCENT OF ITS MODIFIED PROCTOR (ASTM D1557) MAXIMUM VALUE.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
100 0 50 100 200 300
(IN FEET)

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

PROJECT

WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE

STORMWATER
POLLUTION PREVENTION PLAN

LEGEND

	EXISTING PAVEMENT		MITERED END SECTION
	PROPOSED PAVEMENT		DRAINAGE INLET
	EXISTING CONCRETE		VALLEY GUTTER INLET
	PROPOSED CONCRETE		DRAINAGE MANHOLE
	PROPOSED PAVERS	S	PROPOSED SANITARY MANHOLE
	DOUBLE SANITARY SERVICE		DRAINAGE FLOW ARROW
	SINGLE SANITARY SERVICE	#	PARKING STALL COUNT
	SINGLE WATER SERVICE		EXISTING UTILITY POLE
	DOUBLE WATER SERVICE		PROPOSED MUTCD SIGN

J.R. HARRISON, P.E. (DATE)
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
8/31/2026	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
VER	---	---

PROJECT No.
25-144 PRELIM ENG 8-31-26.DWG

DRAWING No. **C-101** REV:

FILE LOCATION: P:\01\25144\5-ORANGE_AVENUE_DEVELOPMENT_3_LLC\25-144 - MOVED 2013\04 LANDMARC BLDG - WEST ORANGE TOWNHOMES\ENGINEERING\AUTOCAD\DWGS\25-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:30 PM

Section 1	Project Name and location information:	PRIVILEGE DEVELOPMENT TOWNHOUSE RESIDENTIAL DADE ROAD & SUNRISE BLVD
Section 2	Describe the nature of the construction activity:	Buildings w/ Parking, Drainage Infrastructure, and Water & Sewer Infrastructure
Section 3	Describe the intended sequence of major soil disturbing activities:	0-2 days, site prep and stabilized construction entrance; 3-6 days, install perimeter sediment and erosion controls; 7-60 days, install stormwater retention basin; 7-10 days, clearing/grubbing over all areas; 11-90 days, site grading; 90-150 days, install storm sewer and utilities; 150-180 days, stabilize site
Section 4	Total area of the site:	56.757 AC. - R.O.W. DEDICATION = 56.409 AC
Section 5	Total area of the site to be disturbed:	56.409 acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	
Section 7	Estimate the drainage area size for each discharge point:	56.409 acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	N27°27'01.34", W80°22'27.90"
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	
	* Prior to clearing, a silt fence (trenched 6 inches deep and backfilled on the uphill side), shall be installed around the perimeter of the site. 2 rock entrance roads (that are 60ft long with a 6 inch depth of FDOT #1 stone and lined with filter fabric) shall be constructed to minimize the effects of truck traffic and sedimentation tracking both on and off of the site. There will be only one construction entrance at this site. * After the initial site grading work, all proposed inlet(s) / outfall, once installed, shall be protected from erosion and sediment runoff by the use of filter fabric and properly installed inlet filters. Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with sod or other permanent stabilization methods (if other methods are used, this SWPPP will be modified) no later than 7 days after the last construction activity. Seeding shall be the same as in temporary seeding. * All installation shall be commenced as depicted on the attached site map and installation "typicals" sheet.	
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
	* Temporary seeding shall be rye grass or other appropriate ground covers depending upon season of installation that is applied at manufacturer's recommendations to any disturbed areas that are inactive more than 7 days. * Sod shall be used to stabilize the sides of the detention basins. * Filter fabric shall be placed under the rock entrance / exit. * Vegetative buffers shall be left undisturbed along the boundaries of the property, with the exception of exotic vegetation removal.	
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
	* A silt fence (with the same installation as indicated under the Best Management Practices heading) shall be placed around the entire perimeter of each construction phase. * A wet detention basin shall be constructed which may be used as a temporary sediment basin (prior to being connected to a discharge structure) if needed. Care shall be taken to assure the removal of accumulated fine sediments and that the excessive compaction of soil by construction machinery is avoided. * Inlets / Outfalls shall be protected with filter fabric and properly installed inlet filters (with the same installation as indicated under the Best Management Practices heading).	
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
	No temporary sedimentation basins are proposed. The detention basins (prior to being connected to a discharge structure) may be used as a temporary sediment basin if needed.	
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
	* A stormwater detention basin shall be constructed per ERP permit and all disturbed areas shall be grassed.	

Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff.
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.	
	Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent: • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.	
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.	
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	It is expected that the following non-stormwater discharges may occur from the site during construction period: wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). Dewatering shall be done in accordance with the requirements of the SFWMD Water Use Permit. If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Turbid water from the stormwater pond shall not be pumped directly into the receiving waters. Any pumped water from the stormwater pond shall be treated so as to not allow a discharge of polluted stormwater. Treatment can include silt fences, settling ponds, the proper use of flocculating agents, or other appropriate means.	
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:	
	"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."	

Section 22	Name	Title	Company Name, Address and Phone Number	Date

DESCRIPTION	FOUND (YES/NO)	AGENCY CONTACT INFORMATION	MANAGEMENT PLAN (YES/NO)	RELOCATION PLAN (YES/NO)
WETLANDS	YES	---	---	---
RARE HABITAT	NO	---	---	---
THREATENED SPECIES	NO	---	---	---
ENDANGERED SPECIES	NO	---	---	---
SPECIES OF SPECIAL CONCERN	NO	---	---	---
INVASIVE/EXOTIC VEGETATION	YES	---	---	---

REFER TO ENVIRONMENTAL ASSESSMENT COMPLETED BY EDC (A DIVISION OF HALEY WARD, INC) ON 02-14-25



EXCAVATION WARNING SIGN DETAIL

N.T.S.

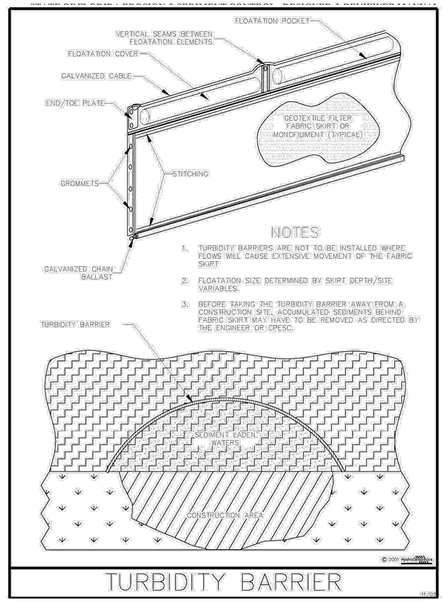


Figure V-44: Illustration of a Turbidity Barrier Curtain

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

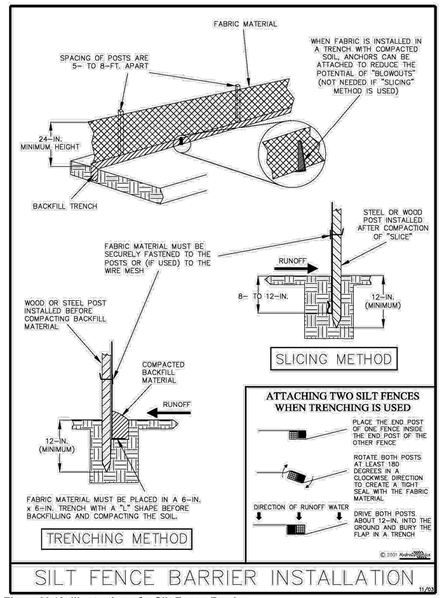


Figure V-40: Illustration of a Silt Fence Barrier

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

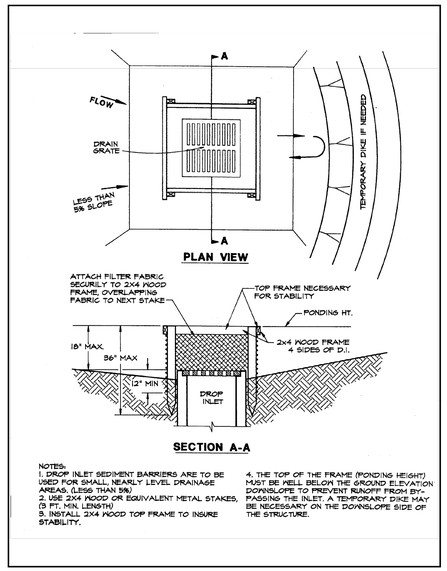


Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier

Source: Erosion Draw

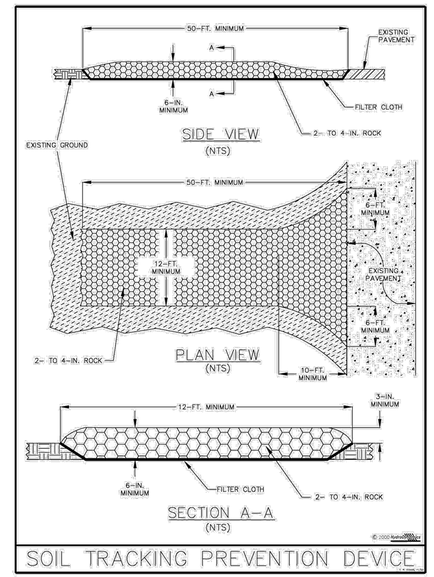


Figure V-52: Illustration of a Soil Tracking Prevention Device

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE

STORMWATER POLLUTION PREVENTION PLAN DETAILS

DATE	SCALE
8/31/2026	AS SHOWN

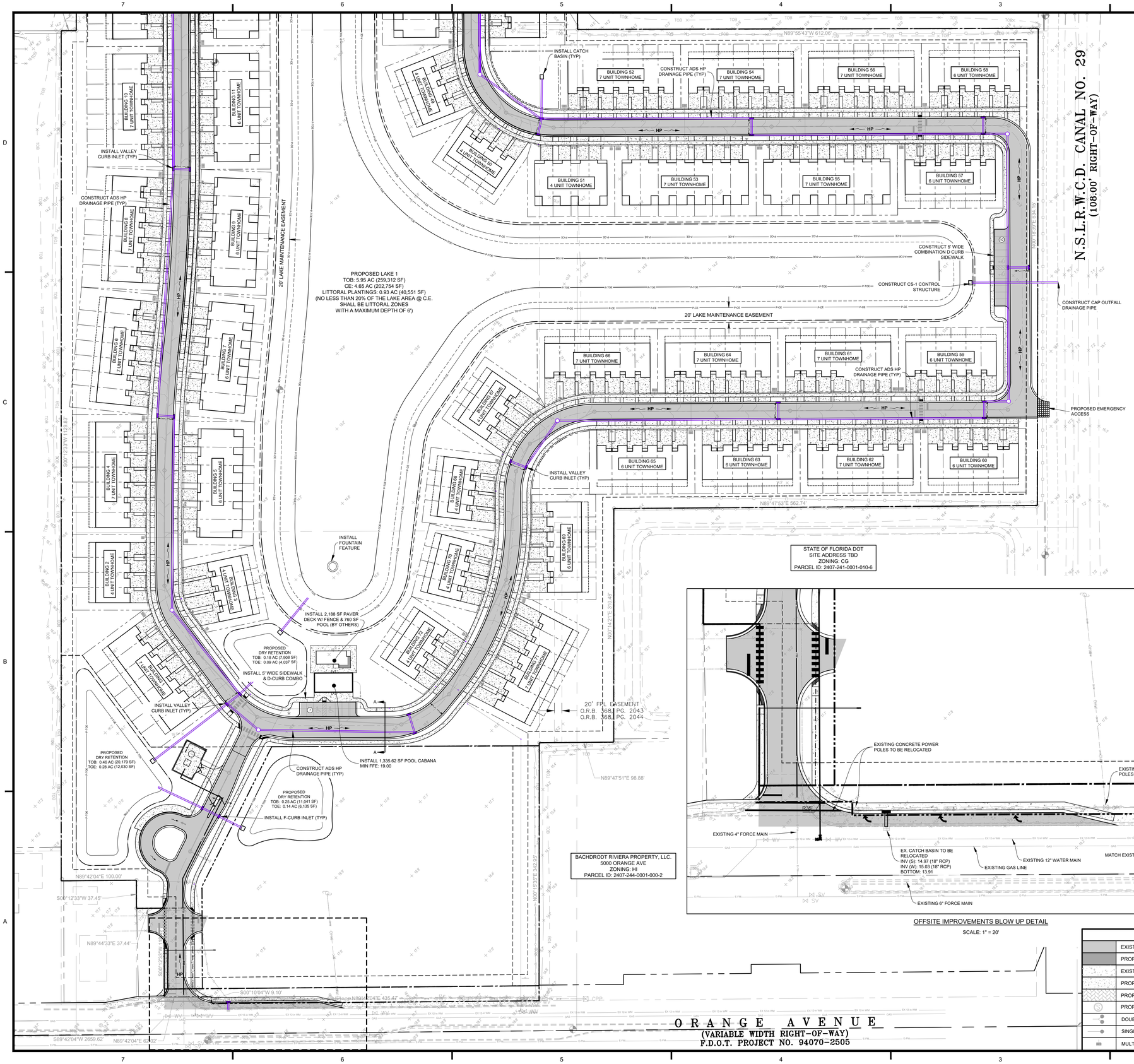
DRAWN BY	DESIGNED BY	CHECKED BY
VER	---	---

PROJECT No. 25-144 PRELIM ENG 8-31-26.DWG

DRAWING No. **C-102** REV.

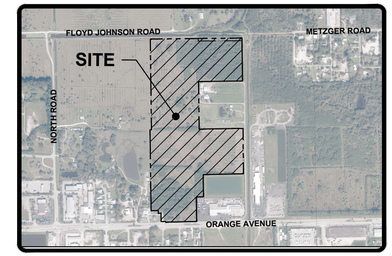
J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

FILE LOCATION: P:\FLI\2013\45-ORANGE_AVENUE_DEVELOPMENT_2_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE_TOWNHOMES\ENGINEERING\AUTOCAD\DWGS\25-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:30 PM



OFFSITE IMPROVEMENTS BLOW UP DETAIL

SCALE: 1" = 20'



VICINITY MAP

SCALE: 1:1,000

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 119 AND 125 AND THE STANDARDS OF SPECIFICATION. SSE NOTE IN CITY OF FORT PIERCE CODE 125-313(a)(3)(c)(14)(vi).
3. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
4. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
5. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
6. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
7. SOD ALL DISTURBED AREAS.
8. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY
9. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
10. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
11. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0159J
CITY OF FT PIERCE
120286

MIN. PAVEMENT: 16.50 NAVD
MIN. FFE: 18.50 NAVD
MIN. PERIMETER BERM: 17.00 NAVD

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

LEGEND

	EXISTING PAVEMENT		MITERED END SECTION
	PROPOSED PAVEMENT		DRAINAGE INLET
	EXISTING CONCRETE		VALLEY GUTTER INLET
	PROPOSED CONCRETE		DRAINAGE MANHOLE
	PROPOSED PAVERS		DRAINAGE FLOW ARROW
S	PROPOSED SANITARY MANHOLE	#	PARKING STALL COUNT
	DOUBLE SANITARY SERVICE		EXISTING UTILITY POLE
	SINGLE SANITARY SERVICE		PROPOSED MUTCD SIGN
	MULTI-WATER METER BANK		

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
1	2026.07.08	UPDATE PRELIM ENG PLAN PER REVISED SITE PLAN BASE	JLW	JRH

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE

PRELIMINARY
PAVING, GRADING, & DRAINAGE PLAN

J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
8/31/2026	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
VER	---	---

PROJECT No. 25-144 PRELIM ENG 8-31-26.DWG

DRAWING No. **C-103** REV. **1**

FILE LOCATION: P:\FLO\13340-ORANGE_AVENUE_DEVELOPMENT_3_LLC\25-144 - MOVED 2013340 LANDMARC BLDG - WEST ORANGE TOWNHOMES\ENGINEERING\AUTOCAD\DWGS\25-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:30 PM

N.S.L.R.W.C.D. CANAL NO. 44
(RIGHT-OF-WAY WIDTH VARIES)

N89°33'35"W 1280.37'

N.S.L.R.W.C.D. CANAL NO. 29
(108.00' RIGHT-OF-WAY)

N00°18'58"E 660.72'

INSTALL CATCH BASIN (TYP)

CONSTRUCT ADS HP DRAINAGE PIPE (TYP)

INSTALL VALLEY CURB INLET (TYP)

INSTALL 5' WIDE SIDEWALK & D-CURB COMBO

20' LAKE MAINTENANCE EASEMENT

PROPOSED LAKE 2
TOB: 3.92 AC (170,632 SF)
CE: 2.93 AC (127,844 SF)
LITTORAL PLANTINGS: 0.59 AC (25,569 SF)
(NO LESS THAN 20% OF THE LAKE AREA @ C.E. SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

CONSTRUCT CS-4 CONTROL STRUCTURE

PROPOSED DRY RETENTION
TOB: 0.45 AC. (19,720 S.F.)
TOE: 0.28 AC. (12,150 S.F.)

INSTALL 5' WIDE SIDEWALK & D-CURB COMBO

R100.00'

INSTALL DRAINAGE MANHOLE (TYP)

S89°44'38"E 612.65'

CONSTRUCT ADS HP DRAINAGE PIPE (TYP)

INSTALL VALLEY CURB INLET (TYP)

CONSTRUCT CS-3 CONTROL STRUCTURE

JULIO CESAR GONZALEZ VALVERDE
4914 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0001-000-9

INSTALL 6' SIDEWALK & D-CURB COMBO

PROPOSED DRY RETENTION
TOB: 0.57 AC (24,620 SF)
TOE: 0.39 AC (16,995 SF)

CONSTRUCT CS-2 CONTROL STRUCTURE

PROPOSED MITEREND END SECTION(TYP.)

CECIL J CAMPBELL & BRENDA A CAMPBELL
4910 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0002-000-6

N89°55'45"W 612.66'

N00°18'58"E 660.72'

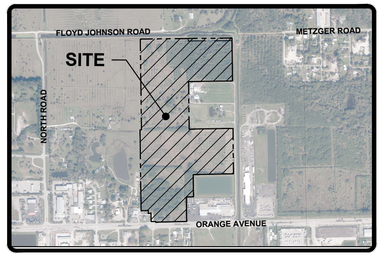
N00°12'51"W 1272.27'

N 1354.71'

500'

BUILDING 24 7 UNIT TOWNHOME
BUILDING 26 7 UNIT TOWNHOME
BUILDING 28 7 UNIT TOWNHOME
BUILDING 30 7 UNIT TOWNHOME
BUILDING 32 7 UNIT TOWNHOME
BUILDING 34 7 UNIT TOWNHOME
BUILDING 36 5 UNIT TOWNHOME
BUILDING 23 7 UNIT TOWNHOME
BUILDING 25 4 UNIT TOWNHOME
BUILDING 27 7 UNIT TOWNHOME
BUILDING 29 7 UNIT TOWNHOME
BUILDING 31 7 UNIT TOWNHOME
BUILDING 33 7 UNIT TOWNHOME
BUILDING 35 4 UNIT TOWNHOME
BUILDING 21 7 UNIT TOWNHOME
BUILDING 22 7 UNIT TOWNHOME
BUILDING 40 6 UNIT TOWNHOME
BUILDING 39 7 UNIT TOWNHOME
BUILDING 38 7 UNIT TOWNHOME
BUILDING 37 7 UNIT TOWNHOME
BUILDING 19 7 UNIT TOWNHOME
BUILDING 20 6 UNIT TOWNHOME
BUILDING 41 5 UNIT TOWNHOME
BUILDING 42 7 UNIT TOWNHOME
BUILDING 17 7 UNIT TOWNHOME
BUILDING 18 4 UNIT TOWNHOME
BUILDING 43 6 UNIT TOWNHOME
BUILDING 44 6 UNIT TOWNHOME
BUILDING 15 5 UNIT TOWNHOME
BUILDING 16 5 UNIT TOWNHOME
BUILDING 13 8 UNIT TOWNHOME
BUILDING 14 6 UNIT TOWNHOME
BUILDING 45 6 UNIT TOWNHOME
BUILDING 46 8 UNIT TOWNHOME
BUILDING 11 7 UNIT TOWNHOME
BUILDING 12 6 UNIT TOWNHOME
BUILDING 47 6 UNIT TOWNHOME
BUILDING 48 7 UNIT TOWNHOME

HP



VICINITY MAP
SCALE: 1:1,000

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 119 AND 125 AND THE STANDARDS OF SPECIFICATION. SSE NOTE IN CITY OF FORT PIERCE CODE 125-313(a)(3)(c)(14)(vi).
3. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
4. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
5. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
6. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
7. SOD ALL DISTURBED AREAS.
8. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
9. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
10. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
11. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0159J
CITY OF FT PIERCE
120286

MIN. PAVEMENT: 16.50 NAVD
MIN. FFE: 18.50 NAVD
MIN. PERIMETER BERM: 17.00 NAVD

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
60 0 30 60 120 180
(IN FEET)

LEGEND

	EXISTING PAVEMENT		MITERED END SECTION
	PROPOSED PAVEMENT		DRAINAGE INLET
	EXISTING CONCRETE		VALLEY GUTTER INLET
	PROPOSED CONCRETE		DRAINAGE MANHOLE
	PROPOSED PAVERS		DRAINAGE FLOW ARROW
	PROPOSED SANITARY MANHOLE	(#)	PARKING STALL COUNT
	DOUBLE SANITARY SERVICE		EXISTING UTILITY POLE
	SINGLE SANITARY SERVICE		PROPOSED MUTCD SIGN
	MULTI-WATER METER BANK		

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

REV.	DATE	DESCRIPTION	BY	CHK
1	2026.07.08	UPDATE PRELIM ENG PLAN PER REVISED SITE PLAN BASE	AJW	JRH

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE
PRELIMINARY
PAVING, GRADING, & DRAINAGE PLAN

J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
8/31/2026	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
VER	---	---

PROJECT No.
25-144 PRELIM ENG 8-31-26.DWG

DRAWING No. C-104
REV. 1

FILE LOCATION: P:\PL\2013\45-ORANGE_AVENUE_DEVELOPMENT_II_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE TOWNHOME\ENGINEERING\AUTOCAD\DWG\9\25-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:30 PM

SHEET 3

INSTALL FIRE HYDRANT ASSEMBLY 4 BSP #5

500' FIRE HYDRANT COVERAGE RADIUS

INSTALL SANITARY MANHOLE(TYP.)

INSTALL FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4

INSTALL 8" SDR-26 SANITARY SEWER MAIN (TYP)

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL FIRE HYDRANT ASSEMBLY 3 BSP #4

INSTALL 6" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

CONSTRUCT CAP OUTFALL DRAINAGE PIPE

INSTALL FIRE HYDRANT ASSEMBLY 2 BSP #3

INSTALL 2,188 SF PAVER DECK W/ FENCE & 760 SF POOL (BY OTHERS)

INSTALL 2" DR-18 POLY W.S. TO CONNECT TO POOL CABANA

INSTALL LIFT STATION IN 30'x30' EASEMENT PER FPUA LIFT STATION DETAILS

INSTALL 1,335.62 SF POOL CABANA MIN FFE: 19.00

INSTALL 6" SDR-26 SANITARY SEWER SERVICE TO CONNECT TO POOL CABANA

INSTALL FIRE HYDRANT ASSEMBLY 1 BSP #2

INSTALL 4" FORCE MAIN

INSTALL SANITARY STUB OUT FOR FUTURE CONNECTION

EAST 1/2 CROSS ACCESS EASEMENT ORB 1938, PG 328

APPROX. LOCATION. CONTRACTOR TO FIELD VERIFY. CONNECT 8" WATER MAIN TO EX. 12" WATER MAIN

CONNECT 4" FORCE MAIN TO EX. 4" FORCE MAIN

EXISTING 12" WATER MAIN

EXISTING 6" FORCE MAIN

BSP #1

EX. CATCH BASIN TO BE RELOCATED
INV (S): 14.97 (18" RCP)
INV (W): 15.03 (18" RCP)
BOTTOM: 13.91

INSTALL FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

20' FPL EASEMENT
O.R.B. 368, PG. 2043
O.R.B. 368, PG. 2044

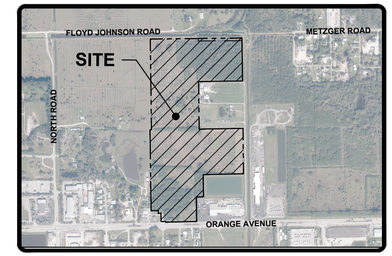
20' UTILITY EASEMENT

STATE OF FLORIDA DOT
SITE ADDRESS TBD
ZONING: CG
PARCEL ID: 2407-241-0001-010-6

BACHDRODT RIVIERA PROPERTY, LLC.
5000 ORANGE AVE
ZONING: HI
PARCEL ID: 2407-244-0001-000-2

N.S.L.R.W.C.D. CANAL NO. 29
(108.00' RIGHT-OF-WAY)

ORANGE AVENUE
(VARIABLE WIDTH RIGHT-OF-WAY)
F.D.O.T. PROJECT NO. 94070-2505



VICINITY MAP
SCALE: 1:1,000

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
10. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0159J
CITY OF FT PIERCE
120286

MIN. PAVEMENT: 16.50 NAVD
MIN. FFE: 18.50 NAVD
MIN. PERIMETER BERM: 17.00 NAVD

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
60 0 30 60 120 180
(IN FEET)

REV.	DATE	DESCRIPTION	BY	CHK
1	2026.07.08	UPDATE PRELIM ENG PLAN PER REVISED SITE PLAN BASE	JLW	JRH

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

811 Know what's below. Call before you dig. It's fast. It's free. It's the law. www.callsunshine.com

PROJECT
WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE
OVERALL UTILITY PLAN

LEGEND

EXISTING PAVEMENT		MITERED END SECTION	
PROPOSED PAVEMENT		DRAINAGE INLET	
EXISTING CONCRETE		VALLEY GUTTER INLET	
PROPOSED CONCRETE		DRAINAGE MANHOLE	
PROPOSED PAVERS	#	PARKING STALL COUNT	
PROPOSED SANITARY MANHOLE	S	EXISTING UTILITY POLE	
DOUBLE SANITARY SERVICE		PROPOSED MUTCD SIGN	
SINGLE SANITARY SERVICE		PROPOSED SANITARY SEWER	
MULTI-WATER METER BANK		PROPOSED WATER MAIN	

J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE 8/31/2026 | SCALE AS SHOWN
DRAWN BY --- | DESIGNED BY --- | CHECKED BY ---
PROJECT No. 25-144 PRELIM ENG 8-31-26.DWG
DRAWING No. C-105 | REV. 1

FILE LOCATION: P:\PLI\2013\45-ORANGE_AVENUE_DEVELOPMENT_II_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE TOWNHOMES\ENGINEERING\AUTOCAD\DWG\925-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:31 PM

N.S.L.R.W.C.D. CANAL NO. 44
(RIGHT-OF-WAY WIDTH VARIES)

N89°33'35"W 1280.37'

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4

INSTALL SANITARY SEWER MANHOLE(TYP.)

BUILDING 24 7 UNIT TOWNHOME
BUILDING 26 7 UNIT TOWNHOME
BUILDING 28 7 UNIT TOWNHOME
BUILDING 30 7 UNIT TOWNHOME
BUILDING 32 7 UNIT TOWNHOME
BUILDING 34 7 UNIT TOWNHOME
BUILDING 36 5 UNIT TOWNHOME
BUILDING 23 7 UNIT TOWNHOME
BUILDING 25 4 UNIT TOWNHOME
BUILDING 27 7 UNIT TOWNHOME
BUILDING 29 7 UNIT TOWNHOME
BUILDING 31 7 UNIT TOWNHOME
BUILDING 33 7 UNIT TOWNHOME
BUILDING 35 4 UNIT TOWNHOME
BUILDING 21 7 UNIT TOWNHOME
BUILDING 22 7 UNIT TOWNHOME
BUILDING 19 7 UNIT TOWNHOME
BUILDING 20 6 UNIT TOWNHOME
BUILDING 17 7 UNIT TOWNHOME
BUILDING 18 4 UNIT TOWNHOME
BUILDING 15 5 UNIT TOWNHOME
BUILDING 16 5 UNIT TOWNHOME
BUILDING 40 6 UNIT TOWNHOME
BUILDING 39 7 UNIT TOWNHOME
BUILDING 38 7 UNIT TOWNHOME
BUILDING 37 7 UNIT TOWNHOME
BUILDING 41 5 UNIT TOWNHOME
BUILDING 42 7 UNIT TOWNHOME
BUILDING 43 6 UNIT TOWNHOME
BUILDING 44 6 UNIT TOWNHOME
BUILDING 13 8 UNIT TOWNHOME
BUILDING 14 6 UNIT TOWNHOME
BUILDING 45 6 UNIT TOWNHOME
BUILDING 46 8 UNIT TOWNHOME
BUILDING 11 7 UNIT TOWNHOME
BUILDING 12 8 UNIT TOWNHOME
BUILDING 47 6 UNIT TOWNHOME
BUILDING 48 7 UNIT TOWNHOME

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL FIRE HYDRANT ASSEMBLY 7 BSP #8

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

500' FIRE HYDRANT COVERAGE RADIUS

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

INSTALL FIRE HYDRANT ASSEMBLY 8 BSP #9

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

INSTALL FIRE HYDRANT ASSEMBLY 6 BSP #7

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4

INSTALL DRAINAGE MANHOLE (TYP)

INSTALL SANITARY SEWER MANHOLE(TYP.)

INSTALL FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

INSTALL 8" SDR-26 SANITARY SEWER MAIN (TYP)

INSTALL 8" SDR-26 SANITARY SEWER MAIN (TYP)

INSTALL 8" C-900 PVC WATER MAIN (TYP) (36" MIN COVER)

INSTALL SANITARY SEWER MANHOLE(TYP.)

INSTALL 8" SDR-26 SANITARY SEWER MAIN (TYP)

S89°44'38"E 612.65'

N89°55'45"W 612.66'

PHASE 2
PHASE 1

INSTALL FIRE HYDRANT ASSEMBLY 5 BSP #6

INSTALL SANITARY SEWER MANHOLE(TYP.)

INSTALL 8" SDR-26 SANITARY SEWER MAIN (TYP)

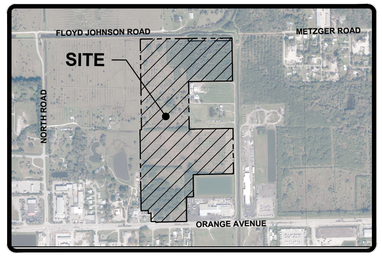
JULIO CESAR GONZALEZ VALVERDE
4914 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0001-000-9

CECIL J CAMPBELL & BRENDA A CAMPBELL
4910 ORANGE AVE
ZONING: RS-2
PARCEL ID: 2407-214-0002-000-6

N.S.L.R.W.C.D. CANAL NO. 29
(108.00' RIGHT-OF-WAY)

N00°18'58"E 660.72'

NOT TO SCALE



VICINITY MAP
SCALE: 1:1,000

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
10. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0159J
CITY OF FT PIERCE
120286

MIN. PAVEMENT: 16.50 NAVD
MIN. FFE: 18.50 NAVD
MIN. PERIMETER BERM: 17.00 NAVD

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
60 0 30 60 120 180
(IN FEET)

LEGEND

	EXISTING PAVEMENT		MITERED END SECTION
	PROPOSED PAVEMENT		DRAINAGE INLET
	EXISTING CONCRETE		VALLEY GUTTER INLET
	PROPOSED CONCRETE		DRAINAGE MANHOLE
	PROPOSED PAVERS	#	PARKING STALL COUNT
S	PROPOSED SANITARY MANHOLE		EXISTING UTILITY POLE
	DOUBLE SANITARY SERVICE		PROPOSED MUTCD SIGN
	SINGLE SANITARY SERVICE		PROPOSED SANITARY SEWER
	MULTI-WATER METER BANK		PROPOSED WATER MAIN

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK
1	2026.07.08	UPDATE PRELIM ENG PLAN PER REVISED SITE PLAN BASE	JLW	JRH

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE
OVERALL UTILITY PLAN

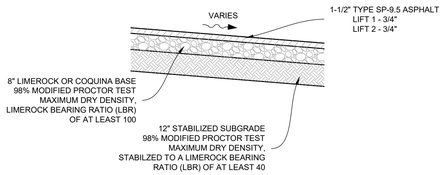
J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE 8/31/2026 | SCALE AS SHOWN
DRAWN BY --- | DESIGNED BY --- | CHECKED BY ---
PROJECT No. 25-144 PRELIM ENG 8-31-26.DWG
DRAWING No. C-106 | REV. 1

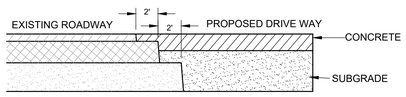
FILE LOCATION: P:\PJ\2013\45-ORANGE_AVENUE_DEVELOPMENT_3_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE TOWNHOME\ENGINEERING\AUTOCAD\DWGS\25-144 PRELIM ENG 8-31-26.DWG, 2026.08.31, 2:31 PM

SPACING OR REQUIRED ROADWAY / PARKING AREA TESTS						
ITEMS TO BE TESTED	DENSITY		L.B.R.		THICKNESS	
	MAX. SPACING		MAX. SPACING		MAX. SPACING	
	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.
COMPACTED OR STABILIZED SUBGRADE	300	10,000	300	10,000	300	10,000
LIMEROCK BASE	300	10,000	300	10,000	300	10,000
SHELLROCK BASE	300	10,000	300	10,000	300	10,000
ASPHALT	—	—	—	—	PER INSP.	PER INSP.

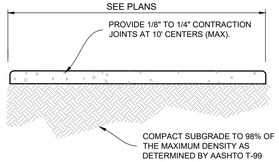
NOTE: ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 12" INSIDE THE LEFT EDGE OF THE ITEM TESTED, TO THE CENTER, TO A POINT 12" INSIDE



TYPICAL RIGID PAVEMENT SECTION
NTS

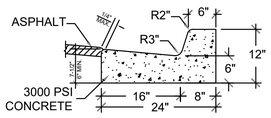


MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS

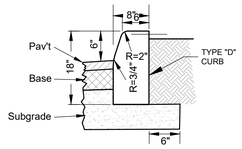


NOTES:
1. USE 3,000 P.S.I. CONCRETE AT 28 DAYS FOR SIDEWALK CONSTRUCTION.
2. SIDEWALK THICKNESS TO BE INCREASED TO 6" THICK AT DRIVEWAY LOCATIONS.
3. ALL REPAIRS REQUIRED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED 10' MINIMUM TO NEXT FULL JOINT.
4. ALL SIDEWALK WITHIN FDOT RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD PLANS 522-001.

TYPICAL SIDEWALK DETAIL
NTS

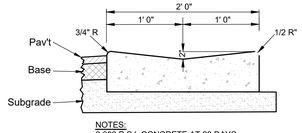


TYPE "F" CURB DETAIL
NTS



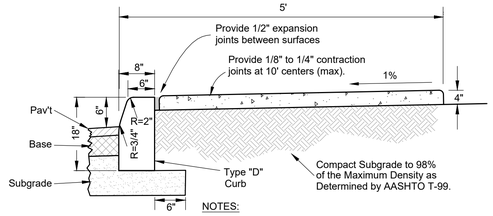
1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.
3. Type "D" Curb to be constructed in accordance with FDOT Index #522-001.

TYPE "D" CURB DETAIL
NTS



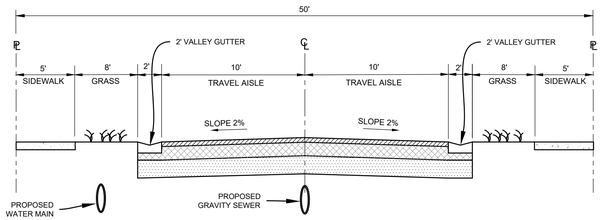
NOTES:
3,000 P.S.I. CONCRETE AT 28 DAYS

VALLEY GUTTER DETAIL
NTS

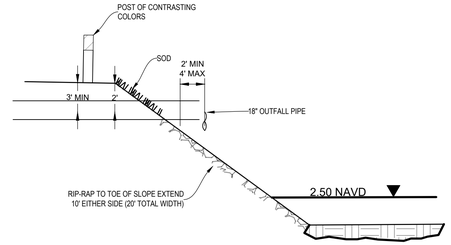


NOTES:
1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.

TYPE "D" CURB & SIDEWALK COMBINATION
NTS

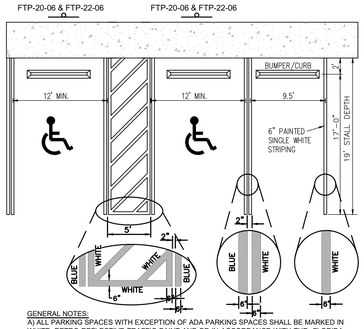


TYPICAL 50' ROADWAY SECTION
NTS



NSLRWCD TYPICAL CONNECTION DETAIL
NTS

NOTE: ALL NSLRWCD CANAL SLOPES SHALL BE SODDED EXCEPT FOR RIP-RAP AS SHOWN ON THIS DETAIL.



GENERAL NOTES:
A) ALL PARKING SPACES WITH EXCEPTION OF ADA PARKING SPACES SHALL BE MARKED IN WHITE. RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,2010 SECTION 710.

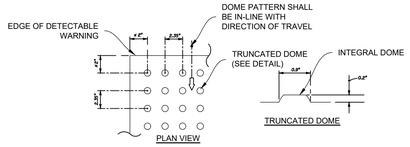
B) ALL ADA PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, FY 2025-26.

C) ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.



NOTES:
1. FTP 20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP 21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP 22-06 IS SUPPLEMENTAL PANEL FOR THE FTP 20-06 & FTP 21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "$250 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

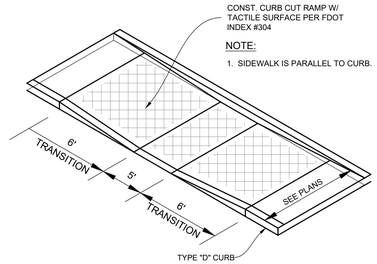
HANDICAP AND TYPICAL PARKING DETAIL
NTS



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB

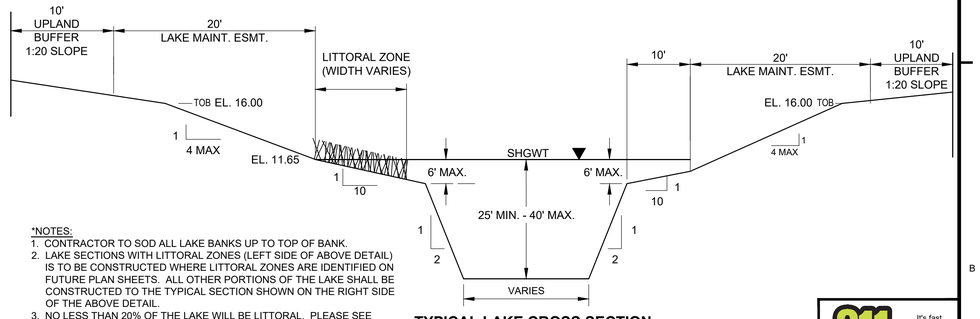
NOTES:
REFER TO FDOT INDEX 304 FOR FURTHER DETAILS
CAST IN PLACE

DETECTABLE WARNING SURFACE DETAIL
NTS



NOTE:
1. SIDEWALK IS PARALLEL TO CURB.

ADA RAMP DETAIL
NTS



*NOTES:
1. CONTRACTOR TO SOD ALL LAKE BANKS UP TO TOP OF BANK.
2. LAKE SECTIONS WITH LITTORAL ZONES (LEFT SIDE OF ABOVE DETAIL) IS TO BE CONSTRUCTED WHERE LITTORAL ZONES ARE IDENTIFIED ON FUTURE PLAN SHEETS. ALL OTHER PORTIONS OF THE LAKE SHALL BE CONSTRUCTED TO THE TYPICAL SECTION SHOWN ON THE RIGHT SIDE OF THE ABOVE DETAIL.
3. NO LESS THAN 20% OF THE LAKE WILL BE LITTORAL. PLEASE SEE ASSOCIATED LANDSCAPE PLANS FOR PLANTING DETAILS

TYPICAL LAKE CROSS SECTION
NOT TO SCALE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10486 SW Village Center Drive
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
WEST ORANGE PD
CITY OF FORT PIERCE, FLORIDA

TITLE
PAVING, GRADING & DRAINAGE DETAILS

J.R. HARRISON, P.E.
#82270
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

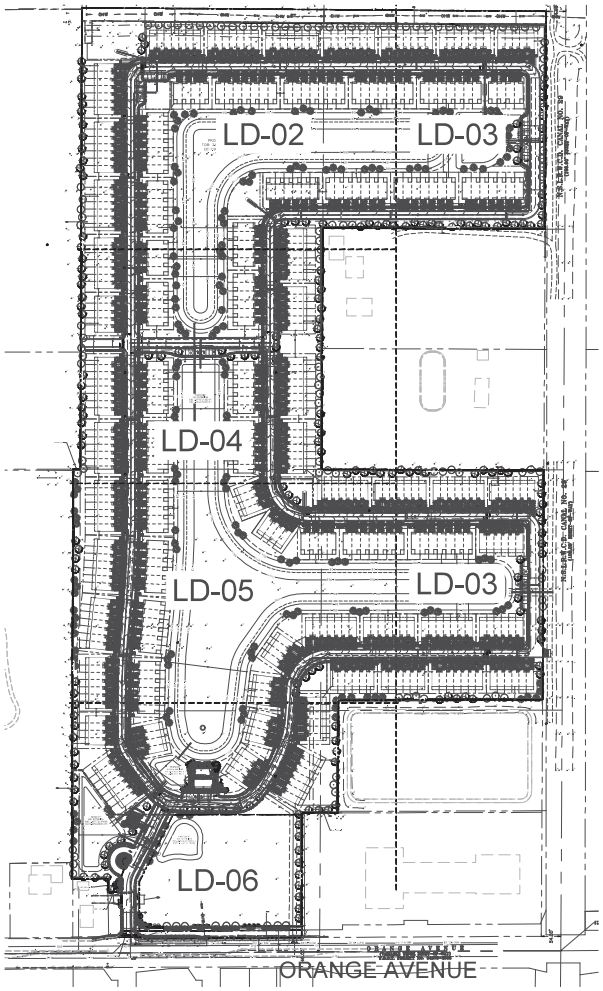
DATE	SCALE
2026.03.09	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
---	---	---

PROJECT No.
25-144 PRELIM ENG 8-31-26.DWG

DRAWING No. **C-501** REV:

FILE LOCATION: P:\2013\25-ORANGE_AVENUE_DEVELOPMENT_II_LLC\25-144 - MOVED 2013\45 LANDMARC BLDG - WEST ORANGE TOWNHOME\ENGINEERING\AUTOCAD\DWG\9\25-144 PRELIM ENG 8-31-26.DWG, 2026 08:31, 2:31 PM



Landscape Legend:

Symb	Qty	Tag	WU	Name (N) Native (F) Flowering Tree (E) Evergreen
Trees:				
	110	AR		Red Maple (N)(F) Acer rubrum, FG, 12' Ht, 5' Spr., 2.5" DBH
	74	IC		Dahoon Holly (N)(E) Ilex cassine, FG, 12' ht, 5' Spr., 2.5" DBH
	10	LI		Crape Myrtle (F) Lagerstromia indica 'Muscogee', FG, 12' Ht, 5' Spr., 2.5" DBH, Multi
	7	LI1		Crape Myrtle (F) Lagerstromia indica 'Tuscarora', FG, 12' Ht, 5' Spr., 2.5" DBH, Multi
	194	QV		Live Oak (N)(E) Quercus virginiana, FG, 12' Ht, 5' Spr., 2.5" DBH
	24	SP		Cabbage Palm (N) (3:1) Sabal palmetto, FG, 16-24' OA Ht
	177	TD		Bald Cypress Taxodium distichum, FG, 12' ht, 5' spr., 2.5" DBH
Accents:				
	12	CRI		Crinum Lily Crinum asiaticum 'Queen Emma, 7 gal, 36" oc
Shrubs:				
	837	FOR		Florida Privet (N) Forestiera segregata, 3 gal, 24" ht, 36" o.c.
	344	HAM		Dwarf Firebush (N)(F) Hamelis patens 'Compacta', 3 gal, 18" ht, 36" o.c.
	26	HIB		Hibiscus Hibiscus rosa-sinensis, Red, 3 gal, 18" ht,36" oc
	92	MUH		Muhly Grass Muhlenbergia capillaris, 3 gal, 36" oc
	806	MYR		Simpson's Stopper (N) (E) Myrcianthes fragrans, 3 gal, 24"x18", 36" o.c.
	216	SPA		Sand Cordgrass (N) Spartina patens, 3 gal, 36" oc
	28	TRI		Dwarf Fakahatchee Grass (N) Tripsacum floridana, 3 gal, 36" oc
	892	VIO		Walters Viburnum Viburnum obovatum 3 gal, 24" ht, 36" o.c.
	134	VIB		Dwarf Walters Viburnum (N) Viburnum obovatum 'Mrs Schiller', 3 gal, 24" ht, 24" o.c.
	252	ZAM		Coontie (N)(E) Zamia pumila, 3 gal, 36" oc
Groundcover:				
	70	LAN		Pineland Lantana (N) Lantana depressa, 1 gal, 6"x12", 36" o.c.
	198	LIR		Liriope Liriope muscari 'Emerald Godess', 1 gal, 12" oc
	98	PEN		Pentas Pentas lanceolata 'New Look Pink', 1 gal, 6" ht, 12" oc.
	XX sf	SOD		St. Augustine 'BitterBlue' Stenotaphrum secundatum 'Bitter Blue', weed free, laid tight

General Notes:

1. *No landscape materials other than sod grasses may be planted within a 5' radius maintenance area of any underground utility such as water meters, backflow devices, fire hydrants, sanitary sewer cleanouts, and manholes, air release valves, etc.*
2. *No Trees may be planted less than 10' from any underground utility. Minimum distance from storm sewer lines is 5' with root barrier.*
3. *No landscaping shall be planted in a manner that would adversely affect utility easements.*
4. *Sod around buildings to be St. Augustine 'Bitter Blue' sod. Sod to be weed and disease free and laid tight. All areas within in preservation areas to be seeded with Argentine Bahia grass.*
5. *Not trees to be placed within 6' of any hard surface unless root barrier will be installed along the edge of the hard surface. Root barrier to extend at least 5' in either direction from the center of the tree trunk. Refer to Sheet LD-05 for installation details.*
6. *All landscape areas to receive automatic irrigation. Irrigation to provide 100% coverage and 50% overlap. Water source to be a new well and pump.*

Landscape Data: Perimeter Buffer

					Shade Trees: 1/100 SF							Shrubs					
					Required	Provided						Required	Provided				
Perimeter	Length	Drive way	Buffer Width	Total SF		AR	LI (2:1)	LI1 (2:1)	QV	SP (3:1)	TD	Total		FOR	HAM	MYR	VIO	Total
N	1103		10	11030	37	37						37	368	80	40	79	160	359
W	2464		10	24640	82	17			44		20	81	821	204	60	293	240	797
S	497	26	10	4710	16	9	6	4	4	3		19	157	34	51		73	158
E	4406	32	10	43740	146	47			97		13	157	1458	519	100	382	419	1420
				Total	280	110	3	2	145	1	33	294	2804	837	251	754	892	2734

VUA Area

		Shade Trees: 1/100 SF						
Total Area		Required	Provided					
SF	225,559		IC	LI (2:1)	LI1 (2:1)	QV	SP (3:1)	TD	Total
Landscape Area required: 1 SF/15 SF VUA			74		3	49	20	144	
SF	15,037	150	74	0	1	49	7	144	274

Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060

72 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF AT&T CALL 1-800-252-1133

N
W E
S
Graphic Scale
Scale: 1" = 120'

REDTAIL LDA
772.742.1199
sabine@redtailLDA.com

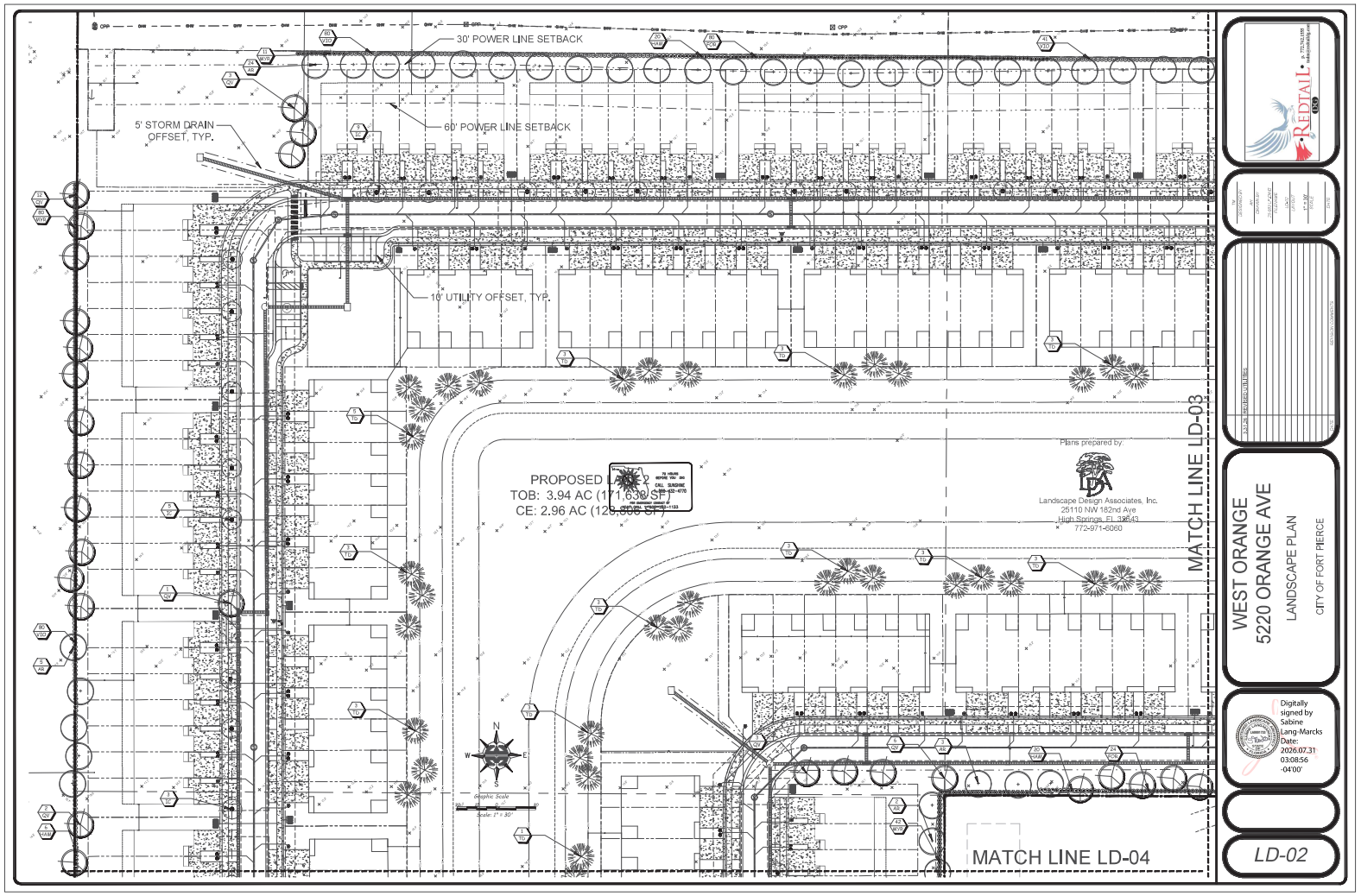
TM	2026.03.31	AMY	
21-081-LDCRE		2026.03.31	
DRAWN		CHECKED	
AMY		SMM	
SCALE		1" = 60'	
DATE		2026.3	

03.31.26	PER DRC COMMENTS

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

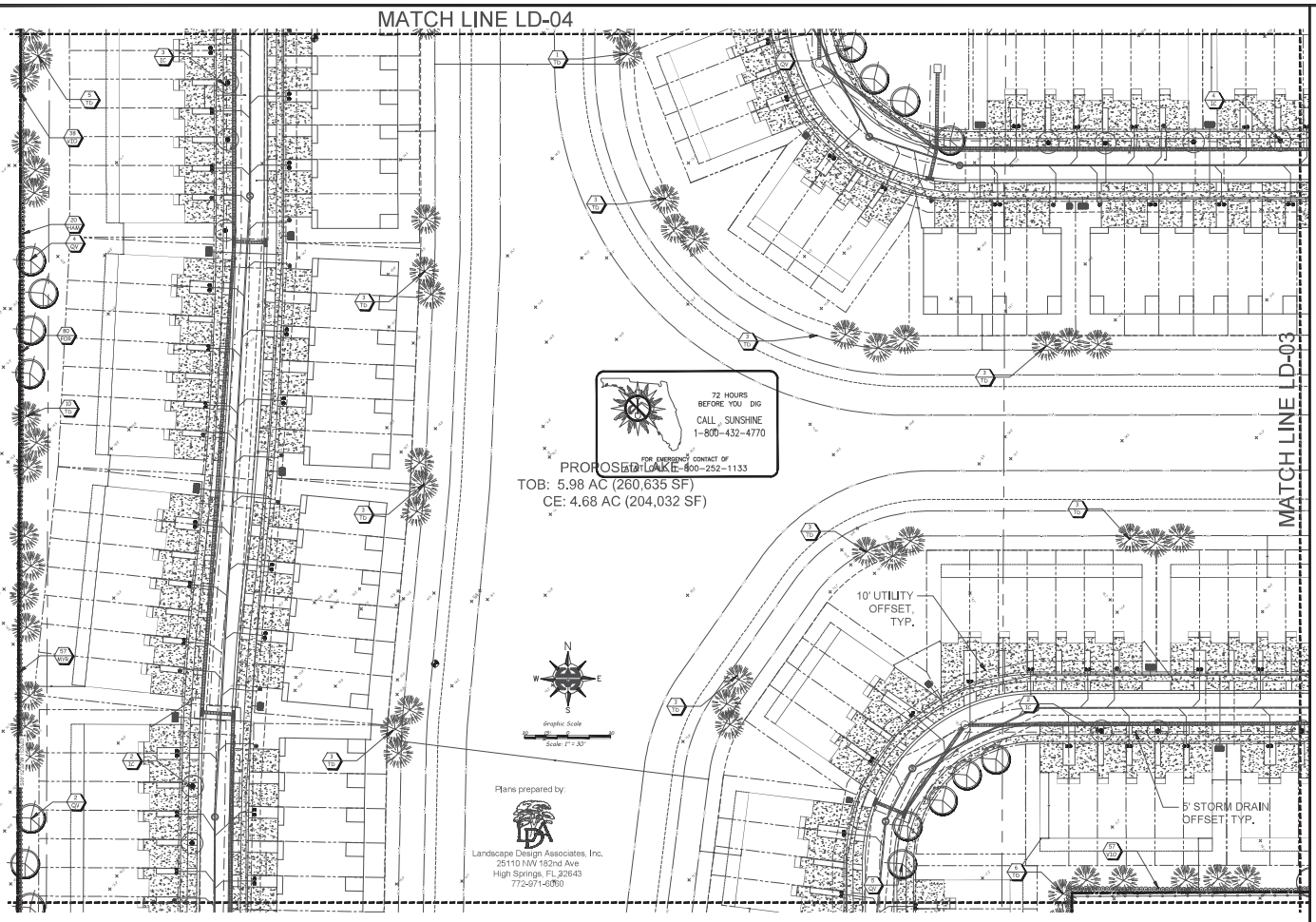
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:14 -04'00'

LD-01


30' POWER LINE SETBACK
60' POWER LINE SETBACK
5' STORM DRAIN OFFSET, TYP.
10' UTILITY OFFSET, TYP.
PROPOSED LAKE 2
TOB: 3.94 AC (171,636 SF)
CE: 2.96 AC (129,006 SF)
MATCH LINE LD-03
MATCH LINE LD-04
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:08:56 -04'00'
LD-02

MATCH LINE LD-02
5' STORM DRAIN OFFSET, TYP.
10' UTILITY OFFSET, TYP.
PROPOSED DRY RETENTION
TOB: 0.45 AC. (19,720 S.F.)
TOE: 0.28 AC. (12,150 S.F.)
MATCH LINE LD-05
72 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
772.521.1201
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:41 -04'00'
LD-03

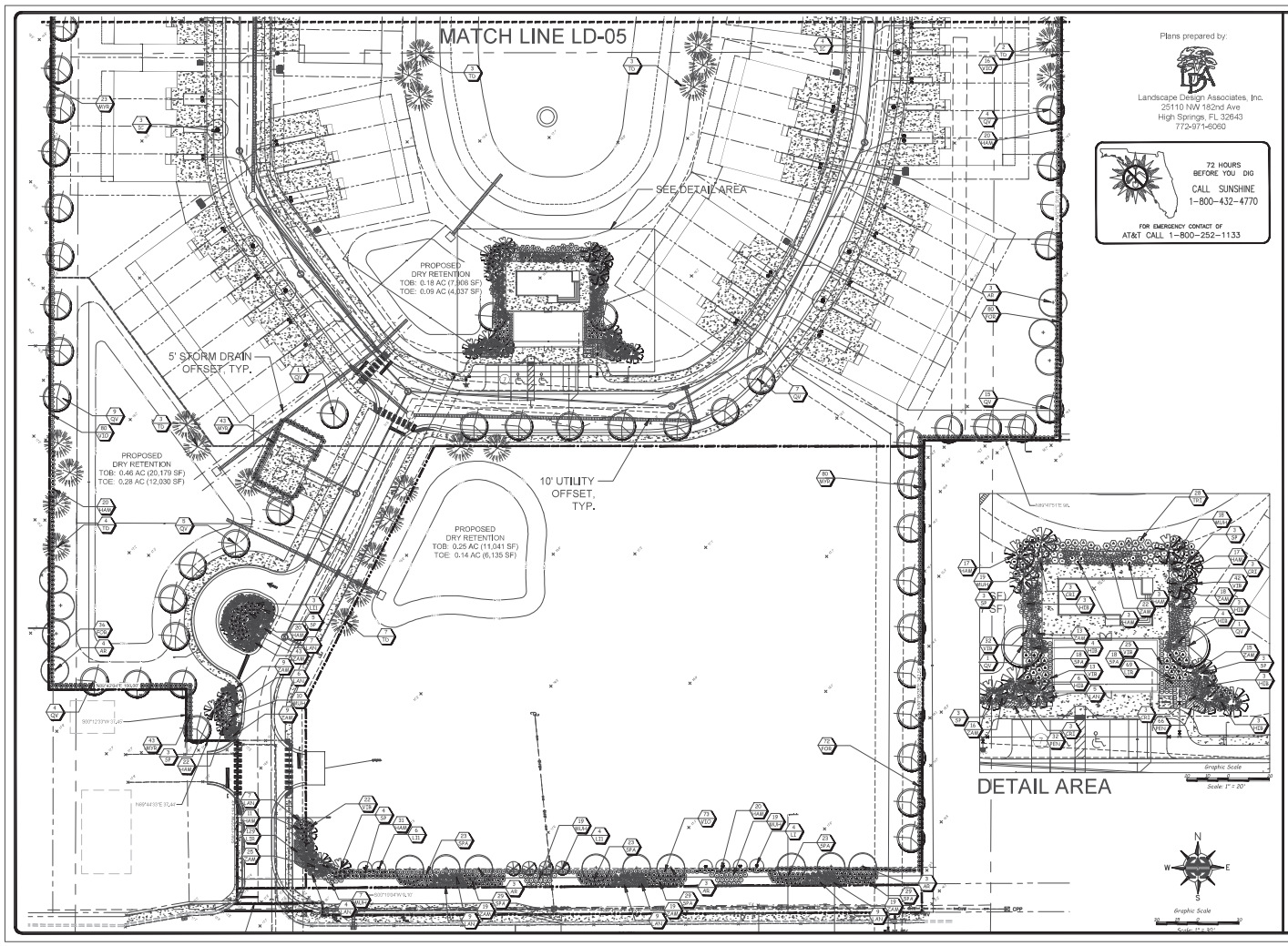
MATCH LINE LD-02
MATCH LINE LD-03
MATCH LINE LD-05
10' UTILITY
OFFSET,
TYP.
PROPOSED
DRY RETENTION
TOB: 0.57 AC (24,620 SF)
TOE: 0.39 AC (16,995 SF)
STORM DRAIN
OFFSET, TYP.
72 HOURS
BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133
Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060
N
W
E
S
Graphic Scale
Scale: 1" = 30'
REDTAIL
772.火山.1199
WEST ORANGE
5220 ORANGE AVE
LANDSCAPE PLAN
CITY OF FORT PIERCE
Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:22 -04'00'
LD-04



WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:08:25 -04'00'

LD-05



Plans prepared by:
Landscape Design Associates, Inc.
25110 NW 182nd Ave
High Springs, FL 32643
772-971-6060

72 HOURS
BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
FOR EMERGENCY CONTACT OF
AT&T CALL 1-800-252-1133

REDTAIL

DESIGNED BY	SL
DRAWN BY	SL
CHECKED BY	SL
DATE	2026.07.31
SCALE	1" = 30'
JOB NO.	2512
SHEET	LD-06

1	PER REVIEW COMMENTS

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:10:04 -04'00'

LD-06

PLANTING NOTES:

FERTILIZER

FERTILIZERS SHALL BE SLOW RELEASE, UNIFROM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURERS STATEMENT OF ANALYSIS,AND SHALL MEET THE FOLLOWING REQUIREMENTS: SIX (6) PERCENT NITROGEN,SIX (6) PERCENT PHOSPHOROUS AND SIX (6) PERCENT POTASSIUM. FERTILIZER SHALL BE APPLIED TO ALL SHRUBS (1/3 LB PER 3 GAL POT, 1/4LB PER 1 GAL POT) AND GROUNDCOVER. THE SOD STARTER FERTILIZER MIXTURE SHALL BE A 5-10-10 ANALYSIS. A 14-14-14 FERTILIZER ANALYSIS IS REQUIRED ON ALL TREES AND SHRUBS OVER 5' IN HEIGHT (1/2 LB PER 5" OF SPREAD). AGRIFORM TABLETS WITH TWENTY (20) PERCENT NITROGEN, TEN (20) PERCENT PHOSPHOROUS,FIVE (5) PERCENT POTASSIUM IN 21 GRAM SIZES SHALL BE APPLIED ALONG WITH THE FERTILIZER PROCESS (1 WITH 1 GAL PLANTS, 2 WITH 3 GAL PLANTS AND 3 TABLETS PER 7" OF TREE TRUNK CALIPER). MAGNESIUM SULFATE SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/2 LB PER INCH OF TRUNK CALIPER. MANGANESE SHALL BE APPLIED AT THE SAME RATE.

MULCH

MULCH MATERIAL SHALL BE COLORED "A" GRADE CERTIFIED RE-CYCLED MULCH AND MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT. MULCH SHALL BE APPLIED TO A MINIMUM OF 3" DEPTH IN PLANTING BEDS. MULCH SHALL NOT BE PLACED WITHIN 6" OF TREE OR PALM TRUNKS.

SOD

THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS,ABSOLUTELY TRUE TO VARIETAL TYPE,AND FREE FROM WEEDS,FUNGUS,INSECTS AND DISEASE OF ANY KIND.

SUBSTITUTIONS

NO SUBSTITUTION OF PLANT MATERIAL TYPES OR SIZES WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT OF RECORD. CONTAINER GROWN MATERIAL WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR B & B MATERIAL UNLESS PREVIOUSLY APPROVED. INTENDED SUBSTITUTIONS SHALL BE SPELLED OUT IN BID.

MEASUREMENTS

SHADE TREES: HEIGHT SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT AREA NOT TO INCLUDE ANY TERMINAL GROWTH.

PALMS: CLEAR TRUNK SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE POINT WHERE THE MATURE AGED TRUNK JOINS THE IMMATURE OR GREEN PORTION OF THE TRUNK OR HEAD.

GREY WOOD (G.W.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO TOP OF THE HARDENED TRUNK.

OVERALL HEIGHT (O.A.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE AVERAGE FROND HEIGHT.

PALMS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED.

PLANTING SOIL AND BACKFILL

TOPSOIL SHALL CONSIST OF A STABILIZED MIXTURE OF GROUND-YARD TRIMMINGS AND POSSIBLY BIOSOLIDS PROCESSED ACCORDING TO STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR THE PROCESSING AND DISTRIBUTION OF SEWAGE SLUDGE COMPOST. RECYCLED TOPSOIL SHALL ONLY BE OBTAINED FROM A STATE PERMITTED RECYCLING FACILITY WHICH IS ALSO D.O.T. CERTIFIED AND STORES PRODUCT ON A PAD WITH A CURRENT NEMATODE CERTIFICATION FROM FLORIDA DEPARTMENT OF AGRICULTURE. RECYCLED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- WEED FREE
- MOISTURE CONTENT 80% BY WEIGHT MAXIMUM.
- WATER HOLDING CAPACITY 100% BY WEIGHT MINIMUM.
- CARBON TO NITROGEN RATIO LESS THAN 25 TO 1.
- ORGANIC MATTER CONTENT 40% BY DRY WEIGHT MINIMUM
- SOLUBLE SALTS LESS THAN 3 MMHOS/CM.
- PH RANGE 7.0 - 7.9
- MINIMUM NUTRIENT LEVELS AS FOLLOWS:

MACRO NUTRIENTS: NITROGEN (N) - 1% MINIMUM, WATER INSOLUBLE NITROGEN 90% MINIMUM, PHOSPHORUS (P) - 0.5% MINIMUM, POTASSIUM (K) - 0.2% MINIMUM. AND OTHER MACRO AND MICRO NUTRIENTS. THE RECYCLED TOPSOIL SHALL CONTAIN LEVELS OF THOSE MICRO NUTRIENTS NECESSARY FOR PLANT GROWTH. THESE INCLUDE CALCIUM, MAGNESIUM, SULFUR, BORON, COPPER, IRON, MANGANESE AND MOLYBDENUM. TOPSOIL NOT MEETING THESE REQUIREMENTS WILL NOT BE ACCEPTED.

BACKFILL:

ALL NEW AND TRANSPLANTED PLANT MATERIAL (INCLUDING NEW SOD) SHALL BE PLANTED ONLY AFTER PREPARATION OF EXISTING SOIL AS FOLLOWS: SPREAD A LAYER OF 3" DEPTH OF RECYCLED TOPSOIL (AS DEFINED ABOVE) OVER THE ENTIRE PLANTING AREA. THE TOPSOIL SHALL THEN BE UNIFORMLY DISKED, TILLED OR AERIFIED INTO THE EXISTING SOIL TO A DEPTH OF 12" UNDERNEATH SHRUBS AND GROUNDCOVERS, 6" UNDERNEATH SOD AND TO A DEPTH OF 36" FOR THE TREE PITS, WITH THE FOLLOWING EXCEPTION: NO ROTOTILLING OR DISKING SHALL OCCUR CLOSER TO THE TRUNKS OF ESTABLISHED PLANTS THAN ONE HALF (1/2) THE DISTANCE OF THE CANOPY FURTHEST OUT FROM THE GRIP LINE OF THE EXISTING PLANT CANOPY. ALL PLANTS, INCLUDING HEDGES AND GROUND COVER SHALL BE PLANTED IN INDIVIDUALLY DUG HOLES AND THE MATERIAL DUG FROM THE HOLES SHALL THEN BE FURTHER MIXED WITH THE PREPARED SITE SOIL PRIOR TO BACKFILLING OF THE PLANTING HOLES AROUND THE ROOT BALLS. NO ADDITIONAL BACKFILL SOIL SHALL BE USED.

AN EXCEPTION ARE PLANTING PITS FOR CABBAGE PALMS, WHICH SHALL BE BACKFILLED WITH CLEAN NATIVE SAND ONLY.

REMOVE EXCESS MATERIAL TO PROVIDE PROPER FINISHED GRADE.

PLANT MATERIALS

TREES, PALMS, SHRUBS,GROUNDCOVERS:

PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED IN THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I & II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE NORMAL FOR THE VARIETY AND FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

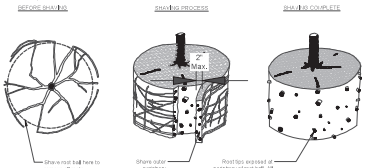
SPECIMEN MEANS AN EXCEPTIONALLY HEAVY, SYMMETRICAL, TIGHTLY KNIT PLANT, SO TRAINED OR FAVORED IN ITS DEVELOPMENT THAT FIRST APPEARANCE IS UNQUESTIONABLE AND IT IS OUTSTANDINGLY SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY.

ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND FREE OF DISEASE AND INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT, WHERE REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS OF GOOD QUALITY AND BE IN HEALTHY GROWING CONDITION. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER.

GENERAL NOTES:

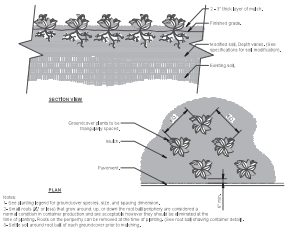
1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIMJHER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIED PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. THE LOCATIONS OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. MAJOR ADJUSTMENTS TO THE LAYOUT ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE. PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE CREWS DURING THE PERFORMANCE OF THE WORK. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROMPTLY REMOVE ALL WASTE MATERIALS, DEBRIS, UNUSED PLANT MATERIAL, EMPTY PLANT CONTAINERS AND ALL EQUIPMENT FROM THE PROJECT SITE.
18. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND REQUEST A FINAL INSPECTION. ANY ITEMS THAT ARE JUDGED INCOMPLETE OR UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. ALL LABOR AND MATERIAL FOR SOIL AMENDMENTS AND FERTILIZER THAT IS REQUIRED TO INSURE THE SUCCESSFUL ESTABLISHMENT AND SURVIVAL OF THE PROPOSED VEGETATION AS WELL AS ALL COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.
2- Shaving can be performed just prior to planting or after placing in the hole.

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

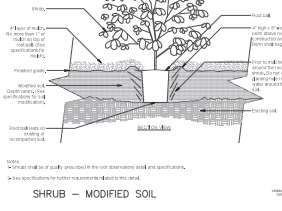
ROOT BALL SHAVING CONTAINER DETAIL



Notes:
1- The planting layout for groundcover species, size, and spacing dimension, is diagrammatic gift. The actual number of plants, size, and arrangement may differ as considered a normal condition in container production and as accepted however they should be eliminated at the time of planting. Roots on the periphery can be removed at the time of planting. Does not limit shaving container detail.
2- Limit soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

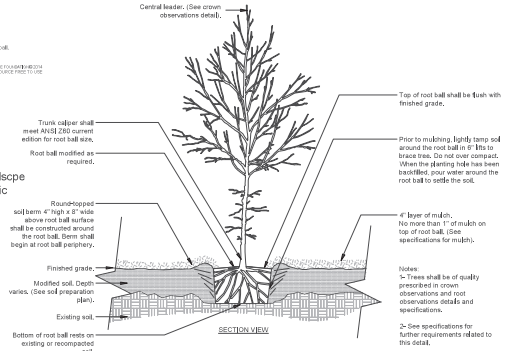
URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.
2- See specifications for further requirements related to this detail.

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

SHRUB – MODIFIED SOIL



Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.
2- See specifications for further requirements related to this detail.

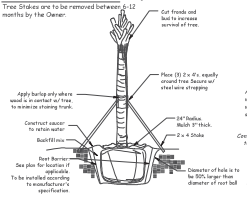
TREE w/ BERM (EXISTING SOIL MODIFIED)

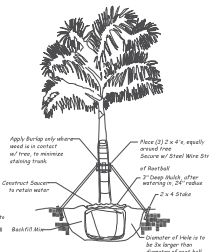
URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

Palm Planting Detail

NTS

Tree Stakes are to be removed between 6-12 months by the Owner.

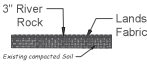




Watering Schedule			
Item	Water	Month	No. of Applications
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			45

Gravel Strip Detail

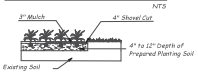
NTS



ABBREVIATIONS:
C.T.- CLEAR TRUNK
HT.- HEIGHT
O.C.- ON CENTER
Spr.- SPREAD

Planting Edge at Sod Detail

NTS



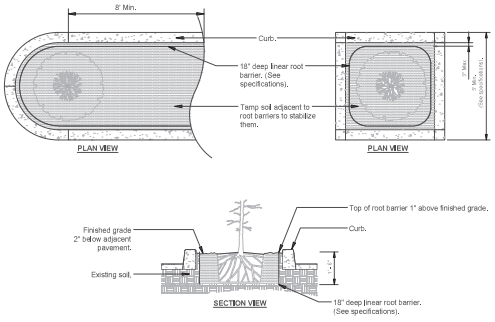
REDTAIL
p. 772.321.1391
e. admin@redtail.com

NO.	DESCRIPTION	DATE
1	PER DEVELOPER	04/07/25
2	PER COUNTY COMMENTS	05/07/25
3	PER COUNTY COMMENTS	06/06/25
4	PER COUNTY COMMENTS	07/07/25

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:33 -04'00'

LD-07

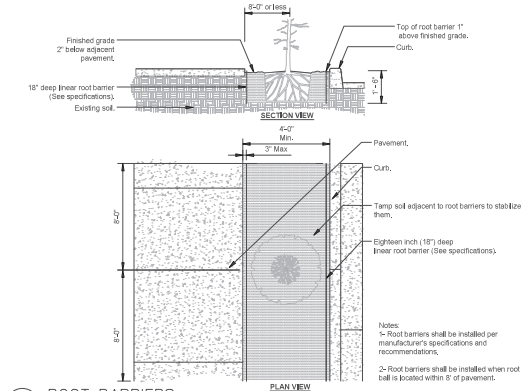


Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 6' of pavement.

ROOT BARRIERS – PARKING LOT ISLANDS

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE



S-X ROOT BARRIERS

3/8" = 1'-0"

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

L_site preparation_rootbarriers

REDTAIL LDG
p. 772.火山.1109
sales@redtailldg.com

NO	DESCRIPTION	BY	DATE
1	PRELIMINARY PLAN REVIEW	JACK	7/23/25

WEST ORANGE
5220 ORANGE AVE
OVERALL LANDSCAPE PLAN
CITY OF FORT PIERCE

Digitally signed by Sabine Lang-Marcks
Date: 2026.07.31 03:09:50 -04'00'

LD-08

Florida Department of Transportation

RON DESANTIS
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

JARED W. PERDUE, P.E.
SECRETARY

October 10, 2025

THIS PRE-APPLICATION LETTER IS VALID UNTIL – October 10, 2026
THIS LETTER IS NOT A PERMIT APPROVAL

Dr Juan F Ortega, PE
JFO GROUP INC
6671 W. Indiantown Rd, Suite 50-324, Jupiter, FL 33458

Dear Dr Juan F Ortega, PE:
RE: Pre-Application Review for **Category D Driveway,** Pre-Application Meeting Date: **10/9/2025, 10:30 AM**
St. Lucie County - Fort Pierce; SR 68; Sec. # 94070000; MP: 18.6; Access Class - 05;
Posted Speed - 45; SIS - Influence Area; FDOT Ref. Project: 449696.1 - Claudia Vinitskiy-Calvo

Request: Modify existing full access driveway along the north side of SR 68, located approximately 1,440 feet east of N Jenkins Road.

SITE SPECIFIC INFORMATION
Project Name & Address: **West Orange – 5220 Orange Ave, Fort Pierce, FL, 34947**
Property Owner: **Orange Avenue Development II LLC**; Parcel Size: **57 Acres**
Development Size: **450 Townhome Units**

REQUEST APPROVED

This decision is based on your presentation of the facts, site plan and survey - please see the conditions and comments below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 100 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided.**
- **If a gate is proposed, a minimum driveway length of 100 feet to the call box and/or gate house, and a turnaround area before the gate are required.**
- **A right turn lane is required and shall meet the minimum requirements in the Florida Design Manual (FDM) and shall provide space for a buffered bicycle lane.**
- **The queue length for the existing eastbound left turn lane and any adjacent affected left turn lanes must be determined by a traffic study.**
- **The eastbound median nose of the existing full access opening shall be extended and aligned to the proposed driveway, according to the Florida Design Manual (FDM) standards.**
- **No future driveway connections shall be allowed directly to SR 68 between the subject existing full access driveway and the east property line (frontage of approximately 470 feet.)**

Comments:
- **Modifications to the development intensity resulting in an increase in trip generation will require an additional pre-application meeting and revised letter.**
- All driveways not approved in this letter must be fully removed and the area restored.
- Drainage mitigation is required for any stormwater impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage.). The drainage mitigation shall meet all FDOT Drainage Manual criteria and will be reviewed/approved as part of an access permit.
- The applicant shall donate property to the Department if right-of-way dedication is required to implement the improvements.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway System and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval**. The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://osp.fdot.gov; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications. Please contact the District Traffic Operations Access Manager - Tel. # 954-777-4363 or e-mail: D4AccessManagement@dot.state.fl.us with any questions regarding the Pre-Approval Letter.

Sincerely,

Roya Edwards
2025.10.10
12:50:10 -04'00'

Roya Edwards, AICP
District Traffic Operations Access Manager

cc: Nesa Harden
File: S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2025-10-09\Pre-App 03 94070000 MP 18.60 SR 68 West Orange\94070000 MP 18.60 SR 68 West Orange.docx

HALEY WARD

September 8, 2025

Marc O'Rourke
Landmarc Building/Development, Inc.
7530 Barnsbury
West Bloomfield, MI 48324
marc@landmarcbuilding.com
Re: 5501 Orange Avenue

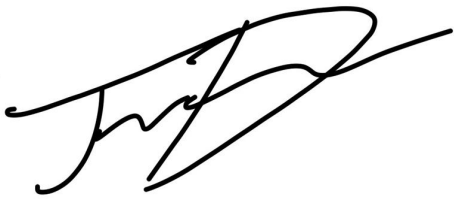
Dear Mr. O'Rourke,

Haley Ward, Inc. has completed this Environmental Assessment (EA) for the above-mentioned property. The purpose of this evaluation was to conduct a review of the above listed parcel by means of site visit, review of available aerial photography, listed species review, review of soil resources, and review of environmental regulation pertaining to this parcel.

The following report details the findings of our on-site and desktop investigations of the properties as they pertain to the City of Fort Pierce regulations.

Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,
Haley Ward, Inc.



Tyler Dunbar, M.S.
Project Scientist

10250 SW VILLAGE PARKWAY, SUITE 201, PORT ST. LUCIE, FL 34987 772.462.2455 | HALEYWARD.COM

HALEY WARD

ENVIRONMENTAL ASSESSMENT

Parcel ID	Acreage	Land Use
2407-211-0001-000-0	8.47	0000 – Vacant Residential
2407-212-0001-000-3	19.45	0000 – Vacant Residential
2407-231-0000-000-5	18.36	1000 – Vacant Commercial
2407-241-0001-000-3	10.37	0000 – Vacant Residential

4918/5501 Orange Ave
Fort Pierce, FL 34947
Date: September 8, 2025
Project # 25-144

Prepared For:

Marc O'Rourke
Landmarc Building/Development, Inc.
7530 Barnsbury
West Bloomfield, MI 48324
morourke@landmarcavedon.com

Prepared By:

Haley Ward, Inc.
10250 SW Village Parkway
Port St Lucie, Florida 34987
(772) 223-5200

INTRODUCTION:

The subject property evaluated as part of this Environmental Assessment consists of approximately 56.65 acres (Parcel ID #s):

2407-211-0001-000-0
2407-212-0001-000-3
2407-231-0000-000-5
2407-241-0001-000-3

The parcels are located at 4918/5220 Orange Avenue in the City of Fort Pierce, Florida. The property is also located at Township 35 South, Range 40 East, and Section 9. According to the St. Lucie County Property Appraiser, the subject property has a current land use code of the subject property has a Future Land Use Designation of Mixed-Use Development (MXD) and would be designated as Vacant Commercial - 1000 and Vacant Residential - 0000.

This Environmental Assessment (EA) was completed for the supporting information associated with a building permit or land development application. Haley Ward staff visited the property on September 4, 2025, to ascertain the status and composition of any critical habitats, such as wetlands and native uplands that may be onsite.

VEGETATION:

It is the opinion of Haley Ward that there is no native upland habitat located on site due to the presence of construction sitework and evidence of demolished structures.

The following vegetation was found on site:

Common Name	Scientific Name
Caesar Weed**	*Urena lobata*
Cabbage Palm	*Sabal palmetto*
Tropical Soda Apple**	*Solanum viarum*
Laurel Oak	*Quercus laurifolia*
Balsam Apple**	*Momordica balsamina*
Brazilian Pepper**	*Schinus terebinthifolia*
Cogon Grass**	*Imperata cylindrica*

****Nuisance vegetation***

*****Exotic vegetation***

WETLAND DELINEATION:

According to aerial photographs and site visits, it appears that one wetland estimated to be half an acre or less in size was identified onsite. A state wetland jurisdictional determination will need to be conducted to determine the exact boundaries of the wetlands located on site and whether mitigation is required.

WILDLIFE EVALUATION:

Haley Ward conducted a pedestrian survey throughout the property to investigate for the presence of any plant or animal listed species.

No gopher tortoises or any other state or federally listed plant/animal species were observed at the time of the site visit.

SOIL COMPOSITION:

Based on a review of the USDA Web Soil the site is composed of:

Riviera fine sand- This nearly level soil is poorly drained and has a surficial layer of dark gray sand about four inches thick. The water table is typically at less than 10 inches for two to four months of the year. The soil is well suited for pasture and hay crops. Natural vegetation includes slash pine, cabbage palm, wax myrtle, blue maidencane, broom sedge, pineland threeawn, cord grass, panicums and a variety of sedges. Riviera Fine Sands are loamy, silicious, nearly level and poorly drained soils that are formed in beds of sandy and loamy marine sediments. These soils are on broad, low flats and in depressional areas. The water table is within a depth of 10 inches for 2 to 4 months in most years and between a depth of 10 and 30 inches for most of the rest of the year.

Winder loamy sand- is poorly drained, nearly level soil found in hammocks and along drainage ways. The surface layer typically is black loamy sand that is 6 inches thick. The water table is within a depth of 10 inches of the surface for 2 to 4 months and between a depth of 10 to 40 inches for most of the rest of the year. The natural vegetation associated with this soil type includes cabbage palm, willow oak, scattered long leaf and slash pine and an understory of wax myrtle and saw palmetto. This soil has high potential for dwellings without basements, small commercial buildings, local roads and streets.

SITE HISTORY:

After reviewing available aerial images on Google Earth, and the St. Lucie County Property Appraiser, the subject parcel appears to have remained undeveloped since 2004. Prior to 2004 the subject property was a full-scale agricultural operation, consisting of row-crops, likely Citrus. The most recent sale listed on the St. Lucie County Property Appraiser took place in December 2005. This property lies in the North St. Lucie River Water Control District which can be seen on Permit# 56-00658-S with SFWMD.

CITY OF FORT PIERCE REGULATIONS:

The following lists the City of Fort Pierce Ordinances that apply to the subject property. As part of the local approval process, the applicant will be required to comply with the following items.

4.4.2 Policy:

Compliance with approved permits with other local governments, state, federal and private plans and programs for conservation of natural resources shall be required prior to receiving development approval.

Any proposed environmental impacts will need to be permitted with the governing agency prior to development approval.

4.4.5 Policy:

The City shall require site plan review of all proposed development or redevelopment to prevent unnecessary destruction or inappropriate use of existing natural resources and natural sites. Site development shall limit the ecological and environmental impacts of design and shall include a site analysis to include the following natural factors:

A. Existing drainage pattern.
B. Geology.
C. Topography.
D. Hydrography (streams, lakes, swamps).
E. Vegetation.
F. Wildlife and habitat.
G. Climate factors (solar orientation, seasonal winds, humidity, precipitation).
H. Soil (type, suitability, bearing capacity).

A site analysis study may be required by the City of Fort Pierce, which reports in detail the parameters outlined above. Further investigation into the environmental requirements of this site plan review is necessary prior to application submittal as the requirements of this site analysis are dependent on the proposed plan and site impacts.

Sec. 123-66 - Tree Protection and Mitigation:

(b) Any native tree at least 14 inches in diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten feet, shall be preserved and protected in accordance with this article, unless the tree is determined to be a safety hazard, prevents the reasonable development of a site, is causing damage to structures or more desirable trees around it, is infected with disease or is infested with insects. A land clearing applicant shall demonstrate why the tree should not be protected or why it is not feasible to develop without removing the tree.

Trees meeting the protection criteria as stated above were observed onsite. If these trees are impacted throughout the development process, then a tree survey will be required to identify protected trees to formulate a tree mitigation plan.

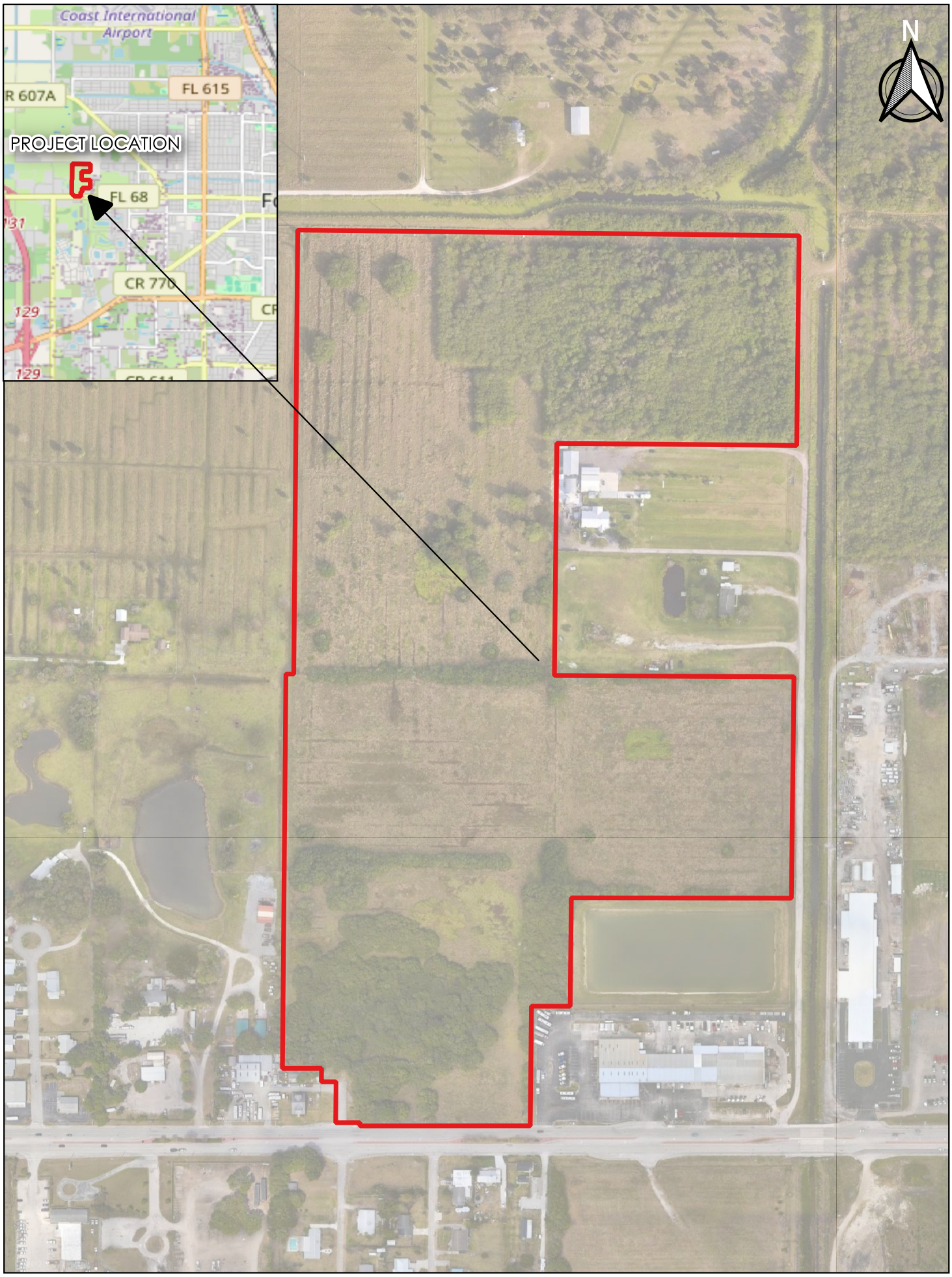
SUMMARY:

It is the professional opinion of Haley Ward that there is no native upland habitat located on site, which is identified as FLUCCS Code 212 – Improved Pasture. The site consists of 56.65 acres designated with a Future Land Use of Residential Urban (RU), as well as Residential Single Family-2 (RS-2), and southern parcels zoned as Commercial, General (CG).

It is our professional opinion that there one wetland estimated to be half an acre or less in size was identified onsite.

No gopher tortoises, burrows, or habitat were observed on site. In addition, no sandhill cranes or their nests were identified on site. Furthermore, no other state-listed species were observed.

Landmarc - West Orange Townhomes

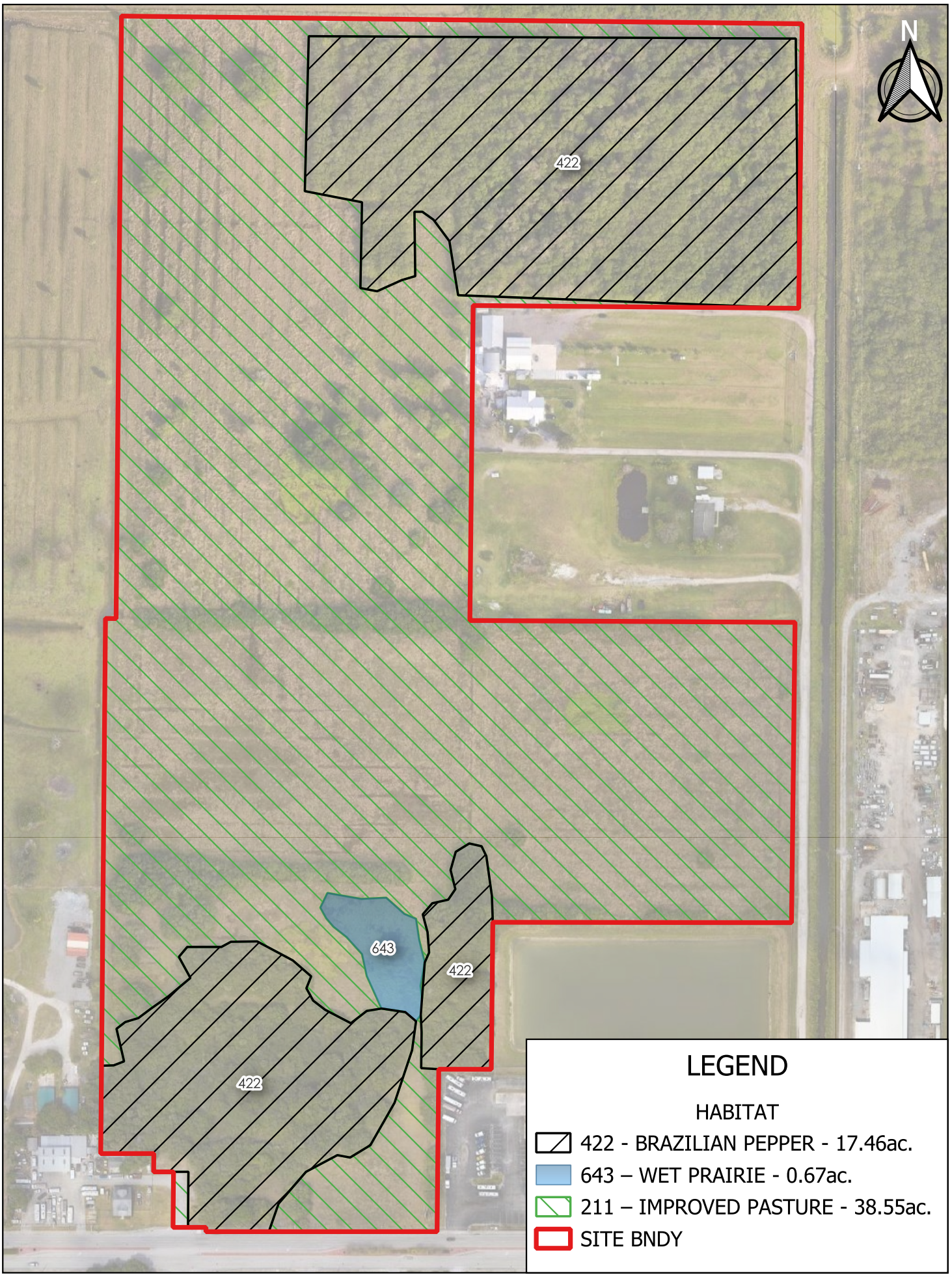


Project# 20-288
15 September 2025

0 300 600 900 ft

HALEY WARD

West Orange Townhomes - Habitat Map

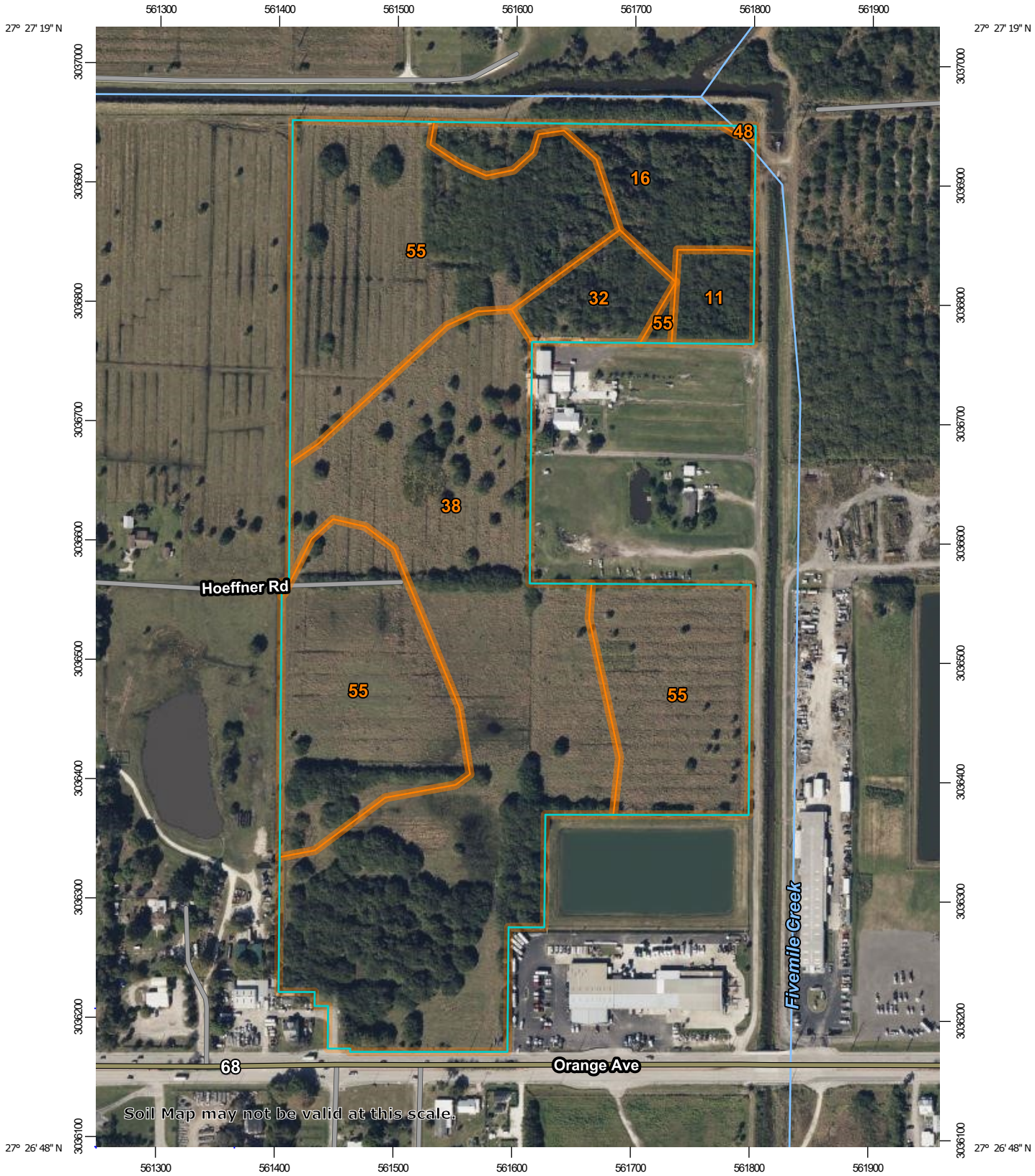


Project# 21-276
15 September 2025

0 200 400 600 ft

HALEY WARD

Soil Map—St. Lucie County, Florida
(Landmarc - West Orange Townhomes - Soil Map)



Map Scale: 1:4,580 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 18, Aug 23, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11	Chobee loamy sand, frequently ponded, 0 to 1 percent slopes	1.3	2.3%
16	Hilolo loamy sand, 0 to 2 percent slopes	4.2	7.4%
32	Pineda sand, 0 to 2 percent slopes	2.0	3.5%
38	Riviera fine sand, 0 to 2 percent slopes	24.2	42.8%
48	Wabasso sand, 0 to 2 percent slopes	0.1	0.1%
55	Winder loamy sand	24.9	44.0%
Totals for Area of Interest		**56.7**	**100.0%**

HALEY WARD

September 15, 2025

Marc O'Rourke
Landmarc Building/Development, Inc.
7530 Barnsbury
West Bloomfield, MI 48322
morourke@landmarcavedon.com

Re: West Orange Townhomes - Tree Assessment & Inventory

Prepared by: Anthony A. Adams
International Society of Arboriculture Certified Arborist FL-9472A

Certification of Performance:
I, Anthony A. Adams, certify to the best of my knowledge, and abilities:

That I have personally inspected the tree(s) and or the property referred to in this report.

That it is my professional opinion, that the following report is true, and the conclusions and results stated are correct based on the information received about the property evaluated and the evaluation methods followed.

That the reported analyses, opinions, and conclusions are only limited by the reported assumptions, methods and limiting conditions and my personal, unbiased professional analyses, opinions and conclusions.

That Haley Ward, Inc. acts as an independent tree, and environmental consultant.

That this Report, or parts of this Report, have not been revealed to any party other than the Client named and will not be revealed to any other party unless authorized to do so by Client named or by due process of law or by legally required public testimony by this firm of these results.

This report is written in good faith, and all rights are reserved by Haley Ward, Inc. It is for use by the client named only.

Signature:_____ Date: 09/15/2025

I. Introduction

This Report is written for Marc O'Rourke of Landmarc Building. It is based on information obtained from the site visit(s), to provide and assign values to the trees located on the subject property.

II. Property Involved

The subject property evaluated as part of this Tree Inventory consists of four parcels, totaling an approximate 56.65 acres. The parcels are located at 4918/5220 Orange Avenue in the City of Fort Pierce, Florida. The property is also located at Township 35 South, Range 40 East, and Section 9. According to the St. Lucie County Property Appraiser, the subject property has a current land use code of the subject property has a Future Land Use Designation of Mixed-Use Development (MXD) and would be designated as Vacant Commercial - 1000 and Vacant Residential - 0000.

III. Data Collection

The property/trees were evaluated by site visits to determine environmental conditions. This appraisal is based on value of subject as per ISA "Rule 14-40.030, Florida Administrative Code". See Appendix A for full Tree Data.

IV. Limiting Conditions

This "Arboriculture Report" includes only the listed trees, landscape conditions in the immediate area where the tree is located, and conditions caused by or attributable to the trees on this property.

Limits of the Assignment

1. This report is not intended as and does not represent legal advice and should not be relied upon to take the place of such advice.

2. This report is limited to documenting the condition of the tree on the dates given. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

3. Loss or alteration of any part of this report invalidates the entire report.

4. Sketches and photographs used in this report are intended as visual aids only and are not necessarily to scale.

V. Discussion

There is a total of one hundred and eighteen (118) native trees on the subject property that meet City of Fort Pierce requirements for mitigation or preservation.
The breakdown by species is as follows:

Cabbage Palms:	106	Fig:	2
Oak *spp*:	10		

VI. Conclusions and Recommendations

Values are calculated for trees 12" D.B.H and greater as per City of Fort Pierce code.

TREES

(Total D.B.H. Inches) x (2) x ($200) = Mitigation Costs - Tree Removal

PALMS

(Total # of Palms) x ($200) = Mitigation Costs - Palms

Trees =	(275.3in. DBH)	x $250	=	$68,825.00
Palms =	(106)	x $250	=	$26,500.00
		***Max. Mitigation Cost**	**=**	**$95,325.00***

The calculated fee of $95,575.00 is the **maximum** tree mitigation fee that is possible – if every tree on the subject parcel was to be cleared.

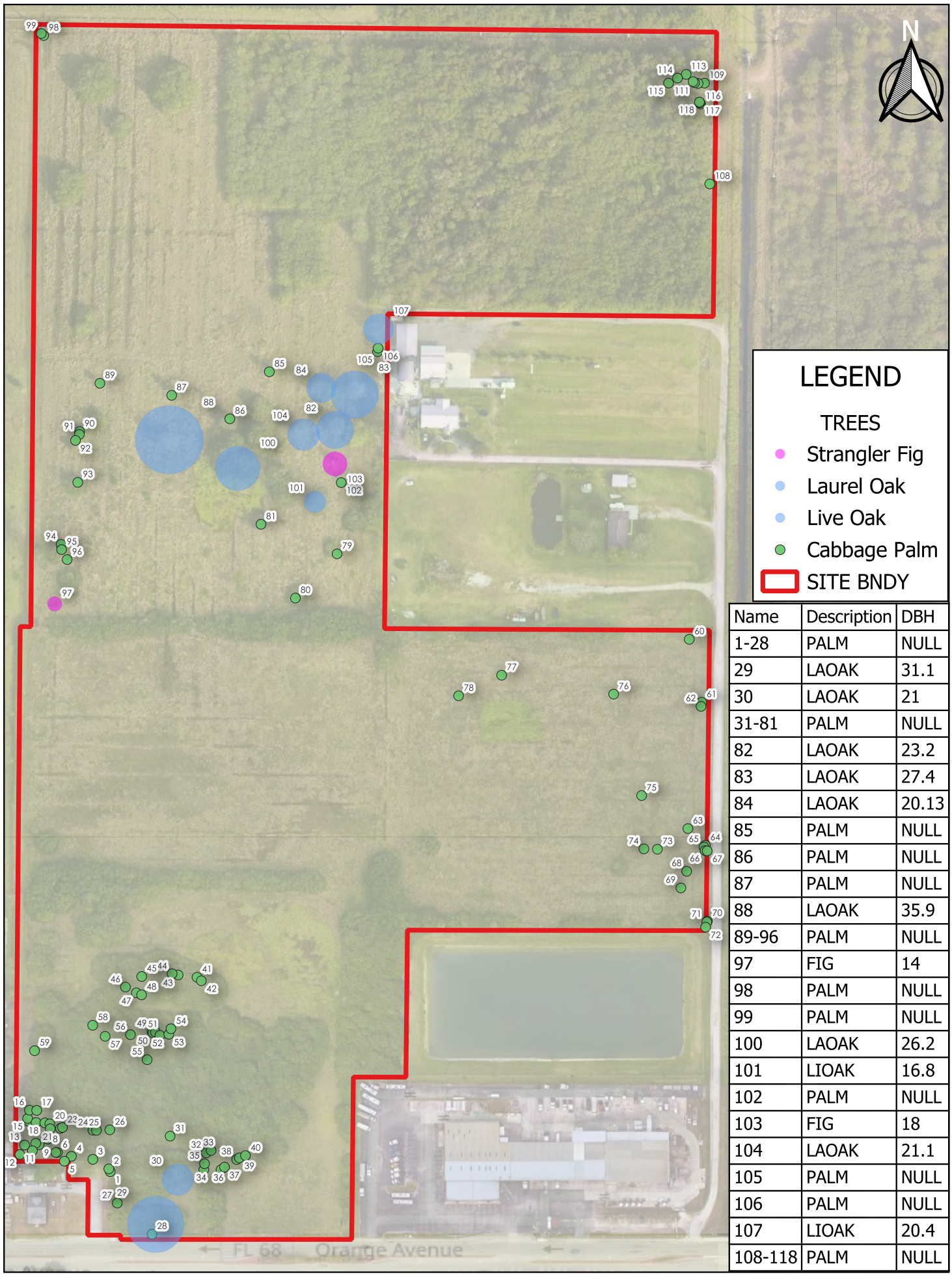
A site planner can use the information in this report to avoid impacts to high-value trees and preserve other trees to reduce mitigation costs to zero, if desired.

Please see the attached Tree Table and Tree Location Map.

This Report, or parts of this Report, have not been revealed to any party other than the Client named and will not be revealed to any other party unless authorized to do so by Client named or by due process of law or by legally required public testimony by this firm of these results.

This report is written in good faith and all rights are reserved by Haley Ward. It is for use by the client named only.

West Orange Townhomes - Tree Location Map



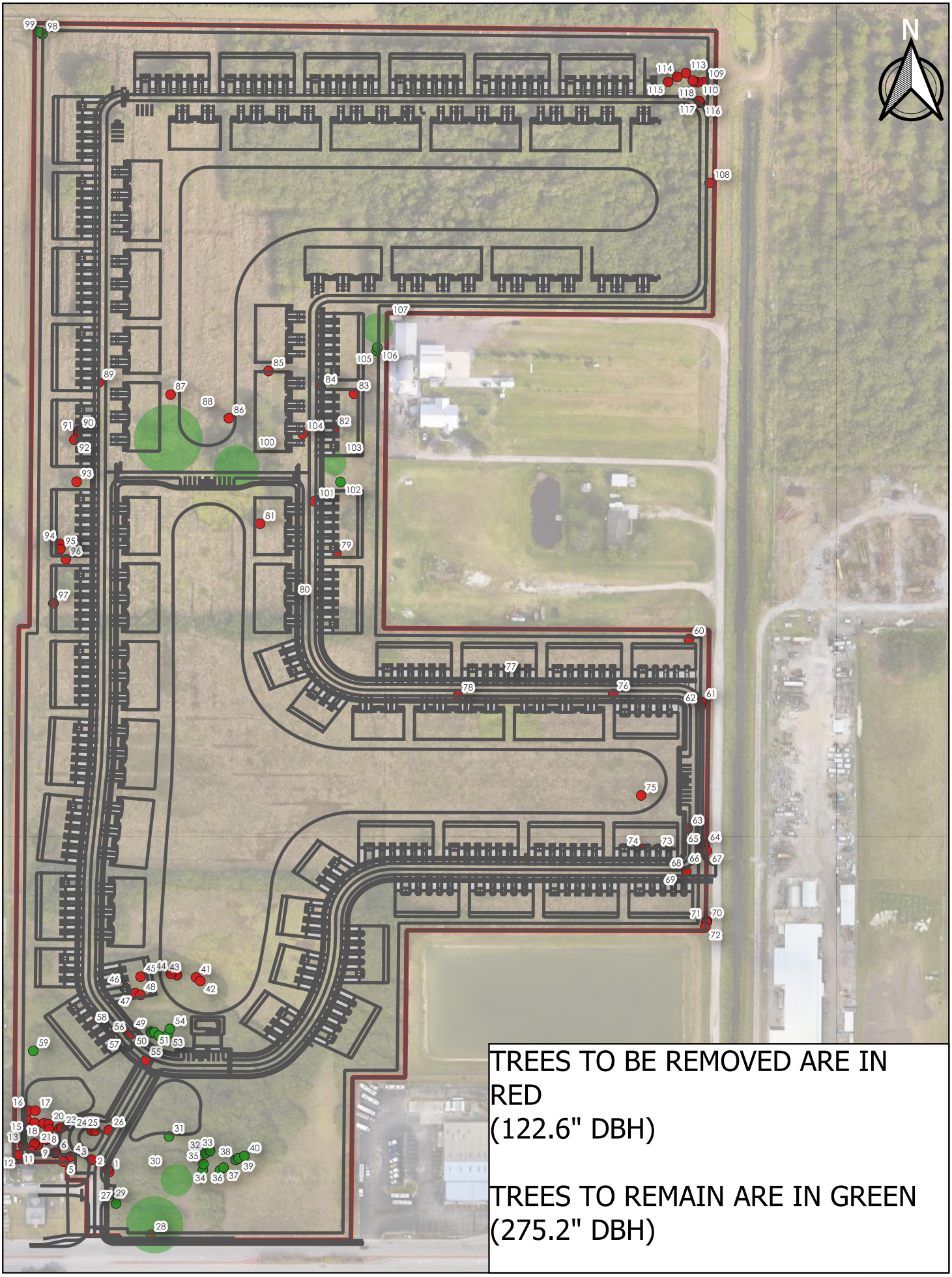
Name	Description	DBH
1-28	PALM	NULL
29	LAOAK	31.1
30	LAOAK	21
31-81	PALM	NULL
82	LAOAK	23.2
83	LAOAK	27.4
84	LAOAK	20.13
85	PALM	NULL
86	PALM	NULL
87	PALM	NULL
88	LAOAK	35.9
89-96	PALM	NULL
97	FIG	14
98	PALM	NULL
99	PALM	NULL
100	LAOAK	26.2
101	LIOAK	16.8
102	PALM	NULL
103	FIG	18
104	LAOAK	21.1
105	PALM	NULL
106	PALM	NULL
107	LIOAK	20.4
108-118	PALM	NULL

Project# 25-144
15 September 2025

0 200 400 600 ft

HALEY WARD

West Orange Townhomes - Tree Disposition Exhibit

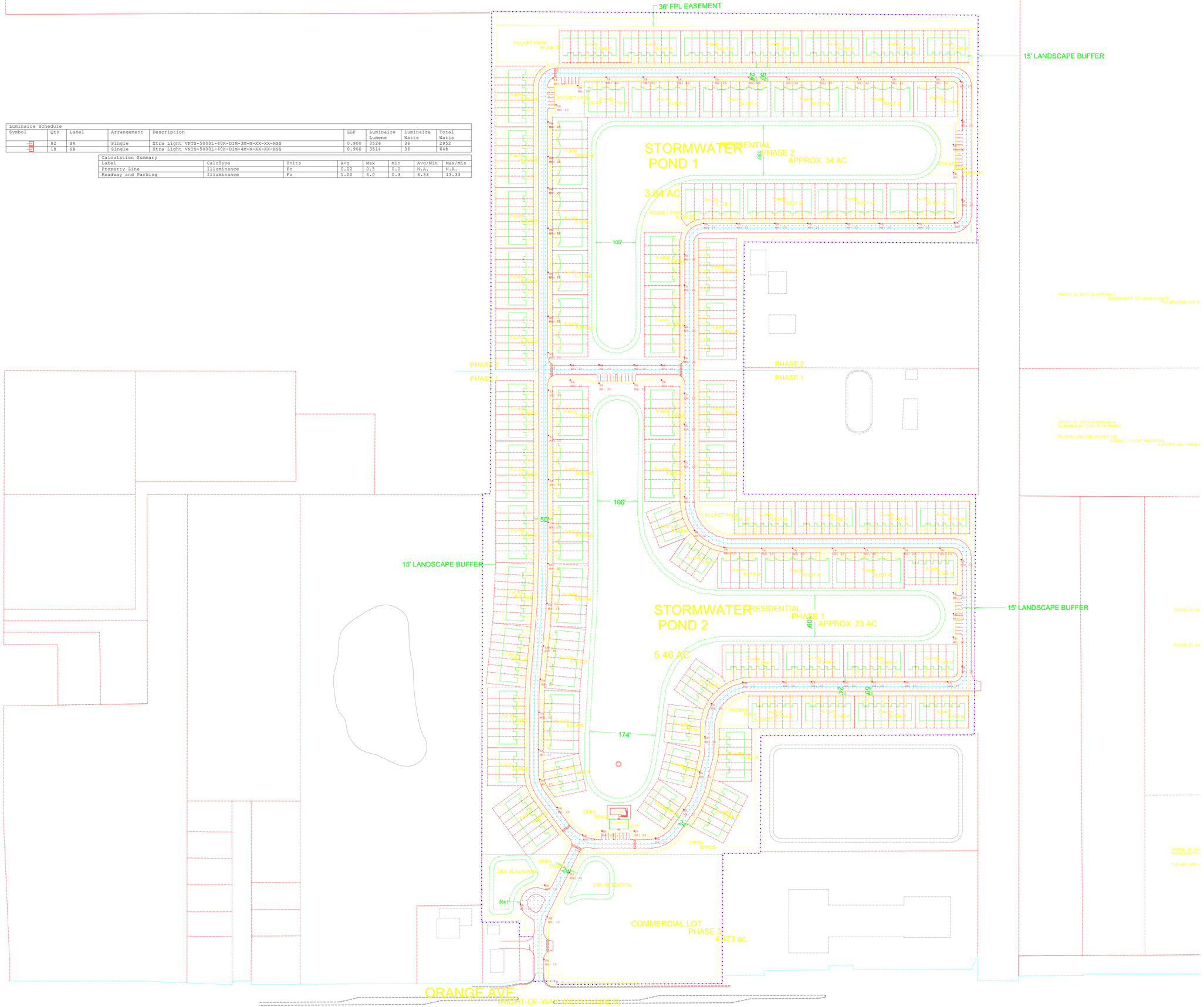


Project# 25-144
24 October 2025

HALEY WARD

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	82	SA	Single	Xtra Light VNTS-5000L-40K-DIM-3M-N-XX-XX-HSS	0.900	3526	36	2952
	18	SB	Single	Xtra Light VNTS-5000L-40K-DIM-4M-N-XX-XX-HSS	0.900	3514	36	648

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Property Line	Illuminance	Fc	0.02	0.5	0.0	N.A.	N.A.
Roadway and Parking	Illuminance	Fc	1.00	4.0	0.3	3.33	13.33



PROJECT INFORMATION

Project Name	Type
Catalog #	Date

VIENTO AREA LUMINARE



APPLICATIONS

- Area Lighting
- Retail Spaces
- Street Lighting
- Auto Dealerships & Sales Lots
- Parks & Recreation Areas
- Safety & Security

APPROVALS

- ETL Listed
- Complies with UL 1598 and CSA C22.2
- Suitable for wet locations
- 3G Vibration Rated
- IP66 Rated
- BAA Compliant
- RoHS Compliant
- ATAL Tested www.ata-labs.com
- Select models DLC Premium. For a complete list of DLC Premium products visit: www.xtralight.com/dlc or qpl.designlights.org

FEATURES

- Lumen packages ranging from 5000L to 55000L.
- Outstanding photometric performance results in excellent uniformity, optimal pole spacing and lower power density.
- Low profile architectural design offers a contemporary appearance with excellent light output.
- Enhanced foot candles delivered utilizing multiple optical options.
- Full cut-off optics with zero uplight.

CONSTRUCTION

- Thermal management achieved with a one-piece die-cast aluminum has integral heat sink fins and a hinged electrical compartment.
- Thermoset powder coat, available in bronze, white or custom colors (consult factory)
- IP66, precision molded, polycarbonate optics providing impact resistance and UV stabilization.
- Upgraded door to provide better protection from water intrusion.

ELECTRICAL

- Voltage: 120-277V or 347-480V AC input
- Driver: Class 1, constant current, calibrated to lumen package (0-10V dimming standard)
- Surge Protection: 20kA standard.
- Operating temperature: -40°C to +50°C (-40°F to +122°F)

CONTROLS

- Programmable smart sensor and twist-lock receptacle control options available.

MOUNTING

- Integral arm with key hole slot facilitates quick and easy installation.
- Adjustable slip fitter, round pole adaptor, universal pole adaptor, and other mounting options available as accessories.

WARRANTY

- Backed by XtraLight's limited 5-year warranty.

ORDER LOGIC

SAMPLE CATALOG NUMBER: VNTL-55000L-50K-DIM-5SN-BZ

VNT | | | | | | | | |

SIZE	MODEL	CCT[1]	DRIVER	OPTICS	ORIENTATION	FINISH	CONTROLS	OPTIONS
S Small	**5000L** **10000L** **15000L** **18000L**	**30K** 3000K **40K** 4000K **50K** 5000K	**DIM** Dim 0-10V, 120-277V **DIM0**[2] Dim 0-10V, 120-277V **HVD** to off Dim 0-10V, 347-480V	**2M** Type II Medium **3M** Type III Medium **4M** Type IV Medium **5S**[3] Type V Square	**N** Normal (forward) **L** Left **R** Right	**BZ** Bronze **WH** White **CC**[4] Custom Color	**XX** No Fixture Controls **BS3**[5] Bluetooth Smart Sensor, 20'H/40'D **BS7**[5] Bluetooth Smart Sensor, 40'H/100'D **CAS** Casambi Controlled **AUT** Autani Controlled **SYN** Synapse Controlled **SWX** Sensorworx Controlled **CUS** Custom Sensor (Factory Installed)	**HSS** House-side Shield **ASF**[5] Adjustable Slip Fitter Cord Whip **3**[6] NEMA 3-Pin Twist-Lock Receptacle **5**[6] NEMA 5-Pin Twist-Lock Receptacle **7**[6] NEMA 7-Pin Twist-Lock Receptacle **10Y** 10 Year Warranty
M Medium	**15000L** **20000L** **25000L** **30000L** **35000L**							
L Large	**30000L** **35000L** **40000L** **45000L** **50000L** **55000L**							

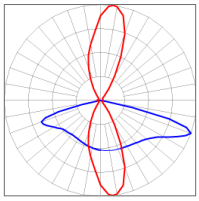
1. Custom CCT available from 2700K - 6500K.
2. Some models may not be available with **DIM0** (Dim to off).
3. The **5S** (Type V Square) optic option is not available with **L** (Left) or **R** (Right) orientations.
4. Provide the desired RAL number for custom colors.
5. Sensor integrated in bottom fixture. (See dimensional drawing)
6. The **ASF** (Adjustable Slip Fitter Cord Whip) must be paired with the Adjustable Slip Fitter accessory (sold separately).
7. Photocell ordered separately. (See page 6)

VIENTO AREA LUMINARE

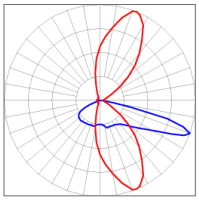
VNT

ISO LINES

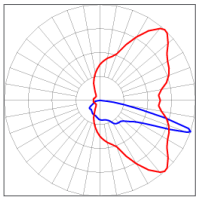
TYPE II MEDIUM



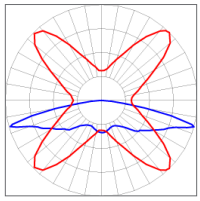
TYPE III MEDIUM



TYPE IV MEDIUM



TYPE V SQUARE



- Red: Horizontal / Blue: Vertical

PHOTOMETRIC DATA

STANDARD

SIZE	MODEL	OPTICS	3000K		4000K		5000K		WATTAGE	BUG RATING
			LUMENS	EFFICACY	LUMENS	EFFICACY	LUMENS	EFFICACY		
VNTS SMALL	5000L	2M	5418	151	5644	156	5559	154	36	B2-U0-G2
		3M	5113	142	5326	148	5246	146		B2-U0-G3
		4M	5054	140	5265	146	5186	144		B1-U0-G3
		5S	5172	144	5387	149	5306	147		B3-U0-G2
	10000L	2M	11533	152	12014	158	11834	156	76	B3-U0-G3
		3M	10855	143	11307	149	11137	147		B2-U0-G2
		4M	10765	142	11214	148	11046	145		B2-U0-G4
		5S	11005	145	11464	151	11292	149		B4-U0-G3
	15000L	2M	15802	145	16460	152	16213	149	109	B3-U0-G3
		3M	15022	138	15648	144	15413	141		B3-U0-G3
		4M	14911	137	15532	143	15299	140		B3-U0-G5
		5S	15252	140	15887	146	15649	144		B4-U0-G3
	18000L	2M	18315	142	19078	147	18792	146	129	B3-U0-G3
		3M	17206	133	17923	139	17654	137		B3-U0-G3
		4M	17270	134	17990	139	17720	137		B3-U0-G5
		5S	17461	135	18189	141	17916	139		B4-U0-G3
VNTM MEDIUM	15000L	2M	15802	146	16460	152	16213	150	108	B3-U0-G3
		3M	15022	139	15648	145	15413	143		B3-U0-G3
		4M	14911	138	15532	143	15299	142		B3-U0-G5
		5S	15252	141	15887	146	15649	145		B4-U0-G3
	20000L	2M	23067	152	24028	158	23668	156	152	B3-U0-G3
		3M	21709	143	22614	149	22275	147		B3-U0-G3
		4M	21531	142	22428	148	22092	145		B3-U0-G5
		5S	22011	145	22928	151	22584	149		B4-U0-G3
	25000L	2M	25861	144	26939	149	26535	147	180	B4-U0-G4
		3M	23574	131	24556	136	24188	134		B4-U0-G3
		4M	23645	131	24630	136	24261	135		B3-U0-G4
		5S	24347	135	25362	141	24981	139		B5-U0-G3
	30000L	2M	31340	144	32646	151	32156	148	217	B4-U0-G4
		3M	29674	137	30910	142	30446	140		B4-U0-G4
		4M	29881	138	31126	144	30659	141		B4-U0-G5
		5S	30148	139	31404	145	30933	143		B5-U0-G4
	35000L	2M	35492	143	36971	148	36416	146	249	B4-U0-G4
		3M	33668	135	35071	141	34545	139		B4-U0-G3
		4M	33458	134	34852	140	34329	138		B4-U0-G5
		5S	34451	138	35886	144	35348	142		B5-U0-G4

- Some Photometric Data is extrapolated and subject to change.

XtraLight® reserves the right to change specifications without notice.

VIENTO AREA LUMINARE

VNT

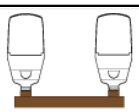
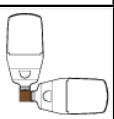
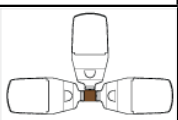
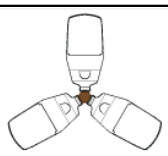
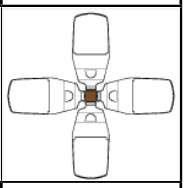
PHOTOMETRIC DATA

STANDARD

SIZE	MODEL	OPTICS	3000K		4000K		5000K		WATTAGE	BUG RATING
			LUMENS	EFFICACY	LUMENS	EFFICACY	LUMENS	EFFICACY		
VNTL LARGE	30000L	2M	31340	144	32646	151	32156	148	217	B4-U0-G4
		3M	29674	137	30910	142	30446	140		B4-U0-G4
		4M	29881	138	31126	144	30659	141		B4-U0-G5
		5S	30148	139	31404	145	30933	143		B5-U0-G4
	35000L	2M	35492	143	36971	148	36416	146	249	B4-U0-G4
		3M	33668	135	35071	141	34545	139		B4-U0-G3
		4M	33458	134	34852	140	34329	138		B4-U0-G5
		5S	34451	138	35886	144	35348	142		B5-U0-G4
	40000L	2M	40952	146	42658	152	42018	150	280	B5-U0-G4
		3M	38022	136	39606	141	39012	139		B5-U0-G4
		4M	38370	137	39969	143	39369	141		B4-U0-G5
		5S	39267	140	40903	146	40289	144		B5-U0-G5
	45000L	2M	46738	143	48685	150	47955	147	326	B5-U0-G4
		3M	43393	133	45201	139	44523	137		B5-U0-G4
		4M	43522	134	45335	139	44655	137		B4-U0-G5
		5S	44814	137	46681	143	45981	141		B5-U0-G5
	50000L	2M	51723	143	53878	149	53070	147	361	B5-U0-G5
		3M	47148	131	49112	136	48375	134		B5-U0-G5
		4M	47292	131	49263	136	48524	134		B4-U0-G5
		5S	48694	135	50723	141	49962	138		B5-U0-G5
	55000L	2M	54761	141	57043	147	56187	145	388	B5-U0-G5
		3M	51948	134	54112	139	53300	137		B5-U0-G5
		4M	52141	134	54314	140	53499	138		B4-U0-G5
		5S	53689	138	55926	144	55087	142		B5-U0-G5

- Some Photometric Data is extrapolated and subject to change.

EPA RATINGS

	SINGLE	DUAL SSA	TWO AT 90	TWO AT 180	THREE AT 90	THREE AT 120	FOUR AT 90
							
SMALL	0.74 sq. ft.	1.37 sq. ft.	1.13 sq. ft.	1.27 sq. ft.	1.27 sq. ft.	1.26 sq. ft.	1.27 sq. ft.
MEDIUM	1.04 sq. ft.	1.50 sq. ft.	1.63 sq. ft.	1.86 sq. ft.	1.87 sq. ft.	1.85 sq. ft.	1.87 sq. ft.
LARGE	1.27 sq. ft.	1.54 sq. ft.	2.02 sq. ft.	2.34 sq. ft.	2.35 sq. ft.	2.27 sq. ft.	2.35 sq. ft.

- EPA calculated with the following:
  - 4" square pole (Single, Two At 90, Two At 180, Three At 90, Four At 90)
  - 4" round pole (Three At 120)
  - VNT-SSA (Dual SSA)

VIENTO AREA LUMINARE

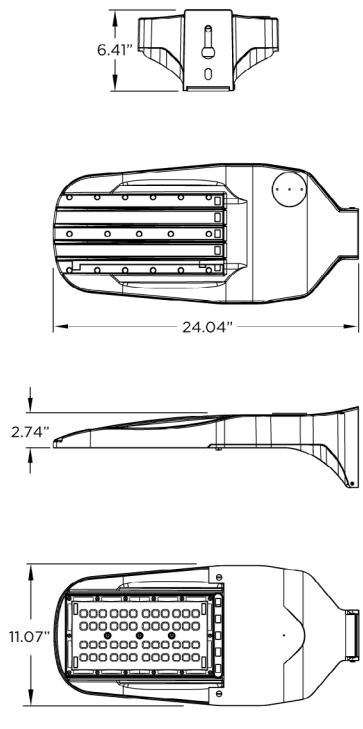
VNT

DIMENSIONAL DATA

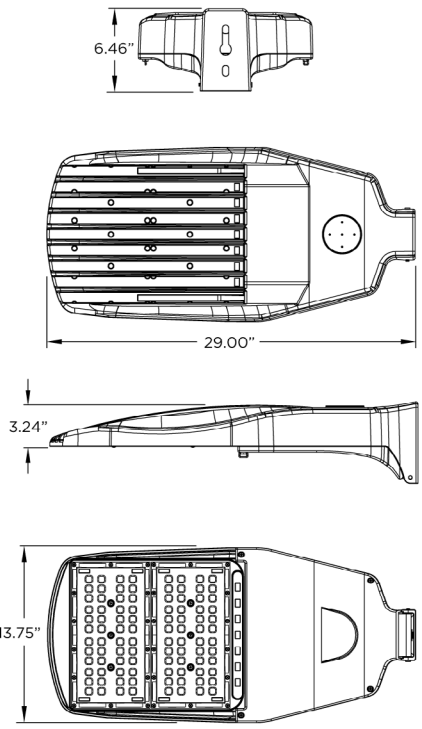
STANDARD SIZES

WEIGHT:
Small = 11 LB
Medium = 29 LB
Large = 39 LB

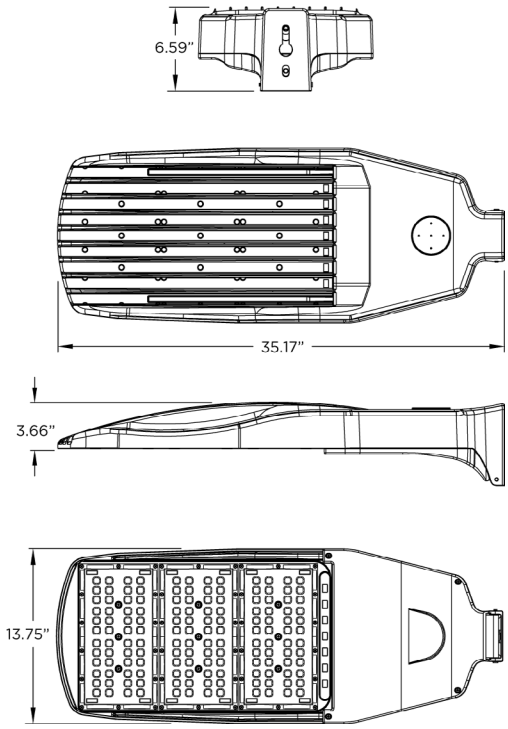
SMALL



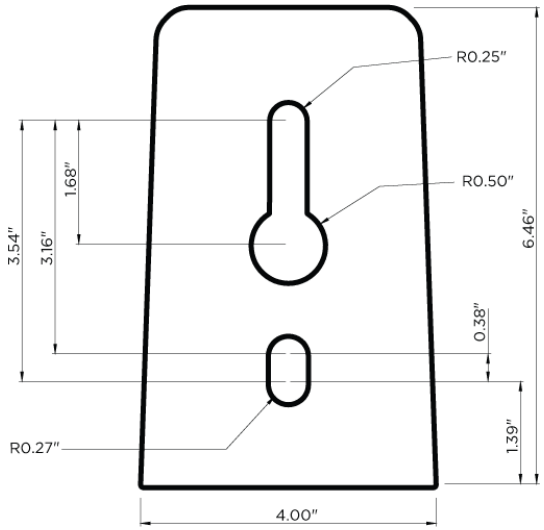
MEDIUM



LARGE



MOUNTING



- Dimensional Data shows the end, top, side, and bottom views for all standard sizes.
- All weights are rounded up to the nearest 0.5 lb.

VIENTO AREA LUMINARE

VNT

ACCESSORIES (SOLD SEPARATELY)

VNT-ASF

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Adjustable Slip Fitter
- Must select (ASF) in the order logic under the Options section.
- 180° range of motion in 10° increments.
- EPA: 0.127 sq. ft. - 6.0 LB
- Viento must not be tilted more than 20° when using ASF



VNT-RPA

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Round Pole Adaptor
- Allows up to four Viento fixtures to be mounted to one pole.
- 3" to 5" Diameter
- EPA: 0.03 sq. ft. - 0.75 LB



VNT-WB

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Wall Bracket



VNT-TWB

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Tenon Wall Bracket Horizontal Mount
- 8" Square Plate - 2 3/8" OD
- Must be ordered with the Adjustable Slip Fitter (ASF) accessory.



XtraLight® reserves the right to change specifications without notice.

VIENTO AREA LUMINARE

VNT

ACCESSORIES (SOLD SEPARATELY)

VNT-SSA [ ]

FINISH	
BZ	Bronze
WH	White
CC	Custom Color

DESCRIPTION

- Sholder-to-Sholder Adaptor
- EPA: 0.90 sq. ft. - 27 LB



VNT-TMA [ ] [ ] [ ] [ ]

POLE		FINISH		SIZE		MOUNTING	
S	Square	**BZ**	Bronze	**4**	4”	**01**	1 Fixture
R	Round	**WH**	White	**5**	5”	**28**	2 Fixtures at 180°
				6	6”	**29**	2 Fixtures at 90°
						39	3 Fixtures at 90°
						32	3 Fixtures at 180°
						49	4 Fixtures at 90°

DESCRIPTION

- Tenon Mount Adaptor
- Dimensions (S): 4”/5”/6”
- Dimensions (R): 4”/5” DIA
- EPA: 0.4 sq. ft. 10 - 16 LB
- VNT-TMAR includes Round Pole Adaptor (VNT-RPA) depending on mounting count.



VNT-UPM [ ] [ ]

POLE		FINISH	
SQ	Square	**BZ**	Bronze
RD	Round	**WH**	White

DESCRIPTION

- Universal Pole Mount Adaptor



[ ]

DIMMING CONTROL	
MS5559	Scheduled Dimming, Standard Voltage
MS5560	Scheduled Dimming, High Voltage
MS5561	Constant All-Night Dimming, Standard Voltage
MS5562	Constant All-Night Dimming, High Voltage

DESCRIPTION

- Dimming Control
- Standard Voltage: 105-305 VAC
- High Voltage: 312-530 VAC
- Frequency: 50/60 Hz



[ ]

SHORTING CAP	
MS1827	Shorting Cap

DESCRIPTION

- Shorting Cap
- Shorting cap required if no other controls are being used in fixture receptacle.

[ ]

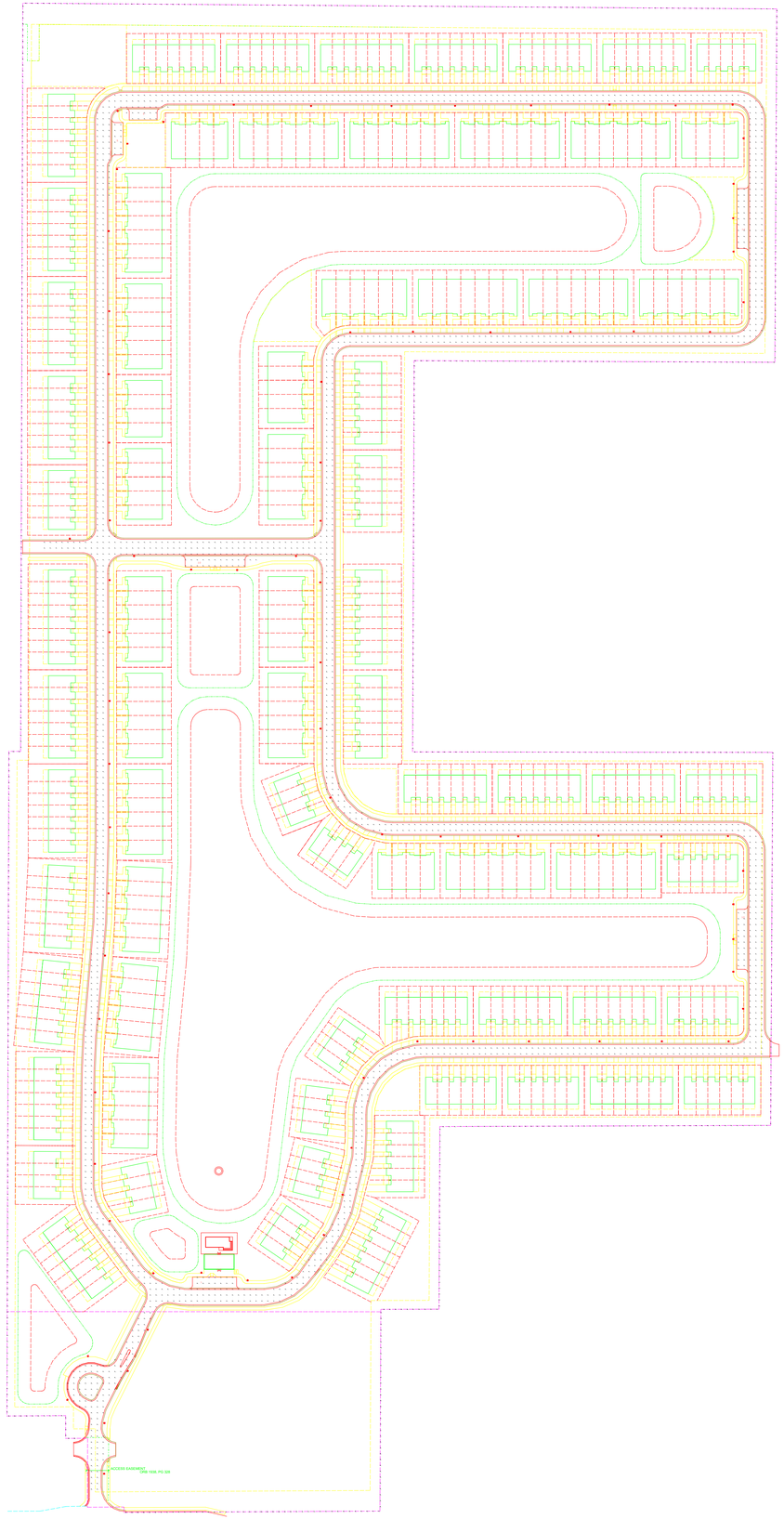
PHOTOCELL STANDARD ON/OFF	
MS0192	120/277
MS5088	480v

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	66	SA	Single	Xtra Light VNTS-10000L-40K-DIM-3M-N-XX-XX-HSS	0.900	7486	76	5016
	16	SB	Single	Xtra Light VNTS-10000L-40K-DIM-4M-N-XX-XX-HSS	0.900	7484	76	1216

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking and Roadway	Illuminance	Fc	1.68	4.5	0.4	4.20	11.25
Property Line	Illuminance	Fc	0.01	0.3	0.0	N.A.	N.A.



PROJECT INFORMATION

Project Name	Type
Catalog #	Date

VIENTO AREA LUMINARE



APPLICATIONS

- Area Lighting
- Retail Spaces
- Street Lighting
- Auto Dealerships & Sales Lots
- Parks & Recreation Areas
- Safety & Security

APPROVALS

- ETL Listed
- Complies with UL 1598 and CSA C22.2
- Suitable for wet locations
- 3G Vibration Rated
- IP66 Rated
- BAA Compliant
- RoHS Compliant
- ATAL Tested www.ata-labs.com
- Select models DLC Premium. For a complete list of DLC Premium products visit: www.xtralight.com/dlc or qpl.designlights.org

FEATURES

- Lumen packages ranging from 5000L to 65000L.
- Outstanding photometric performance results in excellent uniformity, optimal pole spacing and lower power density.
- Low profile architectural design offers a contemporary appearance with excellent light output.
- Enhanced foot candles delivered utilizing multiple optical options.
- Full cut-off optics with zero uplight.

CONSTRUCTION

- Thermal management achieved with a one-piece die-cast aluminum has integral heat sink fins and a hinged electrical compartment.
- Thermoset powder coat, available in bronze, white or custom colors (consult factory)
- IP66, precision molded, polycarbonate optics providing impact resistance and UV stabilization.
- Upgraded door to provide better protection from water intrusion.

ELECTRICAL

- Voltage: 120-277V or 347-480V AC input
- Driver: Class 1, constant current, calibrated to lumen package (0-10V dimming standard)
- Surge Protection: 20kA standard.
- Operating temperature: -40°C to +50°C (-40°F to +122°F)

CONTROLS

- Programmable smart sensor and twist-lock receptacle control options available.

MOUNTING

- Integral arm with key hole slot facilitates quick and easy installation.
- Adjustable slip fitter, round pole adaptor, universal pole adaptor, and other mounting options available as accessories.

WARRANTY

- Backed by XtraLight's limited 5-year warranty.

ORDER LOGIC

SAMPLE CATALOG NUMBER: VNTL-55000L-50K-DIM-5SN-BZ

VNT _____ _____ _____ _____ _____ _____ _____ _____ _____

SIZE	MODEL	CCT[1]	DRIVER	OPTICS	ORIENTATION	FINISH	CONTROLS	OPTIONS
S Small	**5000L**	**30K** 3000K	**DIM** Dim 0-10V, 120-277V	**2M** Type II Medium	**N** Normal (forward)	**BZ** Bronze	**XX** No Fixture Controls	**HSS** House-side Shield
	10000L	**40K** 4000K	**DIM0**[2] Dim 0-10V, 120-277V	**3M** Type III Medium	**L** Left	**WH** White	**IS3**[5] IR Smart Sensor, 20'H/40'D	**ASF**[6] Adjustable Slip Fitter Cord Whip
	15000L	**50K** 5000K	**HVD** to off Dim 0-10V, 347-480V	**4M** Type IV Medium	**R** Right	**CC**[4] Custom Color	**IS7**[5] IR Smart Sensor, 40'H/100'D	**3**[7] NEMA 3-Pin Twist-Lock Receptacle
	18000L			**5S**[3] Type V Square			**BS3**[5] Bluetooth Smart Sensor, 20'H/40'D	**5**[7] NEMA 5-Pin Twist-Lock Receptacle
	20000L[9]						**BS7**[5] Bluetooth Smart Sensor, 40'H/100'D	**7**[7] NEMA 7-Pin Twist-Lock Receptacle
M Medium	**15000L**						**CAS** Casambi Controlled	**SP**[8] Selectable Power
	20000L						**AUT** Autani Controlled	**10Y** 10 Year Warranty
	25000L						**SYN** Synapse Controlled	
	30000L						**SWX** Sensorworx Controlled	
	35000L						**CUS** Custom Sensor (Factory Installed)	
	40000L[9]							
L Large	**30000L**							
	35000L							
	40000L							
	45000L							
	50000L							
	55000L							
	60000L[9]							
	65000L[9]							

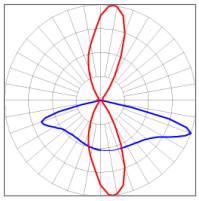
1. Custom CCT available from 2700K - 6500K.
2. Some models may not be available with **DIM0** (Dim to off).
3. The **5S** (Type V Square) optic option is not available with **L** (Left) or **R** (Right) orientations.
4. Provide the desired RAL number for custom colors.
5. Sensor integrated in bottom fixture. (See dimensional drawing)
6. The **ASF** (Adjustable Slip Fitter Cord Whip) must be paired with the Adjustable Slip Fitter accessory (sold separately).
7. Photocell ordered separately. (See page 6)
8. See page 3 for selectable power table.
9. S - 20000L, M - 40000L, L - 60000L, L - 65000L up to +40°C max.

VIENTO AREA LUMINARE

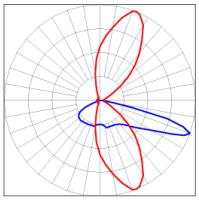
VNT

ISO LINES

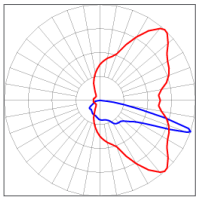
TYPE II MEDIUM



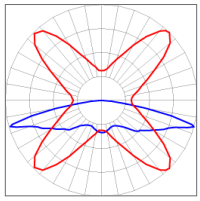
TYPE III MEDIUM



TYPE IV MEDIUM



TYPE V SQUARE



- Red: Horizontal / Blue: Vertical

PHOTOMETRIC DATA

STANDARD

SIZE	MODEL	OPTICS	3000K		4000K		5000K		WATTAGE	BUG RATING
			LUMENS	EFFICACY	LUMENS	EFFICACY	LUMENS	EFFICACY		
VNTS SMALL	5000L	5S	5172	153	5387	160	5388	160	34	B3-U0-G2
		4M	5054	150	5265	156	5266	156		B1-U0-G3
		3M	5113	152	5326	158	5327	158		B2-U0-G3
		2M	5418	161	5644	167	5645	168		B2-U0-G2
	10000L	5S	11005	155	11464	161	11466	161	71	B4-U0-G3
		4M	10765	151	11214	158	11216	158		B2-U0-G4
		3M	10855	152	11307	159	11309	159		B2-U0-G2
		2M	11533	162	12014	169	12016	169		B3-U0-G3
	15000L	5S	15252	152	15887	158	15890	158	101	B4-U0-G3
		4M	14911	148	15532	155	15535	155		B3-U0-G5
		3M	15022	149	15648	156	15651	156		B3-U0-G3
		2M	15802	157	16460	164	16463	164		B3-U0-G3
	18000L	5S	17461	147	18189	153	18192	153	119	B4-U0-G3
		4M	17270	145	17990	151	17993	151		B3-U0-G5
		3M	17206	145	17923	151	17926	151		B3-U0-G3
		2M	18315	154	19078	160	19082	160		B3-U0-G3
	20000L	5S	19236	142	20037	148	20041	148	135	B4-U0-G3
		4M	19025	141	19818	147	19822	147		B3-U0-G5
		3M	18954	140	19744	146	19748	146		B3-U0-G3
		2M	20176	149	21016	156	21020	156		B3-U0-G3
VNTM MEDIUM	15000L	5S	15252	156	15887	162	15890	162	98	B4-U0-G3
		4M	14911	152	15532	158	15535	159		B3-U0-G5
		3M	15022	153	15648	160	15651	160		B3-U0-G3
		2M	15802	161	16460	168	16463	168		B3-U0-G3
	20000L	5S	22011	155	22928	161	22932	161	142	B4-U0-G3
		4M	21531	151	22428	158	22432	158		B3-U0-G5
		3M	21709	152	22614	159	22618	159		B3-U0-G3
		2M	23067	162	24028	169	24033	169		B3-U0-G3
	25000L	5S	24610	152	25635	158	25640	158	162	B5-U0-G3
		4M	23900	148	24896	154	24901	154		B3-U0-G4
		3M	23811	147	24804	153	24808	153		B4-U0-G3
		2M	25861	160	26939	166	26944	166		B4-U0-G4
	30000L	5S	30148	149	31404	155	31410	155	202	B5-U0-G4
		4M	29881	148	31126	154	31132	154		B4-U0-G5
		3M	29674	147	30910	153	30916	153		B4-U0-G4
		2M	31340	155	32646	162	32652	162		B4-U0-G4
	35000L	5S	34451	147	35886	153	35893	153	235	B5-U0-G4
		4M	33458	142	34852	148	34858	148		B4-U0-G5
		3M	33668	143	35071	149	35078	149		B4-U0-G3
		2M	35492	151	36971	157	36978	157		B4-U0-G4
	40000L	5S	38471	142	40074	148	40082	148	270	B5-U0-G4
		4M	38050	141	39636	147	39643	147		B4-U0-G5
		3M	37908	140	39488	146	39495	146		B4-U0-G3
		2M	40351	149	42033	156	42041	156		B4-U0-G4

- Some Photometric Data is extrapolated and subject to change.

VIENTO AREA LUMINARE

VNT

PHOTOMETRIC DATA

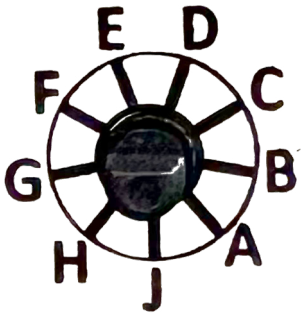
STANDARD

SIZE	MODEL	OPTICS	3000K		4000K		5000K		WATTAGE	BUG RATING
			LUMENS	EFFICACY	LUMENS	EFFICACY	LUMENS	EFFICACY		
VNTL LARGE	30000L	5S	30148	154	31404	160	31410	160	196	B5-U0-G4
		4M	29881	152	31126	159	31132	159		B4-U0-G5
		3M	29674	151	30910	158	30916	158		B4-U0-G4
		2M	31340	160	32646	167	32652	167		B4-U0-G4
	35000L	5S	34451	152	35886	159	35893	159	226	B5-U0-G4
		4M	33458	148	34852	154	34858	154		B4-U0-G5
		3M	33668	149	35071	155	35078	155		B4-U0-G3
		2M	35492	157	36971	164	36978	164		B4-U0-G4
	40000L	5S	39267	151	40903	158	40911	158	260	B5-U0-G5
		4M	38370	148	39969	154	39977	154		B4-U0-G5
		3M	38022	147	39606	153	39614	153		B5-U0-G4
		2M	40952	158	42658	164	42666	164		B5-U0-G4
	45000L	5S	44814	148	46681	154	46690	154	303	B5-U0-G5
		4M	43522	144	45335	150	45344	150		B4-U0-G5
		3M	43393	143	45201	149	45210	149		B5-U0-G4
		2M	46738	154	48685	161	48694	161		B5-U0-G4
	50000L	5S	49878	146	51956	152	51966	152	342	B5-U0-G5
		4M	48440	142	50458	148	50468	148		B4-U0-G5
		3M	48260	141	50271	147	50280	147		B5-U0-G5
		2M	51723	151	53878	158	53888	158		B5-U0-G5
	55000L	5S	53689	143	55926	149	55937	149	375	B5-U0-G5
		4M	52141	139	54314	145	54324	145		B4-U0-G5
		3M	51948	139	54112	144	54122	144		B5-U0-G5
		2M	54761	146	57043	152	57054	152		B5-U0-G5
	60000L	5S	57629	136	60030	142	60041	142	423	B5-U0-G5
		4M	56998	135	59373	140	59385	140		B4-U0-G5
		3M	56786	134	59152	140	59163	140		B5-U0-G5
		2M	60445	143	62964	149	62976	149		B5-U0-G5
	65000L	5S	62109	133	64697	139	64709	139	467	B5-U0-G5
		4M	61430	132	63989	137	64001	137		B4-U0-G5
		3M	61201	131	63751	137	63763	137		B5-U0-G5
		2M	65145	139	67859	145	67872	145		B5-U0-G5

- Some Photometric Data is extrapolated and subject to change.

SELECTABLE POWER (OPTION)

OPTION	SWITCH POSITION	OUTPUT PERCENTAGE	SWITCH POSITION	OUTPUT PERCENTAGE
SP	A	75%	F (DEFAULT)	100%
	B	65%	G	90%
	C	55%	H	85%
	D	50%	J	80%
	E	45%	Switch is located in driver compartment	



VIENTO AREA LUMINARE

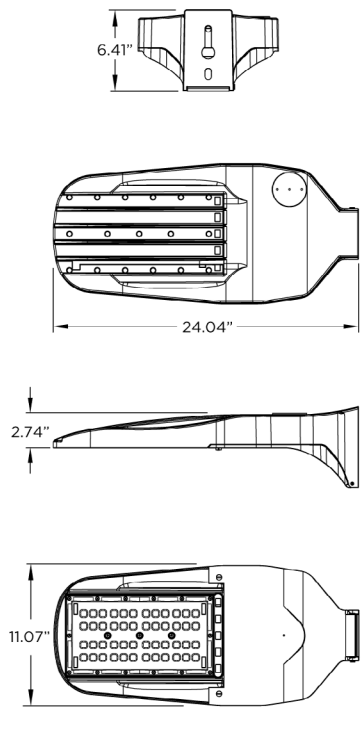
VNT

DIMENSIONAL DATA

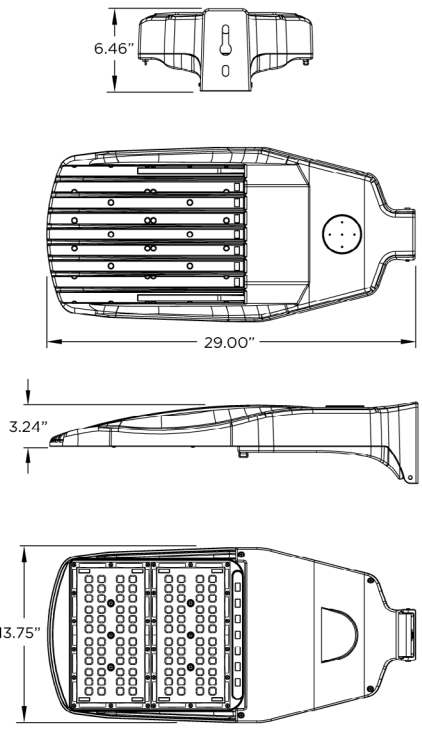
STANDARD SIZES

WEIGHT:
Small = 11 LB
Medium = 29 LB
Large = 39 LB

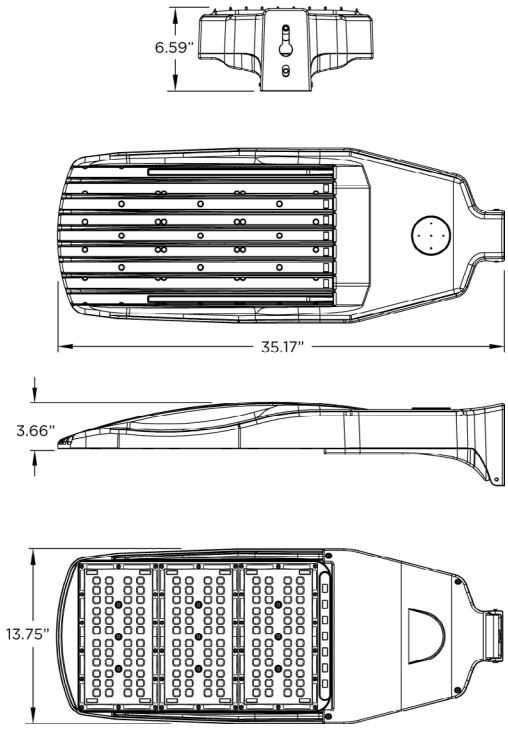
SMALL



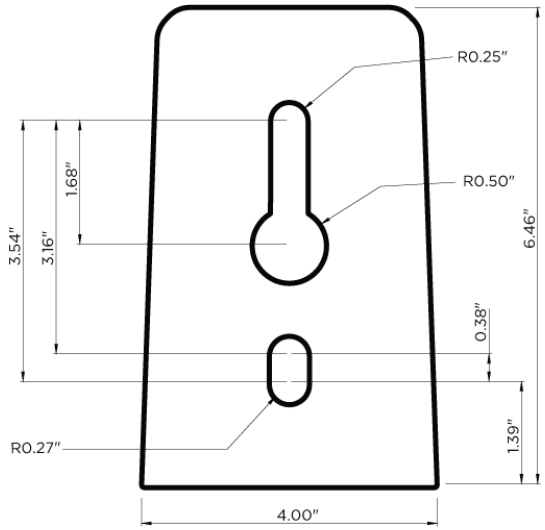
MEDIUM



LARGE



MOUNTING



- Dimensional Data shows the end, top, side, and bottom views for all standard sizes.
- All weights are rounded up to the nearest 0.5 lb.

VIENTO AREA LUMINARE

VNT

ACCESSORIES (SOLD SEPARATELY)

VNT-ASF [ ]

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Adjustable Slip Fitter
- Must select (ASF) in the order logic under the Options section.
- 180° range of motion in 10° increments.
- EPA: 0.127 sq. ft. - 6.0 LB
- Viento must not be tilted more than 20° when using ASF



VNT-RPA [ ]

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Round Pole Adaptor
- Allows up to four Viento fixtures to be mounted to one pole.
- 3" to 5" Diameter
- EPA: 0.03 sq. ft. - 0.75 LB



VNT-WB [ ]

FINISH

BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Wall Bracket



VNT-TWB [ ]

FINISH

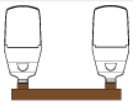
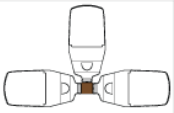
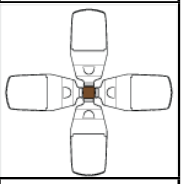
BZ Bronze
WH White
CC Custom Color

DESCRIPTION

- Tenon Wall Bracket Horizontal Mount
- 8" Square Plate - 2 3/8" OD
- Must be ordered with the Adjustable Slip Fitter (ASF) accessory.



EPA RATINGS

	SINGLE	DUAL SSA	TWO AT 90	TWO AT 180	THREE AT 90	THREE AT 120	FOUR AT 90
							
SMALL	0.74 sq. ft.	1.37 sq. ft.	1.13 sq. ft.	1.27 sq. ft.	1.27 sq. ft.	1.26 sq. ft.	1.27 sq. ft.
MEDIUM	1.04 sq. ft.	1.50 sq. ft.	1.63 sq. ft.	1.86 sq. ft.	1.87 sq. ft.	1.85 sq. ft.	1.87 sq. ft.
LARGE	1.27 sq. ft.	1.54 sq. ft.	2.02 sq. ft.	2.34 sq. ft.	2.35 sq. ft.	2.27 sq. ft.	2.35 sq. ft.

- EPA calculated with the following:
  - 4" square pole (Single, Two At 90, Two At 180, Three At 90, Four At 90)
  - 4" round pole (Three At 120)
  - VNT-SSA (Dual SSA)

XtraLight® reserves the right to change specifications without notice.

VIENTO AREA LUMINARE

VNT

ACCESSORIES (SOLD SEPARATELY)

VNT-SSA [ ]

FINISH	
BZ	Bronze
WH	White
CC	Custom Color

DESCRIPTION

- Sholder-to-Sholder Adaptor
- EPA: 0.90 sq. ft. - 27 LB



VNT-TMA [ ] [ ] [ ] [ ]

POLE		FINISH		SIZE		MOUNTING	
S	Square	**BZ**	Bronze	**4**	4”	**01**	1 Fixture
R	Round	**WH**	White	**5**	5”	**28**	2 Fixtures at 180°
				6	6”	**29**	2 Fixtures at 90°
						39	3 Fixtures at 90°
						32	3 Fixtures at 180°
						49	4 Fixtures at 90°

DESCRIPTION

- Tenon Mount Adaptor
- Dimensions (S): 4”/5”/6”
- Dimensions (R): 4”/5” DIA
- EPA: 0.4 sq. ft. 10 - 16 LB



VNT-UPM [ ] [ ]

POLE		FINISH	
SQ	Square	**BZ**	Bronze
RD	Round	**WH**	White

DESCRIPTION

- Universal Pole Mount Adaptor



[ ]

DIMMING CONTROL	
MS5559	Scheduled Dimming, Standard Voltage
MS5560	Scheduled Dimming, High Voltage
MS5561	Constant All-Night Dimming, Standard Voltage
MS5562	Constant All-Night Dimming, High Voltage

DESCRIPTION

- Dimming Control
- Standard Voltage: 105-305 VAC
- High Voltage: 312-530 VAC
- Frequency: 50/60 Hz



[ ]

SHORTING CAP	
MS1827	Shorting Cap

DESCRIPTION

- Shorting Cap
- Shorting cap required if no other controls are being used in fixture receptacle.

[ ]

PHOTOCELL STANDARD ON/OFF	
MS0192	120/277
MS5088	480v

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x

jbiggs@fpua.com

October 2, 2025

Steven Frink, PE
Haley Ward
10250 SW Village Parkway, Ste 201
Port St Lucie, FL 34987

SUBJECT: 5220 Orange Ave
PCN: 2407-231-0000-000-5, 2407-241-0001-000-3, 2407-212-0001-000-3, 2407-211-0001-000-0

Dear Mr. Frink,

As requested, Fort Pierce Utilities Authority (FPUA) would like to confirm the availability of water and wastewater services to the above-referenced parcels. Reuse water is not available at this location. Capacity is currently available at FPUA's Water Treatment Plant and Water Reclamation Facility.

Availability would be contingent upon the completion of construction of the required infrastructure, payment of the applicable fees and charges. Please visit our website at www.fpua.com to review developer requirements, specifications, details, fees, etc.

Should you have any questions please contact John Biggs at 772 466-1600 ext. 3474.

Sincerely,

John Biggs P.E.
Principal Engineer

Ec.: file

STORMWATER OPERATIONAL AND MANAGEMENT REPORT

West Orange Townhomes
Ft Pierce, FL

APPLICANT:
Marc O'Rourke
Orange Avenue Development II, LLC
7530 Barnsbury | West Broomfield, MI 48324

Steven Frink, P.E. #95595 Date
10250 SW Village Parkway, Suite 201
Port St. Lucie, FL 34987 (772) 462-2455

October 23, 2025
JN: 24-276

REPORT PREPARED BY: Steven Frink, PE
Haley Ward, Inc.
10250 SW VILLAGE PKWY, STE 201, PORT ST. LUCIE, FL

Contents

1.0 Project Description 3
2.0 Stormwater Facilities and Components 3
3.0 Stormwater Inlets and Pipes 4
4.0 Dry Detention Area 4
5.0 Operation and Maintenance Plan 4
6.0 Operation and Maintenance Responsible Contact 5
Appendix A: Operation and Maintenance Plan 6
Appendix B: SFWMD Forms 11

1.0 Project Description

The subject property consists of approximately 56.62 acres (ac) land and is located within the City of Fort Pierce in St Lucie County, approximately 1 mile (mi) east of the I-95 and Orange Avenue interchange. The property consists of four parcels, the ids of which can be found below:

- Parcel 1: 2407-212-0001-000-3
- Parcel 2: 2407-231-0000-000-5
- Parcel 3: 2407-241-0001-000-3
- Parcel 4: 2407-211-0001-000-0

The proposed project, known as West Orange Townhomes, includes the construction of a residential townhomes and commercial building to be developed in 2 phases, along with associated drainage, utility, and parking infrastructure. Approximately 0.22 ac- will be donated to the Florida Department of Transportation (FDOT), leaving 56.41 ac available for development. The balance of 56.41 ac will be divided into 2 separate uses upon full project completion. A 4.25 ac commercial outparcel will be provided as part of the development.

2.0 Stormwater Facilities and Components

The stormwater system consists of interconnected catch basins. Tools for maintenance and operations of the stormwater system are not stored on site. The owner will contact a third-party vendor to maintain the stormwater management system.

3.0 Stormwater Inlets and Pipes

The grates for the catch basins should be unobstructed and the bottom, inside of the inlet, should be clean. The catch basins should be inspected for any accumulation of sediment, trash such as garbage bags, or debris in the structures connecting these inlets. Flushing out with a high-pressure hose may clean some of the sediment. Any noted blockage due to a broken pipe, obstruction, etc., should prompt further investigation. Broken or corroded structures should be replaced with structures of the same size. Sediment that has accumulated at the bottom of the catch basin will be removed regularly to prevent a blockage of the stormwater management system.

4.0 Dry Detention Area

The dry detention area serves as treatment and storage of stormwater runoff generated by the development of the property. Stormwater is routed to the dry detention area by means of stormwater catch basins and drainage pipes. The dry detention area should be mowed at regular intervals and the control structure inspected for damage and debris removed.

5.0 Operation and Maintenance Plan

Haley Ward, Inc, has prepared a written Operation and Maintenance (O & M) plan for the development as shown in Appendix B: . The O & M provides the overall inspection requirements, recommended inspection frequencies, and details of the overall inspection requirements. Once inspections are completed Form 62-330.311(1), **Error! Reference source not found.**, should be submitted to the South Florida Water Management District (SFWMD) within 30 days upon the completion of the inspection.

6.0 Operation and Maintenance Responsible Contact

Contacts for the responsible party in charge of the O & M of the stormwater system have been provided below and will also act as the 24-hr contact in the event of an emergency. Copies of the maintenance and inspection records should be provided to the SFWMD and reference application number listed on the Environmental Resource Permit (ERP), and shall be available to review on the SFWMD online portal.

Responsible Party:	Orange Avenue Development II, LLC
Name:	Mark O'Rourke
Title	Member
Address:	7530 Barnsbury Dr
City, State, Zip:	West Bloomfield, MI 48324
Phone Number:	(248) 982-6240

Appendix A: Operation and Maintenance Plan

HALEY WARD

Stormwater Maintenance Plan
for
West Orange Townhomes

Located at Orange Blvd in St Lucie County

The maintenance of your stormwater treatment systems is critical to the performance and directly contributes to the quality of your stormwater runoff leaving your site. It is the responsibility of **Orange Avenue Development II, LLC** to maintain the stormwater system and repair any damage in a timely fashion.

SFWMD ERP Permit Number: _____

Operating Entity Contact:	Orange Avenue Development II, LLC
	c/o Marc O'Rourke – Member
Phone #	(248) 982-6240
E-mail	morourke@landmarcavedon.com

Proper operation and maintenance ensures that the structures remain effective at removing pollutants as originally designed and will also…

- Reduce failure, therefore improve water quality
- Maintain the volume of stormwater treated in the long term
- Increase pollutant removal efficiency

Operation and Maintenance Plan: The proper operation and maintenance of a stormwater management structure includes frequent inspection and scheduled maintenance activities. Manpower and budgetary needs to perform the maintenance must be anticipated. Included in this plan are two (2) appendices. The first is a comprehensive schedule of inspection intervals and maintenance items, the second is a comprehensive site evaluation form to be utilized when performing annual or periodic inspections.

Accessibility: All structures must be easily accessible for inspection and needed equipment. Formal access must be provided and permanent easements must be provided to the entity responsible for maintenance when that entity does not own the property.

10250 SW VILLAGE PARKWAY, SUITE 201, PORT ST. LUCIE, FL 34987 772.462.2455 | HALEYWARD.COM

INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
AREA	SCHEDULE	CORRECTIVE ACTIONS
LANDSCAPED AREAS	Annually early spring and after heavy rains	Inspect all slopes and embankments and replant areas of bare soil or with sparse growth.
		Armor rill erosion areas with riprap or divert the runoff to a stable area.
		Inspect and repair down-slope of all spreaders and turn-outs for erosion.
		Mow vegetation as specified for the area.
DITCHES, SWALES AND OPEN STORMWATER CHANNELS	Annually spring and late fall and after heavy rains	Remove obstructions, sediments or debris from ditches, swales and other open channels.
		Repair any erosion of the ditch lining.
		Mow vegetated ditches.
		Remove woody vegetation growing through riprap.
		Repair any slumping side slopes.
		Repair riprap where underlying filter fabric or gravel is showing or if stones have dislodged.
CULVERTS	Spring and late fall and after heavy rains	Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
		Repair any erosion damage at the culvert's inlet and outlet
CATCH BASINS	Annually in the spring	Remove sediments and debris from the bottom of the basin and inlet grates
		Remove floating debris and oils (using oil absorptive pads) from any trap
ROADWAYS AND PARKING AREAS	Annually in the spring or as needed	Clear and remove accumulated winter sand in parking lots and along roadways
		Sweep pavement to remove sediment
		Grade road shoulders and remove accumulated winter sand
		Grade gravel roads and gravel shoulders
		Clean-out the sediment within water bars or open-top culverts
		Ensure that stormwater runoff is not impeded by false ditches of sediment in the shoulder
RESOURCE AND TREATMENT BUFFERS	Annually in the spring	Inspect buffers for evidence of erosion, concentrated flow, or encroachment by development
		Manage the buffer's vegetation with the requirements in any deed restrictions
		Repair any sign of erosion within a buffer
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Install more level spreaders, or ditch turn-outs if needed for a better distribution of flow
		Clean-out any accumulation of sediment within the spreader bays or turnout pools
		Mow non-wooded buffers no shorter than six inches and less than three times per year

INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
AREA	SCHEDULE	CORRECTIVE ACTIONS
WET PONDS AND DETENTION BASINS	Annually in fall and after heavy rains	Inspect the embankments for settlement, slope erosion, piping, and slumping
		Mow the embankment to control woody vegetation
		Inspect the outlet structure for broken seals, obstructed orifices, and plugged trash racks
		Remove and dispose of sediments and debris within the control structure
		Repair any damage to trash racks or debris guards
		Replace any dislodged stone in riprap spillways
		Remove and dispose of accumulated sediments within the impoundment and forebay
FILTRATION AND INFILTRATION BASINS	Annually in the spring and late fall	Clean the basin of debris, sediment and hydrocarbons
		Provide for the removal and disposal of accumulated sediments within the basin
		Renew the basin media if it fails to drain within 72 hours after a one-inch rainfall event
		Till, seed and mulch the basin if vegetation is sparse
		Repair riprap where underlying filter fabric or gravel is showing or where stones have dislodged
PROPRIETARY DEVICES	As specified by manufacturer	Contract with a third-party for inspection and maintenance
		Follow the manufacturer's plan for cleaning of devices
OTHER PRACTICES	As specified for devices	Contact the department for appropriate inspection and maintenance requirements for other drainage control and runoff treatment measures.

COMPREHENSIVE SITE EVALUATIONS

Inspection Results and Follow-up Action		
Date	Site Personnel Performing Inspection	Incidents of Noncompliance

Certification

I, _____ certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designated to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my personal inspection of the stormwater management system, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Name: _____

Title: _____

Signature: _____

Date: _____

Appendix B: SFWMD Forms

OPERATION AND MAINTENANCE INSPECTION CERTIFICATION

Instructions: Submit this form to the Agency within 30 days of completion of the inspection after any failure of a stormwater management system or deviation from the permit. This form may also be used to document inspections required under Section 12.4 of Applicant's Handbook Volume I, however submittal to the Agency is not required unless requested by the Agency.

Permit No.: _____ Application No.: _____ Date Issued: _____

Identification or Name of Stormwater Management System: _____

Phase of Stormwater Management System (if applicable): _____

Inspection Date: _____

Inspection results: (check all that apply)

☐ The undersigned hereby certifies that the works or activities are functioning in substantial conformance with the permit. This certification is based upon on-site observation of the system conducted by me or my designee under my direct supervision and my review of as-built plans.

☐ The following maintenance was conducted since the last inspection (attach additional pages if needed):

_____

☐ The undersigned hereby certifies that I or my designee under my direct supervision has inspected this surface water management system and the system does not appear to be functioning in substantial conformance with the permit. I am aware that maintenance or alteration is required to bring the system into substantial compliance with the terms and conditions of the permit. As appropriate, I have informed the owner of the following:

(a) The system does not appear to be functioning properly;
(b) That maintenance or repair is required to bring the system into compliance; and
(c) If maintenance or repair measures are not adequate to bring the system into compliance, the system may have to be replaced or an alternative design constructed subsequent to approval by the agency below.

The following components of the system do not appear to be functioning properly (attach additional pages if needed):

_____

Any components of the constructed system that are not in substantial conformance with the permitted system shall require a written request to modify the permit in accordance with the provisions of Rule 62-330.315, F.A.C. If such modification request is not approved by the agency below, the components of the system that are not in conformance with the permit are subject to enforcement action under Sections 373.119, .129, .136, and .430, F.S.

Name of Inspector: _____ Florida Registration Number: _____

Company Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____ Email: _____

_____ _____

Signature of Inspector Date

Report Reviewed by Permittee:

Name of Permittee: _____

_____ _____

Signature of Permittee Date

_____

Title (if any)

Stormwater Facility
Inspection Checklist

Instructions

Prior to the inspection, the Inspector should review the permit for the facility and the design or as-built drawing for the facility.

This inspection checklist is required for the documentation of the annual inspection of all permitted stormwater systems. Complete all parts of the general data section for the project site. Attach any additional required documentation, if necessary. In the "All Technologies" category, mark all items as "satisfactory" or "unsatisfactory." For all other categories, either select "N/A" and minimize the category or mark all inspection items as "satisfactory" or "unsatisfactory." If the system described does not contain a component that is listed for inspection mark that item as "N/A"

For any item marked unsatisfactory, provide a comment below the BMP technology describing maintenance action needed to bring the system back into compliance. Within 30 days of any failure of a stormwater management system or if any components of the constructed system are found to be not in substantial conformance with the permitted system, a report shall be submitted by the permittee or their authorized representative to the Agency using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," ({effective date}), as per 62-330.331(2) F.A.C., describing the remedial actions taken to resolve the failure or deviation.

Inspection reports will be submitted by the permittee or their authorized representative to the applicable permitting agency. Each inspection report must be signed by a certified inspector or a registered professional to certify its authenticity.

Inspection Checklist

General Data

Inspection Date _____ Project Name West Orange Townhomes
Location_____ Permit Number 56-_____

Time since last storm event ☐<24 hours ☐24-48 hours ☐48-72 hours ☐>72 hours
Permit Holder Permit Effective Date
Inspector Name
Inspector Contact Information

Multiple BMP types in the system No ☐Yes ☐ List All: _____
_____
_____

Permit drawings have been reviewed No ☐Yes☐
Additional Photos Attached ☐ N/A ☐
Compliance Activity Record Attached ☐ N/A ☐

All (or other unlisted) Technologies

Items for inspection	Satisfactory	Unsatisfactory
General		
BMPs and treatment facilities are in good repair and operational	☐	☐
BMPs and treatment facilities are free from debris buildup that may impair function	☐	☐
Berms, embankments, curbing, or other methods used to impound, divert, and direct discharges are adequate and in good condition	☐	☐
The discharge (if any) is free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam, or any other signs of contamination	☐	☐
Vegetation		
Mowing done when needed	☐	☐
Grass clippings removed	☐	☐
No evidence of erosion	☐	☐
Inlets		
Good condition, no need for repair	☐	☐
No evidence of erosion*	☐	☐
Outlets/overflow spillway		
Good condition, no need for repair	☐	☐
No evidence of erosion*	☐	☐

Comments: _____

Traditional BMPS

Swales N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Swales and contributing areas clear of debris*	☐	☐
Vegetation		
No evidence of erosion*	☐	☐
No weeds or invasive plants present	☐	☐
No evidence of nutrient deficiency	☐	☐
No evidence of disease	☐	☐
Grasses/sod are not in need of replanting/resodding	☐	☐
No signs of drought stress	☐	☐
No signs of plant overgrowth	☐	☐
Recovery		
Swale recovers between storms within permitted timeframe	☐	☐
Swale clean of sediments		
Good condition, no need for repair	☐	☐
No areas of sediment buildup*	☐	☐
No evidence of erosion*	☐	☐
Inlet Structure / Pretreatment:		
Good condition, no need for repair	☐	☐
No trash/debris/sediment in or around inlet structures*	☐	☐
No evidence that runoff is short-circuiting the inlet	☐	☐

Emergency Overflow / Outlet Structure		
Good condition, no need for repair	☐	☐
No evidence of accumulation of trash, debris, or sediment in or around outlet structure(s)*	☐	☐
No evidence of erosion, or flooding around structures*	☐	☐
Swale Blocks N/A ☐		
If swale blocks or other structures are present, there is no evidence of erosion at downstream toe of structure*	☐	☐

Comments: _____

Wet Pond N/A ☐

Type of wet pond _____

Items for inspection	Satisfactory	Unsatisfactory
Vegetation		
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No emergent invasive plant life	☐	☐
No areas need replanting	☐	☐
Dead plant material is removed, if necessary	☐	☐
Upland banks are maintained		
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Fences/access repairs		
Fence(s) condition	☐	☐
Lock(s) and gate(s) function are adequate	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Outlets/overflow spillway/ drain gate		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐
Weir System: drawdown and overflow weir		
Weir system condition	☐	☐
No evidence of clogging *	☐	☐
Clear of debris*	☐	☐

Comments: _____

Dry Pond N/A ☐

Type of dry pond _____

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Basin bottom clear of debris*	☐	☐
Emergency spillway clear of debris*	☐	☐
Recovery		
Pond recovers between storms	☐	☐
Vegetation		
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No emergent invasive plant life	☐	☐
Does not need replanting	☐	☐
Not overgrown	☐	☐
Sediment cleanout of pond		
No evidence of sedimentation in pond	☐	☐
No evidence of erosion at downstream toe	☐	☐
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Fences/access repairs		
Fence(s) condition	☐	☐
Lock(s) and gate(s) function adequate	☐	☐
Underdrain/side bank Filters		
Cleanout caps present and in good condition	☐	☐
No evidence of clogging	☐	☐
No evidence of erosion over or adjacent to filter*	☐	☐
Inlets		
Inlet(s) condition	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet*	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet*	☐	☐

Comments: _____

Exfiltration Trench N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Trench surface clear of debris*	☐	☐
Inlet areas clear of debris*	☐	☐
Inflow pipes clear of debris*	☐	☐
Overflow spillway clear of debris*	☐	☐
Sediment traps or forebays		
Sufficiently trapping sediment	☐	☐
Has additional storage capacity available until next maintenance action	☐	☐
Sediment buildup has been removed	☐	☐
Vegetation		

Water does not stand on vegetative surface	☐	☐
Good vegetative cover exists	☐	☐
Recovery		
Trench recovers between storms	☐	☐
Sediment cleanout of trench		
No evidence of sedimentation in trench*	☐	☐
Inlets		
Inlet intake(s) functioning adequately	☐	☐
Inlet(s) condition	☐	☐
No evidence of flooding around inlet	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of flooding around outlet	☐	☐
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Aggregate repairs		
Surface of aggregate clean	☐	☐
Top layer of stone does not need replacement	☐	☐
Trench does not need rehabilitation	☐	☐

Comments: _____

Pervious Pavers/Pavement N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Paving area clean of debris*	☐	☐
Site Area		
Drainage area contains stable soil that will not clog pavers	☐	☐
Vegetation on site healthy and glass clippings removed	☐	☐
Runoff is not short-circuiting the pavers	☐	☐
No evidence of erosion, gullies, or rills around site	☐	☐
Infiltration		
Infiltrometer Test meets requirements	☐	☐
Recovery		
Pervious paving recovers between storms	☐	☐
No evidence of clogging or standing water	☐	☐
Sediments		
Pavement area clean of sediments	☐	☐
Area vacuum swept on a periodic basis	☐	☐
Structural Integrity		
No evidence of surface deterioration	☐	☐
No evidence of rutting or spalling	☐	☐
No evidence of pavement settling	☐	☐
No evidence of missing aggregate between pavers	☐	☐

Outlets		
Outlet(s) condition	☐	☐
No evidence of clogging	☐	☐
Clean out caps present if included	☐	☐
Vegetation cells N/A ☐		
Vegetation healthy	☐	☐
Vegetation not overgrown	☐	☐
No grass clippings present *	☐	☐

Comments: _____

Stormwater Vaults or Tanks N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Paving area clean of debris*	☐	☐
Recovery		
Recovers between storms	☐	☐
No evidence of standing water	☐	☐
No nuisance flooding evident	☐	☐
Sediments		
Clear of sediments*	☐	☐
Structural Integrity		
No evidence of surface deterioration	☐	☐
No evidence of cracking	☐	☐
No evidence of rutting or spalling	☐	☐
Safety		
Ladders functioning and in good repair	☐	☐
Adequate venting for access	☐	☐
Contains primary and secondary access	☐	☐
Inlets		
Inlet(s) condition	☐	☐
No evidence of scouring	☐	☐
Outlets		
Outlet(s) condition	☐	☐
No evidence of erosion *	☐	☐
No evidence of clogging	☐	☐

Comments: _____

Constructed Marsh System N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Marsh System clear of debris*	☐	☐
Vegetation		
Appears healthy	☐	☐

No emergent invasive plant life	☐	☐
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No areas need replanting	☐	☐
Dead plant material removed, as necessary	☐	☐
Upland banks are maintained	☐	☐
Flow		
No signs of channeling or erosion *	☐	☐
Maintains minimum permitted water elevation	☐	☐
No signs of drought or short-circuiting	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Vegetation around inlet in good condition	☐	☐
Outlets/emergency outflow N/A ☐		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐
Weir System or Level Spreader N/A ☐		
Weir system condition	☐	☐
No evidence of clogging	☐	☐
Clear of debris*	☐	☐

Comments: _____

Vegetative Natural Buffers N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Buffer clear of debris*	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No areas need replanting	☐	☐
Dead plant material removed, as necessary	☐	☐
Upland banks are maintained	☐	☐
Flow		
No signs of channeling or erosion *	☐	☐
Maintain minimum permitted water elevation	☐	☐
No signs of drought or prolonged ponding	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short Circuiting the inlet	☐	☐

No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Vegetation around inlet in good condition	☐	☐
Outlets/emergency outflow N/A ☐		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐

Comments: _____

Green Roof N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Vegetated area clear of debris*	☐	☐
Dewatering		
Recovers between storms	☐	☐
No evidence of ponding or inundation	☐	☐
Structural		
Constructed elements condition	☐	☐
No evidence of roof leaks	☐	☐
No evidence of exposed or actively eroding areas	☐	☐
Dispersal system/sprinkler N/A ☐		
Dispersal system/sprinkler functioning as intended	☐	☐
Piping in good repair	☐	☐
Pumps functioning as intended	☐	☐
Cistern tank functioning as intended	☐	☐
Overflow functioning as intended	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No signs of nutrient deficiency/disease	☐	☐
No areas need replanting	☐	☐
Inlets/Catchments		
Inlet(s) condition	☐	☐
No evidence of erosion*	☐	☐
No evidence of clogging	☐	☐
Outlets		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
No evidence of bypassing	☐	☐

Comments: _____

Cistern N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Site area		

No evidence of clogging flow paths or pipes *	☐	☐
Structural		
Constructed elements condition	☐	☐
Condition of foundation if above ground	☐	☐
No evidence of leaks	☐	☐
No evidence of algal growth in cistern	☐	☐
No evidence of prolonged storage	☐	☐
Vegetation		
Trees appear healthy	☐	☐
Trees do not need replacing or pruning	☐	☐
No emergent invasive plant life	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not bypassing the inlet(s)	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Screen and/or trap is secured and functioning properly	☐	☐
Screen and/or trap is clear of debris build up *	☐	☐
First flush collector (if present) clear of debris and properly functioning	☐	☐
Outlets/emergency overflow		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
Pump N/A ☐		
Float switch functional	☐	☐
Pump functional	☐	☐
Healthy vegetation, if used for irrigation	☐	☐

Comments: _____

Tree Box or Tree Well N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Site area		
Area clear of excess debris*	☐	☐
No evidence of erosion*	☐	☐
Structural		
Constructed elements condition	☐	☐
Device dewaters between storms	☐	☐
No evidence of inundation	☐	☐
No evidence of sediment build up *	☐	☐
Vegetation		
Tree(s) appears healthy	☐	☐
Tree(s) do not need replacing or pruning	☐	☐
No emergent invasive plant life	☐	☐

Inlets		
Inlet(s) condition	☐	☐
Runoff is not bypassing the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Outlets/emergency overflow		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
Underdrain, if installed		
All cleanouts clear from clogging or blockages *	☐	☐
Cleanouts in good condition	☐	☐

Comments: _____

Bioswale or Raingarden N/A ☐

Type of LID(s) _____

Items for inspection	Satisfactory	Unsatisfactory
Site area		
Area clear of excess debris*	☐	☐
No evidence of erosion or sedimentation *	☐	☐
Dewatering		
Ponding dewaters between storms	☐	☐
No evidence of inundation	☐	☐
Sediment cleanout		
No evidence of sedimentation	☐	☐
Structural		
Constructed elements condition	☐	☐
Mulch depth at least 2 inches	☐	☐
No evidence of damage from wildlife	☐	☐
No evidence of erosion*	☐	☐
No sediment build-up*	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No areas need replanting	☐	☐
Not overgrown	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet area	☐	☐
No evidence of trash/debris/sediment in or around inlet area*	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet area*	☐	☐
Plant life around inlets condition	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐

No evidence of erosion or flooding *	☐	☐
Underdrain N/A ☐		
All cleanouts clear form clogging or blockages	☐	☐
Cleanouts in good condition	☐	☐

Comments: _____

Non-Traditional BMPS

Other Manufactured BMPs N/A ☐

Type of System _____

Items for inspection	Satisfactory	Unsatisfactory
Functioning based on permit and manufacturer specifications	☐	☐
No evidence of damage or clogging	☐	☐

Comments: _____

Monitoring Devices and Adaptive Controls N/A ☐

Type of Monitoring Device(s) _____

Items for inspection	Satisfactory	Unsatisfactory
Computer components		
Functioning as intended	☐	☐
Recording data at permitted intervals	☐	☐
No signs of rusting, corrosion, or other weather damage	☐	☐

Comments: _____

* That May Impair Function

Signature

Inspector Name:
Signature of Inspector:
Florida Registration Number:

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x

jbiggs@fpua.com

October 2, 2025

Steven Frink, PE
Haley Ward
10250 SW Village Parkway, Ste 201
Port St Lucie, FL 34987

SUBJECT: 5220 Orange Ave
PCN: 2407-231-0000-000-5, 2407-241-0001-000-3, 2407-212-0001-000-3, 2407-211-0001-000-0

Dear Mr. Frink,

As requested, Fort Pierce Utilities Authority (FPUA) would like to confirm the availability of water and wastewater services to the above-referenced parcels. Reuse water is not available at this location. Capacity is currently available at FPUA's Water Treatment Plant and Water Reclamation Facility.

Availability would be contingent upon the completion of construction of the required infrastructure, payment of the applicable fees and charges. Please visit our website at www.fpua.com to review developer requirements, specifications, details, fees, etc.

Should you have any questions please contact John Biggs at 772 466-1600 ext. 3474.

Sincerely,

John Biggs P.E.
Principal Engineer

Ec.: file

October 24, 2025

Kev Freeman
Planning Director
City of Fort Pierce
Planning Department
100 North U.S. 1
Fort Pierce, FL 34950

RE: West Orange Planned Development (Phase 1) – Final PD – Narrative

Location: Orange Avenue, City of Fort Pierce, Florida
Parcel ID: 2407-211-0001-000-0, 2407-212-0001-000-3 ,2407-231-0000-000-5
2407-241-0001-000-3

Dear Kev:

On behalf of the owner, Orange Avenue Devel II LLC, we are pleased to submit for a Final PD for the Phase 1 (56.62 ac) of the West Orange PD approved by the ordinance 23-013 in Feb 21, 2023.

This 56.62-acre Planned Development (PD) phase 1 located on Orange Avenue, east of Jenkins Road (image 1), proposes a new residential community designed to provide a balanced mix of housing, open space, and future neighborhood-serving uses. The project will be developed in multiple phases to coordinate with infrastructure improvements, market demand, and overall community growth.

The propoerties that make the Phase 1 have Residential High (RH) Future Land Use designation (Image 2) and the abovementioned Planned Developemnt (PD) zoning designation (Image 3)

The development will include a total of approximately **450 townhome units**, representing a significant contribution to the City of Fort Pierce's housing supply. The addition of these units will help meet the growing demand for quality housing options within the city and support continued residential growth in a well-planned and coordinated manner.

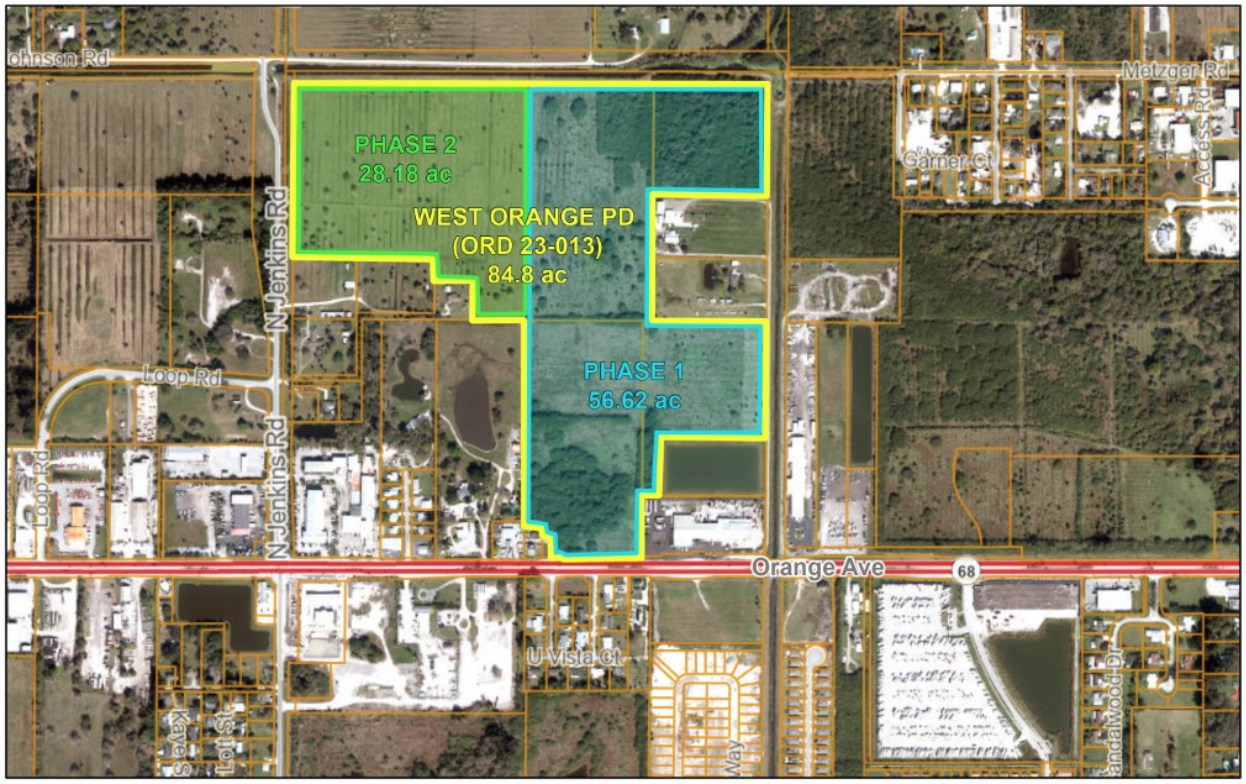


Image 1 – Location

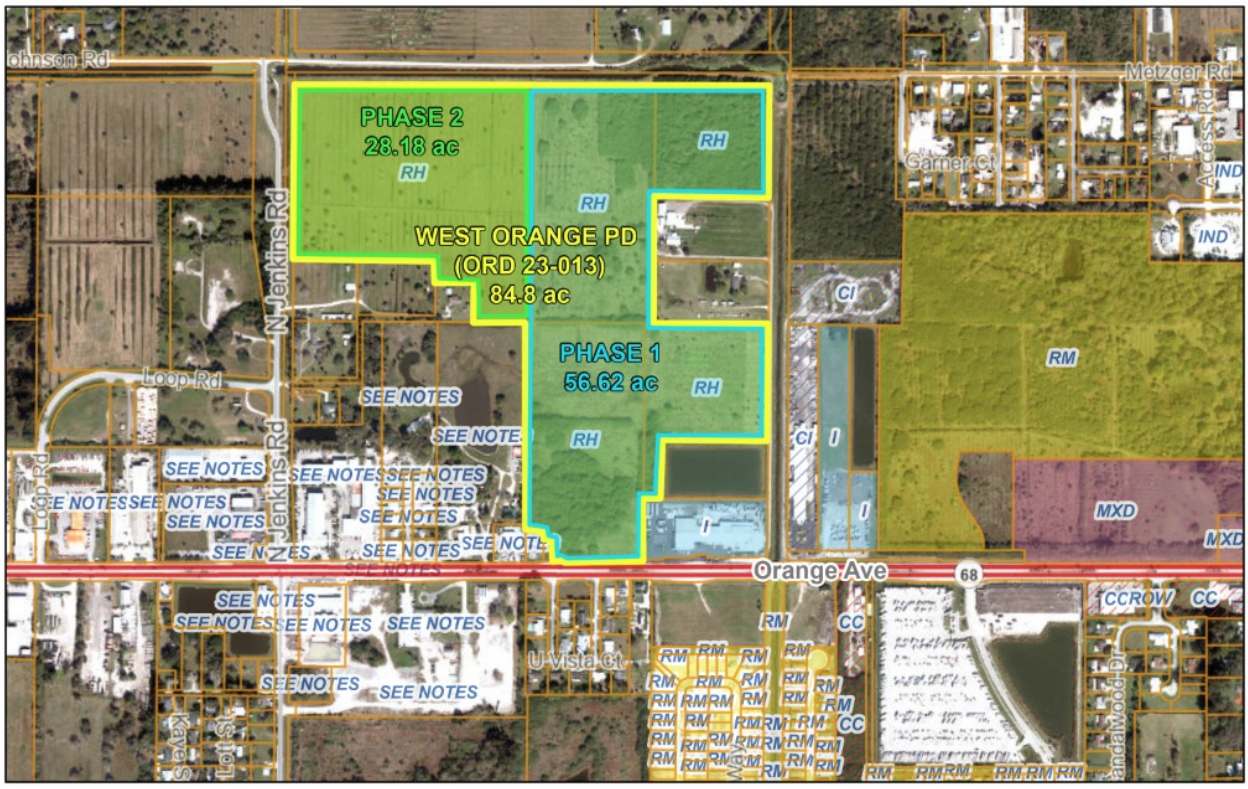


Image 2 – Future Land Use Map

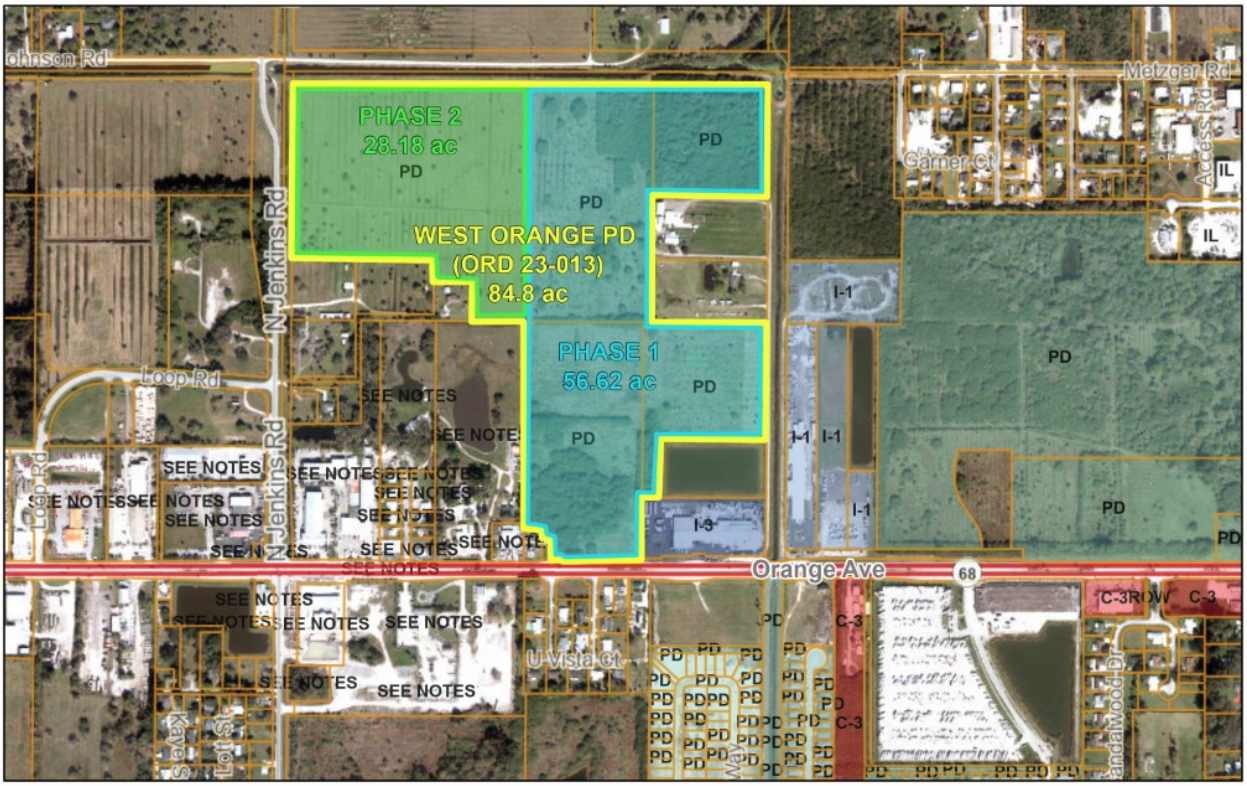


Image 3 – Zoning Map

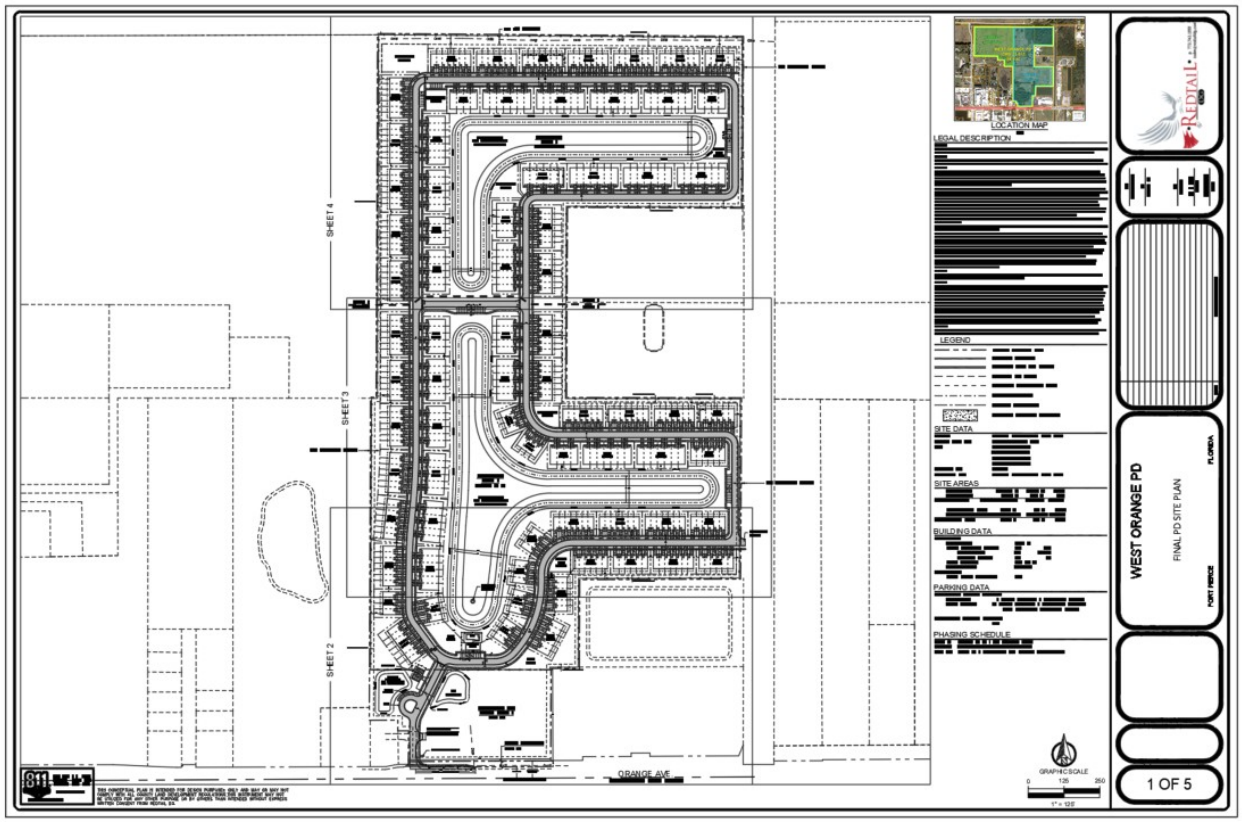


Image 4 – Final PD phase 1 site plan

Phasing Plan

Phases 1 and 2 will consist of townhome units arranged to promote an organized street pattern and walkable neighborhood layout. These initial phases will establish the internal roadway network, utility infrastructure, stormwater systems, and community amenities.

Phase 3 is reserved for a **future commercial use**, envisioned as a small-scale neighborhood-serving area providing convenient services for residents and nearby properties. The commercial portion will be designed to complement the residential character of the overall development.

PROPOSED DEVELOPMENT:

PHASE 1: Residential (29.47 acres): 256 dwelling units – 8.69 du/ac
PHASE 2: Residential (22.69 acres): 194 dwelling units – 8.55 du/ac
TOTAL: Residential (52.16 acres): 450 dwelling units – 7.89 du/ac

FUTURE DEVELOPMENT:

PHASE 3: Commercial (4.25 acres)

R.O.W. DEDICATION: 0.215 acres (Orange Avenue is currently having a variable ROW, and the propoerty is currently 40 feet from the centerline. The ultimate right-of-way is 120ft for this section of Orange Avenue which calls for 60’ to the propoerty, so a 20’ wide strip of the property adjacent to Orange Avenue will be dedicated to it’s right-of way.

Site Design and Improvements

The PD has been designed with attention to both functionality and appearance, ensuring a livable and well-integrated environment.

Key design elements include:

- **Stormwater Management:** The site incorporates a combination of **lakes and dry retention areas** throughout the community to provide effective drainage and add visual interest.

- **Open Space and Recreation:** Multiple **open space areas and pocket parks** are distributed across the development to encourage outdoor activity and neighborhood interaction.

- **Community Amenities:** A centrally located **clubhouse with a swimming pool** will serve as a shared amenity for residents, supporting a sense of community and providing recreational opportunities.

- **Access and Circulation:** A **deceleration lane along Orange Avenue** is proposed to improve traffic flow and provide safe ingress into the development. Internal streets are planned to promote safe, efficient circulation and pedestrian connectivity. The community is gated with 6’ high fence or wall. There is an emergency connection to the road to the east of the property.

- **School Bus Stop:** A designated **school bus stop area** has been incorporated for safe and convenient student pick-up and drop-off.

- **Landscape Buffer:** Along portions of the site adjacent to overhead utility lines, a **36-foot-wide landscape buffer** has been provided. This buffer not only accommodates the existing utility easement but also enhances visual screening and privacy for neighboring properties. The additional width offers opportunities for layered plantings and contributes to the overall aesthetic quality of the PD. The whole developemt area has an improved **15-foot wide landscape buffer** along the propoerty lines.

Development Intent

The intent of this Planned Development is to create a high-quality residential community that aligns with the City of Fort Pierce's goals for well-planned growth and thoughtful neighborhood design. The project combines functional infrastructure with generous open spaces and quality architecture to create a cohesive environment.

The inclusion of approximately **450 townhomes** will expand the city's range of housing opportunities, providing attainable and attractive options for families, professionals, and residents seeking to live within Fort Pierce. The future commercial phase will further enhance the community's long-term sustainability by providing convenient local services and reducing off-site vehicle trips.

Overall, this PD represents a balanced and responsible development approach that benefits both its residents and the surrounding area while contributing positively to the city's continued growth.

Tod Mowery, AICP
President

REDTAIL DG
100 S. 2nd Street
Fort Pierce, FL 34950
772.742.1555 (w)
561.262.6304 (c)
todm@redtaildg.com

Architectural Design Narrative

West Orange Avenue Planned Development

Project Introduction and Design Intent

The West Orange Avenue Planned Development, encompassing 56.624 acres in Fort Pierce, Florida, proposes the creation of a high-quality, pedestrian-friendly residential community featuring 450 townhome units across two phases.

Our design philosophy centers on integrating contemporary Florida vernacular architecture with modern efficiency and community-focused amenities. The development aims to provide an attractive, attainable housing option that enhances the urban-to-suburban transition along Orange Avenue while establishing a cohesive and aesthetically pleasing neighborhood fabric. The architectural choices prioritize durability, low maintenance, and a regionally appropriate aesthetic to ensure long-term value and neighborhood appeal.

Developer's Commitment to Quality and Efficiency

This development is designed and constructed by Ryan Homes, one of the nation’s largest and most experienced homebuilders. With a foundation built over 75 years, Ryan Homes is renowned for its commitment to standardized quality, value engineering, and operational efficiency across 16 states. The townhome plans—Neptune WB and Piper WB—are part of the "Florida Simply Ryan" series, tailored specifically for the Southeast climate and lifestyle.

This approach incorporates the company’s **BuiltSmart** whole-house engineering standards, which mandate advanced construction methods and energy-efficient materials. Each home is designed to deliver superior year-round comfort, reduced energy consumption (often achieving HERS scores significantly lower than standard new homes), and long-term durability, providing assurance of a resilient and cost-effective product for the future residents of Fort Pierce.

Architectural Character and Massing

The townhomes employ a robust, multi-unit attached typology, exemplified by the "Neptune WB" and "Piper WB" models. The exterior architecture balances traditional proportions with clean, modern lines. The dominant visual element is the combination of traditional siding and stucco veneers, creating textural depth and variety while maintaining a coastal, resilient aesthetic. The massing is characterized by two-story construction with deep, articulated rooflines featuring a consistent mean roof height (approximately 22’-9”), which imparts a substantial and residential scale to the building rows. Subtle variations in roof eaves and front entry canopies, as seen in the renderings , break up the horizontal expanse, mitigating the appearance of repetitive structures. The placement of multiple vertical windows, both double-hung and fixed, ensures ample natural light penetration while adding rhythm and visual interest to the facades.

Unit Design and Functionality

The unit floor plans, designed for efficient use of space and modern living, offer both three-bedroom (Neptune WB) and three-bedroom, two-and-a-half bath configurations across approximately 1,466 to 1,632 square feet of conditioned space. The main level is dedicated to open-concept living, maximizing connection between the Great Room, Dining, and Kitchen areas. This flow supports flexibility for entertaining and daily family life. A crucial element of the ground floor is the inclusion of a dedicated, front-entry, single-car garage and an accessible Powder Room, addressing parking needs and guest amenities directly. Specific attention is given to the indoor-outdoor transition, featuring a covered lanai (e.g., 10' x 10' in the Neptune model and an option for the Piper model) accessible from the rear, promoting the Florida lifestyle.

The upper level is designed as the private domain, efficiently clustering bedrooms and bathrooms. The Neptune model notably includes a ground-floor owner’s suite (12'-10" x 14'-0") for enhanced accessibility and privacy, a sought-after feature in multi-generational housing. The interior volumes are maximized with generous ceiling heights: 8’-8” on the first floor and 8’on the second floor, contributing to an airy and spacious feel.

Community Amenities and Site Integration

The architectural expression extends to the community amenities, which serve as visual and social anchors for the development. The amenity area includes a centrally located Clubhouse, Pool, and Shade Structure . The Clubhouse architecture adopts a clean, bright, and formal language—characterized by smooth stucco finishes and a hip roof—to create a distinguished focal point. The mail kiosk and shade structure at the main entrance establish a formal, welcoming gateway, utilizing similar architectural elements to ensure a unified design vocabulary across the entire site. These elements, surrounded by lush, regionally appropriate landscaping (including mature palm trees), are strategically positioned to foster social interaction and provide active and passive recreational opportunities for residents, further elevating the quality of life within this new Fort Pierce community.

Statement of Planned Development Benefits
Project Name: West Orange Planned Development
Location: 5220 Orange Avenue.
Parcel ID: 2407-211-0001-000-0
2407-212-0001-000-3
2407-231-0000-000-5
2407-241-0001-000-3

REDTAIL DC
100 S. 2nd Street
Fort Pierce, FL 34950

October 2025

This Statement of Benefits is provided in support of the **Final Planned Development (PD) submittal** for the *West Orange PD* located along Orange Avenue in the City of Fort Pierce. The property, encompassing approximately **56.62 acres**, is currently zoned **Planned Development (PD)** and has received its preliminary approval under Ordinance No. *23-013*.
The purpose of this submittal is to present the final site design, phasing plan, and associated improvements consistent with the approved PD framework. The final plan continues to uphold the intent and character of the previously approved development while providing meaningful community, infrastructure, and economic benefits to the City and its residents.

Public Benefits

1. Expansion of the City's Housing Supply:
The project will provide approximately **450 new townhome units**, offering a range of modern and attainable housing options within the City of Fort Pierce. This addition directly supports the City's ongoing efforts to increase its housing inventory and provide diverse residential opportunities that respond to local demand.

2. Transportation and Access Improvements:
A **new deceleration lane on Orange Avenue** is proposed to facilitate safe and efficient entry into the development. This improvement enhances overall traffic operations, reduces turning conflicts, and contributes to the safety of both residents and the traveling public.

3. School Bus Safety and Accessibility:
A **dedicated school bus stop area** has been incorporated within the plan to provide a safe, off-street location for student pick-up and drop-off. This feature minimizes interaction with Orange Avenue traffic and improves overall child safety and circulation within the community.

4. Stormwater Management and Environmental Quality:
The PD integrates a comprehensive **stormwater management system**, including both lakes and dry retention areas. These features ensure proper drainage, improve water quality, and enhance the visual environment of the neighborhood while meeting all regulatory standards.

5. Open Space, Recreation, and Amenities:
The community includes multiple **open space areas, pocket parks, and a central clubhouse with pool**, offering residents recreational and social opportunities within walking distance of their homes. These privately maintained amenities lessen the burden on public parks and contribute to the long-term quality of life within the PD.

6. Landscape Buffer and Neighborhood Compatibility:
A **36-foot-wide landscape buffer** is provided along portions of the property where overhead utility lines exist. This enhanced buffer not only accommodates the existing easement but also strengthens screening and privacy between the PD and adjacent uses. The additional width allows for layered plantings, improving both aesthetics and environmental function.

Developer Benefits

1. Implementation of a Cohesive Master-Planned Community:
As an already approved PD, this final submittal ensures a unified and consistent design across all project phases. The master-planned approach promotes architectural harmony, integrated landscaping, and coordinated infrastructure delivery.

2. Orderly Phased Development:
The project is structured to be built in multiple phases, allowing development to proceed in a logical sequence aligned with infrastructure completion and market demand. This approach benefits both the City and the developer by ensuring timely provision of improvements and community amenities.

3. Predictable and Coordinated Implementation:
The PD approval process establishes clear standards for layout, access, landscaping, and amenities. This results in a predictable development outcome that reflects the City's planning goals and gives the developer a reliable framework for construction and future operations.

Conclusion

The Final PD submittal for *West Orange* represents a well-planned, high-quality residential community spanning **56.62 acres** that aligns with the City of Fort Pierce's objectives for smart growth, safety, and livability. The project delivers tangible public benefits—expanded housing, roadway and safety improvements, enhanced stormwater systems, generous open space, and aesthetic buffering—while fulfilling the vision of a cohesive, thoughtfully designed neighborhood.

LEGAL DESCRIPTION:

PARCEL 1:

THE WEST ONE-HALF (1/2) OF THE NORTHEAST ONE-QUARTER (1/4) OF THE NORTHWEST ONE-QUARTER (1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS RIGHT-OF-WAY FOR CANALS, AS RECORDED IN THE PUBLIC RECORDS IN AND FOR ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:

THE EAST 50 FEET OF THE FOLLOWING DESCRIBED PROPERTY: THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR PUBLIC ROADS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 3:

THE NORTH 15 ACRES OF THE FOLLOWING DESCRIBED PROPERTY, THE EAST 1/2 OF THE SOUTHEAST 1/4 OF NORTHWEST 1/4 IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR CANALS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA. AND FURTHER LESS AND EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2915:

A PORTION OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 806.208 METERS (2,645.03 FEET) TO A POINT ON A FOUND BOAT SPIKE MARKING THE WEST 1/4 CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASELINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASELINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, A DISTANCE OF 624.027 METERS (2,047.33 FEET); THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT A RIGHT ANGLE TO THE LAST DESCRIBED COURSE, A DISTANCE OF 116.668 METERS (382.77 FEET) TO THE POINT OF BEGINNING; THENCE NORTH 89 DEG 47' 56" EAST, A DISTANCE OF 171.190 METERS (561.65 FEET); THENCE NORTH 00 DEG 18' 45" EAST, A DISTANCE OF 94.635 METERS (310.48 FEET); THENCE SOUTH 89 DEG 47' 56" WEST, A DISTANCE OF 171.309 METERS (562.04 FEET); THENCE SOUTH 00 DEG 14' 26" WEST, A DISTANCE OF 94.634 METERS (310.48 FEET) TO THE POINT OF BEGINNING.

FURTHER LESS AND EXCEPTING THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1430, PAGE 1914:

A PARCEL OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTH 15 ACRES OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCLUSIVE OF RIGHTS-OF-WAY FOR CANALS. LYING SOUTHERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 2,645.03 FEET TO A POINT ON A FOUND RAILROAD SPIKE MARKING THE WEST QUARTER CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASE LINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON A FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASE LINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 7, A DISTANCE OF 2,047.33 FEET; THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE, A DISTANCE OF 382.77 FEET TO THE POINT OF BEGINNING.

THENCE NORTH 89 DEG 47' 56" EAST, A DISTANCE OF 561.65 FEET TO THE EASTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, SAID LINE ALSO TO BE EXTENDED TO THE WESTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER.

PARCEL 4:

THE NE1/4 OF THE NE1/4 OF THE NW 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, EXCEPTING ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AND DITCHES.

PARCEL 5:

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE EAST 20' OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST.

LESS AND EXCEPTING THE EAST 50' THEREOF AND LESS RIGHT-OF-WAY FOR PUBLIC ROADS.

FURTHER EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND: BEGIN 20' WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7 AND RUN THENCE NORTH 40' TO POINT OF BEGINNING; THENCE CONTINUE NORTH PARALLEL WITH THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 165' TO A POINT; THENCE TURN AND RUN EAST PARALLEL WITH

THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 100' TO A POINT; THENCE TURN AND RUN SOUTH 165' TO A POINT 100' EAST OF POINT OF BEGINNING; THENCE TURN AND RUN WEST 100' TO POINT OF BEGINNING.

LESS D.O.T. EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2925, OFFICIAL RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LESS THE WEST 1/2 OF THE CROSS EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1938, PAGE 328 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE 20 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE N00°10'09"E FOR 40.00 FEET TO THE NORTH RIGHT OF WAY LINE OF ORANGE AVENUE (STATE ROAD NO. 68); THENCE N89°42'09"E ALONG SAID RIGHT OF WAY LINE OF ORANGE AVENUE FOR 54.99 FEET; THENCE N79°48'50"E FOR 45.07 FEET; THENCE N89°42'09"E FOR 0.67 FEET TO THE POINT OF BEGINNING; THENCE N00°10'09"E FOR 119.20 FEET, THENCE N89°42'09"E FOR 74.89 FEET; THENCE S00°10'09"W FOR 119.20 FEET TO SAID NORTH RIGHT OF WAY LINE OF ORANGE AVENUE; THENCE S89°10'09"W FOR 74.89 FEET TO THE POINT OF BEGINNING.

CONTAINING 56.62 ACRES, MORE OR LESS.

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2911155 OR BOOK 2633 PAGE 355, Recorded 08/10/2006 at 11:40 AM
Doc Tax: $5040.00

Prepared by and return to:

Bloomgarden Goudreau & Rosen
8551 West Sunrise Blvd. Suite 208
Fort Lauderdale, FL 33322
954-370-2222
File Number: **05-404**
Will Call No.:

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this 26 day of **July, 2006** between **Michael Tzimenatos, a single man** whose post office address is **3860 NW 78th Way, Coral Springs, FL 33065**, grantor, and **Orange Avenue Development II, LLC, a Michigan limited liability company** whose post office address is **40440 Grand River Avenue, Suite E, Novi, MI 48375**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Saint Lucie County, Florida** to-wit:

The NE1/4 of the NE1/4 of the NW 1/4 of Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida, EXCEPTING all rights of way for Public Roads and Drainage Canals and ditches.

Parcel Identification Number: 2407 211 0001 000 0

Subject to real estate taxes for the year 2006 and all subsequent years; conditions, restrictions, limitations and easements of record; all zoning and subdivision ordinances of Saint Lucie CountyCounty, Florida, none of which are reimposed by this Deed.

Grantor warrants that at the time of this conveyance, the subject property is not the Grantor's homestead within the meaning set forth in the constitution of the state of Florida, nor is it contiguous to or a part of homestead property. Grantor's residence and homestead address is: **3860 NW 78th Way, Coral Springs, FL 33065**

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2005**.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: C Goudreau

Witness Name: ILA RODRIGUEZ

Michael Tzimenatos

By:

State of Florida
County of Broward

The foregoing instrument was acknowledged before me this 26th day of July, 2006 by Michael Tzimenatos. He/she [_] is personally known to me or [X] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name:

My Commission Expires:

CHERRIE F. GOUDREAU
MY COMMISSION # DD 223616
EXPIRES: September 10, 2007
Bonded Thru Notary Public Underwriters

DoubleTime®

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2853121 OR BOOK 2558 PAGE 153, Recorded 05/09/2006 at 04:16 PM
Doc Tax: $21393.40

This instrument prepared by:
IRA C. HATCH, ESQUIRE
Hatch & Doty, P.A.
1701 A-1-A, Suite 220
Vero Beach, Fl 32963

AFTER RECORDING RETURN TO:

Howard B. Goldman, Esq.
Butzel Long, PC
100 Bloomfield Hills Parkway, Suite 200
Bloomfield Hills, MI 48304

Property Appraiser's
Parcel Identification Number:
2407-241-00001-000-3 & 2407-212-00001-000-3

WARRANTY DEED (Statutory Form - Section 689.02, F.S.)

THIS INDENTURE, made this 17th day of April, 2006, BETWEEN **THOMAS HOEFFNER, a married man,** whose post office address is: 1910 Esplandade Avenue, N, Fort Pierce, FL 34982, **ROBERT J. HOEFFNER, a single man,** whose post office address is: 1881 KamLoops St. NW, Palm Bay, FL 32907, **WILLIAM J. HOEFFNER, a married man,** whose post office address is: 5307 Echo Pines Circle, Fort Pierce, FL 34951, **PATRICIA HOEFFNER, an unmarried woman,** whose post office address is: 2413 1st Avenue, Unit K-6, Fernandina, FL 32034, **SALLY J. HOEFFNER, an unmarried woman,** whose post office address is: 1881 KamLoops Street, NW, Palm Bay, FL 32907, **SUSAN C. TRUNDLE, a married woman,** whose post office address is: 2529 Eden Ridge Lane, Acworth, GA 30101, **GERARD P. HOEFFNER, a married man,** whose post office address is: 2601 Lazy Hammock Lane, Fort Pierce, FL 34981 **and LISA B. HOEFFNER, an unmarried woman,** whose post office address is: 701 Bryant Avenue, Stuart, FL 34994, ("grantor")*, and **ORANGE AVENUE DEVELOPMENT II, LLC,** a Michigan limited liability company, whose post office address is 40440 Grand River Ave, Suite E, Novi, Michigan 48375, ("grantee")*.

WITNESSETH that said grantor, for and in consideration of the sum of Ten ($10.00) Dollars, and other good and valuable consideration, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in St. Lucie County, Florida, to-wit:

See exhibit "A" attached hereto and made a part hereof

SUBJECT TO: (1) TAXES FOR 2006 AND SUBSEQUENT YEARS; (2) ZONING AND/OR RESTRICTIONS AND PROHIBITIONS IMPOSED BY GOVERNMENTAL AUTHORITY AND (3) RESTRICTIONS, EASEMENTS AND OTHER MATTERS APPEARING ON THE PLAT AND/OR COMMON TO THE SUBDIVISION

NB, the subject property is not now nor has it ever been the homestead of nor adjacent to the homestead of the Grantors herein. The Subject property is vacant land.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

*"Grantor" and "grantee" are used for singular or plural, as context requires.

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered
in our presence:

Witness Name: CHRISTINA A. PERNA

Witness Name: STACEY SEALS

THOMAS HOEFFNER

STATE OF FLORIDA

COUNTY OF INDIAN RIVER

The foregoing instrument was acknowledged before me this 7th day of April, 2006 by **THOMAS HOEFFNER**

NOTARY PUBLIC

_____Personally known ✓ OR Produced Identification Type of Identification Produced: Driver's License(s)

NOTARY PUBLIC-STATE OF FLORIDA
Lisa B. Aguiar
Commission # DD518101
Expires: FEB. 14, 2010
Bonded Thru Atlantic Bonding Co., Inc.

Witness Name: CHRISTINA A PERNA

Witness Name: Stacey Seals

ROBERT J. HOEFFNER

STATE OF FLORIDA

COUNTY OF INDIAN RIVER

The foregoing instrument was acknowledged before me this 7th day of April, 2006 by **ROBERT J. HOEFFNER.**

NOTARY PUBLIC

_____Personally known ___ OR Produced Identification Type of Identification Produced: Driver's License(s)

NOTARY PUBLIC-STATE OF FLORIDA
Lisa B. Aguiar
Commission # DD518101
Expires: FEB. 14, 2010
Bonded Thru Atlantic Bonding Co., Inc.

Witness Name: Roberta A. Breene

Witness Name: Brenda Marlin

WILLIAM J. HOEFFNER

STATE OF FLORIDA

COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 17th day of April, 2006 by **WILLIAM J. HOEFFNER.**

NOTARY PUBLIC

_____Personally known __ OR Produced Identification Type of Identification Produced: Driver's License(s)

NOTARY PUBLIC-STATE OF FLORIDA
Lisa B. Aguiar
Commission # DD518101
Expires: FEB. 14, 2010
Bonded Thru Atlantic Bonding Co., Inc.

Witness Name: Teresa Oliver

Witness Name: Amanda Patterson

PATRICIA HOEFFNER

STATE OF FLORIDA

COUNTY OF Nassau

The foregoing instrument was acknowledged before me this 11th day of April, 2006 by **PATRICIA HOEFFNER.**

SUZANNE L. WILLIS
MY COMMISSION # DD 328516
EXPIRES: September 12, 2008
Bonded Thru Notary Public Underwriters

NOTARY PUBLIC

_____Personally known __✓__OR Produced Identification Type of Identification Produced: Driver's License(s) FL

Witness Name: CHRISTINA A. PERNA

Witness Name: Stacey Seals

SALLY J. HOEFFNER

STATE OF FLORIDA

COUNTY OF INDIAN RIVER

The foregoing instrument was acknowledged before me this 7th day of April, 2006 by **SALLY J. HOEFFNER.**

NOTARY PUBLIC

_____Personally known __ OR Produced Identification Type of Identification Produced: Driver's License(s)

NOTARY PUBLIC-STATE OF FLORIDA
Lisa B. Aguiar
Commission # DD518101
Expires: FEB. 14, 2010
Bonded Thru Atlantic Bonding Co., Inc.

Witness Name: _____

Witness Name: _____

SUSAN C. TRUNDLE

STATE OF ~~FLORIDA~~ GEORGIA

COUNTY OF COBB

The foregoing instrument was acknowledged before me this 7th day of April, 2006 by **SUSAN C. TRUNDLE.**

NOTARY PUBLIC Exp 4/26/09

✓ Personally known ___ OR Produced Identification Type of Identification Produced: Driver's License(s)

Witness Name: EDWARD F. RUBY

Witness Name: LISA B. AGUIAR

GERARD P. HOEFENER

STATE OF FLORIDA

COUNTY OF ST LUCIE

The foregoing instrument was acknowledged before me this 17th day of April, 2006 by **GERARD P. HOEFFNER.**

NOTARY PUBLIC

_____Personally known ✓ OR Produced Identification Type of Identification Produced: Driver's License(s)

NOTARY PUBLIC-STATE OF FLORIDA
Lisa B. Aguiar
Commission # DD518101
Expires: FEB. 14, 2010
Bonded Thru Atlantic Bonding Co., Inc.

Witness Name:

Witness Name:

LISA B. HOEFFNER

STATE OF FLORIDA

COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 7 day of April, 2006 by **LISA B. HOEFFNER.**

NOTARY PUBLIC

WILLIAM D. DIXON
Commission # DD0224415
Expires 7/29/2007
Bonded through
(800-432-4254) Florida Notary Assn., Inc.

Personally known ___ OR Produced Identification Type of Identification Produced: Driver's License(s)

EXHIBIT "A"
LEGAL DESCRIPTION

The Land is described as follows:

Parcel 1: The West one-half (1/2) of the Northeast one-quarter (1/4) of the Northwest one-quarter (1/4) of Section 7, Township 35 South, Range 40 East, Less right-of-way for canals, as recorded in the Public Records in and for St. Lucie County, Florida.

Parcel 2: The East 50 feet of the following described property: The West 1/2 of the Southeast 1/4 of the Northwest 1/4 of Section 7, Township 35 South, Range 40 East, LESS AND EXCEPT rights of way for public roads, lying and being in St. Lucie County, Florida.

Parcel 3: The North 15 acres of the following described property, the East 1/2 of the Southeast 1/4 of Northwest 1/4 in Section 7, Township 35 South, Range 40 East, LESS AND EXCEPT rights of way for canals, lying and being in St. Lucie County, Florida. And further less and excepting therefrom the following described parcel as set forth in Warranty Deed recorded in Official Records Book 1433, Page 2915:

A portion of the Northwest 1/4 of Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida, being more particularly described as follows:

Commence at a found railroad spike marking the Southwest corner of said Section 7; thence North 00 deg 07' 33" East along the West line of said Section 7, a distance of 806.208 meters (2,645.03 feet) to a point on a found boat spike marking the West 1/4 corner of said Section 7, said point being on the Baseline of Survey for State Road 68 (Orange Avenue) as shown on the Florida Department of Transportation Right of Way Map for Section No. 94070-2505; thence North 89 deg 42' 09" East along said Baseline of Survey and the South line of the Northwest 1/4 of said Section 7, a distance of 624.027 meters (2,047.33 feet); thence North 00 deg 17' 51" West along a line at a right angle to the last described course, a distance of 116.668 meters (382.77 feet) to the POINT OF BEGINNING; thence North 89 deg 47' 56" East, a distance of 171.190 meters (561.65 feet); thence North 00 deg 18' 45" East, a distance of 94.635 meters (310.48 feet); thence South 89 deg 47' 56" West, a distance of 171.309 meters (562.04 feet); thence South 00 deg 14' 26" West, a distance of 94.634 meters (310.48 feet) to the POINT OF BEGINNING.

Further less and excepting the following described parcel as set forth in Warranty Deed recorded in Official Records Book 1430, Page 1914:

A parcel of land lying in the Northwest quarter of Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida, and being more particularly described as follows:

The North 15 acres of the East half of the Southeast quarter of the Northwest quarter in Section 7, Township 35 South, Range 40 East, exclusive of rights-of-way for canals. Lying Southerly of

the following described line;

Commence at a found railroad spike marking the Southwest corner of said Section 7; thence North 00 deg 07' 33" East along the West line of said Section 7, a distance of 2,645.03 feet to a point on a found railroad spike marking the West quarter corner of said Section 7, said point being on the base line of survey for State Road 68 (Orange Avenue) as shown on a Florida Department of Transportation right-of-way Map for Section No. 94070-2505; thence North 89 deg 42' 09" East along said base line of survey and the South line of the Northwest quarter of said Section 7, a distance of 2,047.33 feet; thence North 00 deg 17' 51" West along a line at right angles to the last described course, a distance of 382.77 feet to the Point of Beginning.

Thence North 89 deg 47' 56" East, a distance of 561.65 feet to the Easterly boundary of the East half of the Southeast quarter of the Northwest quarter, said line also to be extended to the Westerly boundary of the East half of the Southeast quarter of the Northwest quarter.

Together with a strip of land 50.00 feet in width measured at right angles to and parallel to the line forming the Western boundary of said East half of the Southeast quarter of the Northwest quarter and extending from the Southerly boundary line of the 15 acres hereby conveyed to the North right-of-way line of Orange Avenue extension, exclusive of rights-of-way for public roads.

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3037169 OR BOOK 2794 PAGE 89, Recorded 04/05/2007 at 01:07 PM
Doc Tax: $23112.60

This Document Prepared By and Return to:
Steven R. McCain, Esquire
HAYSKAR WALKER SCHWERER
DUNDAS & McCAIN, P.A.
515-519 South Indian River Drive
Fort Pierce, FL 34950

Parcel ID Number: 2407-231-0000-000/5

Warranty Deed

This Indenture, Made this 6th day of March, 2007 A.D., **Between** Charles Alan Turner, David Paul Turner and Karen T. Enterline, as Trustees U/W/O Earl V. Turner, deceased of the County of St. Lucie, State of Florida, **grantor,** and ORANGE AVENUE DEVELOPMENT II, LLC, a Michigan limited liability company whose address is: 40440 Grand River Avenue, Suite E, Novi, MI 48375 of the County of , State of MI 48375, **grantee.**

Witnesseth that the GRANTOR, for and in consideration of the sum of Ten & 00/100ths---------- DOLLARS, and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of St. Lucie State of Florida to wit:

See Attached Exhibit "A" for legal description.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Printed Name: ROBERT V. SCHWERER
Witness as to all

Printed Name: Patty Arendt
Witness as to all

Charles Alan Turner, David Paul Turner and Karen T. Enterline, as Trustees U/W/O Earl V. Turner, deceased

By: _____ (Seal)
Charles Alan Turner, Trustee
P.O. Address: **5000 Orange Avenue, Fort Pierce, FL 34947**

By: _____ (Seal)
David Paul Turner, Trustee
P.O. Address: **5000 Orange Avenue, Fort Pierce, FL 34947**

By: _____ (Seal)
Karen T. Enterline, Trustee
P.O. Address: **5000 Orange Avenue, Fort Pierce, FL 34947**

STATE OF Florida
COUNTY OF St. Lucie

The foregoing instrument was acknowledged before me this 6th day of March, 2007 by Charles Alan Turner, David Paul Turner, and Karen T. Enterline Trustees of said Florida trust who are personally known to me or who have produced their Florida driver's license as identification.

Patty Arendt
Notary Public
My Commission Expires: 11/16/08

PATTY ARENDT MY COMMISSION EXPIRES November 16, 2008 #DD365420 Bonded Thru Troy Fain-Insurance 800-385-7019 NOTARY PUBLIC, STATE OF FLORIDA

Laser Generated by © Display Systems, Inc., 2007 (863) 763-5555 Form FLWD-1

EXHIBIT "A"

LEGAL DESCRIPTION

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE EAST 20' OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST.

LESS AND EXCEPTING THE EAST 50' THEREOF AND LESS RIGHT-OF-WAY FOR PUBLIC ROADS.

FURTHER EXPECTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND: BEGIN 20' WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7 AND RUN THENCE NORTH 40' TO POINT OF BEGINNING; THENCE CONTINUE NORTH PARALLEL WITH THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 165' TO A POINT; THENCE TURN AND RUN EAST PARALLEL WITH THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 100' TO A POINT; THENCE TURN AND RUN SOUTH 165' TO A POINT 100' EAST OF POINT OF BEGINNING; THENCE TURN AND RUN WEST 100' TO POINT OF BEGINNING.

LESS D.O.T. EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2925 OFFICIAL RECORDS OF ST. LUCIE COUNTY, FLORIDA.

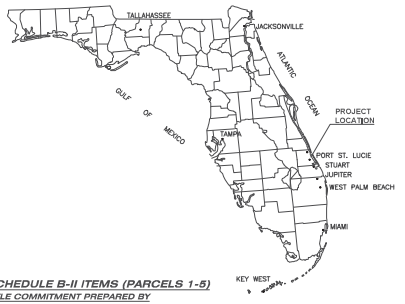
LESS THE WEST 1/2 OF THE CROSS EASEMENT AS RECORDED IN OFFICIAL RECORD BOOK 1938 PAGE 328 MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE 20 FEET WEST OF THE SOUTHEASTER CORNER OF THE SOUTHWEST 1/4/ OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE N00°10'09"E FOR 40.00 FEET TO THE NORTH RIGHT OF WAY LINE OF ORANGE AVENUE (STATE ROAD NO. 68); THENCE N89°42'09"E ALONG SAID RIGHT OF WAY LINE OF ORANGE AVENUE FOR 54.99 FEET; THENCE N79°48'50"E FOR 45.07 FEET; THENCE N89°42'09"E FOR 0.67 FEET TO THE POINT OF BEGINNING; THENCE N00°10'09"E FOR 119.20 FEET, THENCE N89°42'09"E FOR 74.89 FEET; THENCE S00°10'09"W FOR 119.20 FEET TO SAID NORTH RIGHT OF WAY LINE OF ORANGE AVENUE; THENCE S89°10'09"W FOR 74.89 FEET TO THE POINT OF BEGINNING.

CONTAINING 800,259 SQUARE FEET OR 18.37 ACRES MORE OR LESS.

BOUNDARY & TOPOGRAPHIC SURVEY

LANDMARC BUILDING DEVELOPMENT, INC.
SECTION 07, TOWNSHIP 35 SOUTH, RANGE 40 EAST
ST. LUCIE COUNTY, FLORIDA

LOCATION MAP



SCHEDULE B-II ITEMS (PARCELS 1-5)

TITLE COMMITMENT PREPARED BY
CHICAGO TITLE INSURANCE COMPANY
COMMITMENT # 1810-144
COMMITMENT DATE: MARCH 9, 2021, AT 11:00 PM

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS FORM.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
2. TAXES AND ASSESSMENTS FOR THE YEAR 2021 AND SUBSEQUENT YEARS, WHICH ARE NOT YET DUE AND PAYABLE.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
3. STANDARD EXCEPTIONS:
   A. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND.
      SHOWN ON THIS SURVEY.
   B. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
      AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
   C. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIALS HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
      AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
   D. TAXES OR ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS IN THE PUBLIC RECORDS.
      AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
4. ANY CLAIM THAT ANY PORTION OF THE INSURED LAND IS SOVEREIGN LANDS OF THE STATE OF FLORIDA, INCLUDING SUBMERGED, FILLED OR ARTIFICIALLY EXPOSED LANDS ACCRETED TO SUCH LAND.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
5. ANY LIEN PROVIDED BY COUNTY ORDINANCE OR BY CHAPTER 159, FLORIDA STATUTES, IN FAVOR OF ANY CITY, TOWN, VILLAGE OR PORT AUTHORITY FOR UNPAID SERVICE CHARGES FOR SERVICE BY ANY WATER, SEWER OR GAS SYSTEM SUPPLYING THE INSURED LAND.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
6. TERMS, CONDITIONS, AND PROVISIONS OF CROSS EASEMENT AGREEMENT, RECORDED IN OFFICIAL RECORDS BOOK 1938, PAGE 328. (PARCEL 5)
   SHOWN ON THIS SURVEY.
7. ~~TERMS, CONDITIONS, AND PROVISIONS OF RESOLUTION NO. 89-246 ACCEPTING RIGHT OF WAY EASEMENT ON BEHALF ST. LUCIE COUNTY, RECORDED IN OFFICIAL RECORDS BOOK 651, PAGE 1029.~~ **(PARCELS 1 AND 4)**
   DOES NOT AFFECT SUBJECT PROPERTY.
8. EASEMENT GRANTED FLORIDA POWER & LIGHT COMPANY AS RECORDED IN OFFICIAL RECORDS BOOK 237, PAGE 2802. (PARCEL 4)
   SHOWN ON THIS SURVEY.
9. EASEMENT GRANTED FLORIDA POWER & LIGHT COMPANY AS RECORDED IN OFFICIAL RECORDS BOOK 189, PAGE 2801. (PARCEL 5)
   SHOWN ON THIS SURVEY.
10. EASEMENT GRANTED FLORIDA POWER & LIGHT COMPANY AS RECORDED IN OFFICIAL RECORDS BOOK 238, PAGE 1743. (PARCEL 1)
    SHOWN ON THIS SURVEY.
11. EASEMENT GRANTED FLORIDA POWER & LIGHT COMPANY AS RECORDED IN OFFICIAL RECORDS BOOK 368, PAGE 2044 AND OFFICIAL RECORDS BOOK 368, PAGE 2043. (PARCEL 3)
    SHOWN ON THIS SURVEY.
12. ACCESS WILL NOT BE INSURED TO PARCEL 3, SHOULD IT BE SEPARATED FROM OTHER PARCELS.
    AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
13. RIGHTS OF OTHERS TO USE THE WATERS OF ANY WATER BODY EXTENDING FROM THE INSURED LAND ONTO OTHER LANDS.
    AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
14. RIGHTS OF TENANTS OCCUPYING ALL OR PART OF THE INSURED LAND UNDER UNRECORDED LEASES OR RENTAL AGREEMENTS.
    AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
15. DRAINAGE DITCHES THAT MAY TRAVERSE THE LANDS INSURED, TOGETHER WITH ANY RIGHTS OF OTHERS FOR DRAINAGE PURPOSES AND ANY RIGHTS OF ST. LUCIE COUNTY OR THE STATE OF FLORIDA TO MAINTAIN SAID DITCHES.
    AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.

LEGAL DESCRIPTION:

PARCEL 1:

THE WEST ONE-HALF (1/2) OF THE NORTHEAST ONE-QUARTER (1/4) OF THE NORTHWEST ONE-QUARTER (1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS RIGHT-OF-WAY FOR CANALS, AS RECORDED IN THE PUBLIC RECORDS IN AND FOR ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:

THE EAST 55 FEET OF THE FOLLOWING DESCRIBED PROPERTY: THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR PUBLIC ROADS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 3:

THE NORTH 15 ACRES OF THE FOLLOWING DESCRIBED PROPERTY, THE EAST 1/2 OF THE SOUTHEAST 1/4 OF NORTHWEST 1/4 IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS AND EXCEPT RIGHTS OF WAY FOR CANALS, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA. AND FURTHER LESS AND EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2915:

A PORTION OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 806.208 METERS (2,645.03 FEET) TO A POINT ON A FOUND BOAT SPIKE MARKING THE WEST 1/4 CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASELINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASELINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, A DISTANCE OF 424.027 METERS (2,047.23 FEET); THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT A RIGHT ANGLE TO THE LAST DESCRIBED COURSE, A DISTANCE OF 116.668 METERS (382.77 FEET) TO THE POINT OF BEGINNING; THENCE NORTH 89 DEG 47' 58" EAST, A DISTANCE OF 171.190 METERS (561.65 FEET); THENCE NORTH 00 DEG 18' 45" EAST, A DISTANCE OF 94.635 METERS (310.48 FEET); THENCE SOUTH 89 DEG 47' 58" WEST, A DISTANCE OF 171.309 METERS (562.04 FEET); THENCE SOUTH 00 DEG 14' 28" WEST, A DISTANCE OF 94.634 METERS (310.48 FEET) TO THE POINT OF BEGINNING.

FURTHER LESS AND EXCEPTING THE FOLLOWING DESCRIBED PARCEL AS SET FORTH IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1430, PAGE 1914:

A PARCEL OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE NORTH 15 ACRES OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCLUSIVE OF RIGHTS-OF-WAY FOR CANALS. LYING SOUTHERLY OF THE FOLLOWING DESCRIBED LINE;

COMMENCE AT A FOUND RAILROAD SPIKE MARKING THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE NORTH 00 DEG 07' 33" EAST ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 2,645.03 FEET TO A POINT ON A FOUND RAILROAD SPIKE MARKING THE WEST QUARTER CORNER OF SAID SECTION 7, SAID POINT BEING ON THE BASE LINE OF SURVEY FOR STATE ROAD 68 (ORANGE AVENUE) AS SHOWN ON A FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP FOR SECTION NO. 94070-2505; THENCE NORTH 89 DEG 42' 09" EAST ALONG SAID BASE LINE OF SURVEY AND THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 7, A DISTANCE OF 2,047.33 FEET; THENCE NORTH 00 DEG 17' 51" WEST ALONG A LINE AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE, A DISTANCE OF 382.77 FEET TO THE POINT OF BEGINNING.

THENCE NORTH 89 DEG 47' 58" EAST, A DISTANCE OF 561.65 FEET TO THE EASTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, SAID LINE ALSO TO BE EXTENDED TO THE WESTERLY BOUNDARY OF THE EAST HALF OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER.

PARCEL 4:

THE NE1/4 OF THE NE1/4 OF THE NW 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, EXCEPTING ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AND DITCHES.

PARCEL 5:

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE EAST 20' OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST.

LESS AND EXCEPTING THE EAST 50' THEREOF AND LESS RIGHT-OF-WAY FOR PUBLIC ROADS.

FURTHER EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCEL OF LAND: BEGIN 20' WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7 AND RUN THENCE NORTH 40' TO POINT OF BEGINNING; THENCE CONTINUE NORTH PARALLEL WITH THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 165' TO A POINT; THENCE TURN AND RUN EAST PARALLEL WITH THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 7, FOR A DISTANCE OF 100' TO A POINT; THENCE TURN AND RUN SOUTH 165' TO A POINT 100' EAST OF POINT OF BEGINNING; THENCE TURN AND RUN WEST 100' TO POINT OF BEGINNING.

LESS D.O.T. EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1433, PAGE 2925, OFFICIAL RECORDS OF ST. LUCIE COUNTY, FLORIDA.

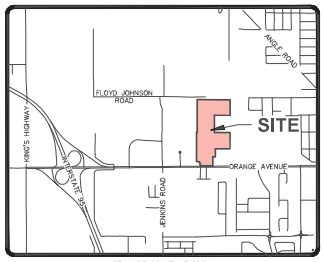
LESS THE WEST 1/2 OF THE CROSS EASEMENT AS RECORDED IN OFFICIAL RECORDS BOOK 1938, PAGE 328 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE 20 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE N00°10'09"E FOR 40.00 FEET TO THE NORTH RIGHT OF WAY LINE OF ORANGE AVENUE (STATE ROAD NO. 68); THENCE N89°42'09"E ALONG SAID RIGHT OF WAY LINE OF ORANGE AVENUE FOR 54.99 FEET; THENCE N75°48'50"E FOR 45.07 FEET; THENCE N89°42'09"E FOR 0.67 FEET TO THE POINT OF BEGINNING; THENCE N00°10'09"E FOR 119.20 FEET, THENCE N89°42'09"E FOR 74.89 FEET; THENCE S00°10'09"W FOR 119.20 FEET TO SAID NORTH RIGHT OF WAY LINE OF ORANGE AVENUE; THENCE S89°10'09"W FOR 74.89 FEET TO THE POINT OF BEGINNING.

CONTAINING 56.62 ACRES, MORE OR LESS.

FLIGHT NOTES & ACCURACY REPORT:

1. THIS SITE WAS FLOWN DURING OCTOBER 6, 2025, ZENMUSE L1 LIDAR, WITH DJI PILOT FOR FLIGHT PLANNING AND TRIMBLE BUSINESS CENTER AND/OR POAD SURVEY POST PROCESSING.
2. THE FLIGHT WAS DESIGNED BY CERTIFIED REMOTE PILOT NO. 4357810.
3. GROUND ELEVATIONS WHERE SPOT CHECKED WITH GPS RTK ON OCTOBER 01, 2025.
4. MEASUREMENTS OF DISTANCE, AREA AND VOLUME WITHIN THE MAP ARE ACCURATE TO WITHIN 1-3 TIMES THE GROUND SAMPLING DISTANCE. MAP MEASUREMENTS ARE WITHIN 1-3ft OF GROUND-BASED MEASUREMENTS.
5. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE FLY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER. AREAS DESIGNATED AS "OBSCURED" INDICATE THE GROUND IS OBSCURED BY VEGETATION AND/OR SHADOWS. MAPPING WITHIN THESE AREAS MAY NOT MEET STANDARD ACCURACY.
6. RELATIVE ACCURACY:
   - VERTICAL ACCURACY IS ± 0.25' FOR OPEN AREAS
   - VERTICAL ACCURACY IS ± 0.50' AREAS OF DENSE VEGETATION.



ST. LUCIE COUNTY, FLORIDA
VICINITY MAP
NO SCALE

SYMBOL & ABBREVIATION LEGEND:

BWF	BARBED WIRE FENCE
◆	BENCHMARK (BM) OR GROUND CONTROL POINT (GCP)
(C)	CALCULATED
℄	CENTERLINE
COR	CERTIFIED CORNER RECORD
CONC.	CONCRETE
CM	CONCRETE MONUMENT
CPP ☒	CONCRETE POWER POLE (CPP)
C.A.E.	CROSS ACCESS EASEMENT
	CURB INLET
(D)	DEED
Ⓓ	DRAINAGE MANHOLE
EP	EDGE OF PAVEMENT
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FPL	FLORIDA POWER AND LIGHT
FND	FOUND
⟵	GUY WIRE ANCHOR
	HYDRANT
ID	IDENTIFICATION
IP	IRON PIPE
IR	IRON ROD
IR/C	IRON ROD AND CAP
L&E	LESS AND EXCEPT
LB	LICENSED BUSINESS
MAG/D	MAG NAIL MAG BRAND NAIL
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NSLRWMD	NORTH ST. LUCIE RIVER WATER MANAGEMENT DISTRICT
F.K.A.	F.K.A. NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT
No.	NUMBER
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVER HEAD WIRES
PG	PAGE
PK/D	PARKER-KALON NAIL & DISK
PRM	PERMANENT REFERENCE MONUMENT
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
P.L.S	PROFESSIONAL LAND SURVEYOR
℗	PROPERTY LINE
R/W	RIGHT-OF-WAY
SWD⊂	SANITARY VALVE
SEC	SECTION
—ss—	SIGN
TOE	TOE OF SLOPE
TOB	TOP OF BANK/BERM
X 0.0	TOPOGRAPHIC DATA (SOFT SURFACE)
X 0.00	TOPOGRAPHIC DATA (HARD SURFACE)
TYP	TYPICAL
WV⊳⊲	WATER VALVE (WV)
⁴Ⓟ₀	WOOD POWER POLE

SURVEYORS NOTES AND REPORT:

1. THIS BOUNDARY & TOPOGRAPHIC SURVEY WAS PERFORMED FOR THE PURPOSE OF MAPPING EXISTING FEATURES AND CONDITIONS, AS SHOWN AND DEPICTED HEREON. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON OCTOBER 6, 2025. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY MAP, AND REPRODUCTIONS THEREOF, ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. THIS SURVEY MAP AND REPORT IS FOR THE USE OF THE PARTIES NAMED AND IS NOT TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF HALEY WARD, INC. IT IS A VIOLATION OF CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE TO ALTER THIS SURVEY WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF THE SURVEYOR. ADDITIONS AND/OR DELETIONS MADE TO THE FACE OF THIS SURVEY WILL MAKE THIS SURVEY INVALID.
3. THE LAST DATE OF FIELD WORK (AND DATA ACQUISITION) WAS OCTOBER 1, 2025.
4. THE LEGAL DESCRIPTION(S) AND MATTERS OF RECORD HEREON ARE SHOWN IN REFERENCE TO TITLE COMMITMENT NUMBER 1810-144, AS PREPARED BY CHICAGO TITLE INSURANCE COMPANY, HAVING AN EFFECTIVE DATE OF MARCH 9, 2021 AT 11:00PM.
5. PARCEL(S) CONTAIN A TOTAL OF 56.62 ACRES, MORE OR LESS.
6. THIS BOUNDARY & TOPOGRAPHIC SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM-EAST ZONE, NAD 83 (2011 ADJUSTMENT).
7. UNDERGROUND IMPROVEMENTS AND UTILITIES WERE NOT LOCATED AS A PART OF THIS SURVEY.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HEREON ARE BASED UPON GRID NORTH AND REFERENCE TO THE LINE LABELED HEREON AS (BEARING BASIS) AND ALL OTHER BEARINGS ARE RELATIVE THERETO. DISTANCES ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
10. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED ON THE FLORIDA PERMANENT REFERENCE NETWORKS (FPRN) USING GPS REAL TIME NETWORK (RTN) OBSERVATION WITH AN ACCURACY OF ±0.10'. SITE BENCHMARKS UTILIZED AND SHOWN HEREON WERE ESTABLISHED VIA CLOSED LEVEL LOOP ORIGINATING AT FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) BENCHMARK DESIGNATED "C3", HAVING A PUBLISHED ELEVATION OF 17.59 FEET, NAVD88.
11. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPECTRA HARDWARE TOGETHER WITH SPECTRA SURVEY PRO REALTIME PROCESSING AND WAS BASED ON TRIMBLE'S "VRS NOW" NETWORK AND/OR THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). THE PROCEDURES AND NETWORK DESIGN MEETS THE GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATED POSITIONING AS SET FORTH BY THE FEDERAL GEODETIC CONTROL COMMITTEE IN THE MOST CURRENT PUBLICATION FOR 3RD ORDER CLASS ONE FOR HORIZONTAL CONTROL SURVEYS, WITH A PRECISION OF ±0.05 FEET.
12. IN SOME INSTANCES, GRAPHIC REPRESENTATIONS AND SYMBOLS SHOWN HAVE BEEN EXAGGERATED TO MORE CLEARLY ILLUSTRATE THE RELATIONSHIP BETWEEN PHYSICAL IMPROVEMENTS AND/OR LOT LINES. THE DIMENSIONS SHOWN SHALL CONTROL OVER LOCATION, OF THE IMPROVEMENTS, OVER THE SCALED POSITION.
13. THE OWNERSHIP OF PERIMETER FENCES, WALLS, HEDGES, AND LANDSCAPING, IF ANY, SHOWN HEREON ARE NOT KNOWN AND ARE NOT LISTED AS ENCROACHMENTS. THEIR RELATIVE LOCATION IS SHOWN IN RELATION TO THE BOUNDARY LINES SHOWN.
14. THE SURVEY MAP SHOWN HEREON DOES NOT NECESSARILY CONTAIN ALL OF THE INFORMATION OBTAINED OR DEVELOPED BY THE UNDERSIGNED SURVEYOR IN HIS FIELD WORK, OFFICE WORK, OR RESEARCH.
15. PARCEL APPEARS TO BE SITUATE IN FLOOD HAZARD ZONE X, PURSUANT TO F.E.M.A. FIRM NUMBER 12111C0184J, HAVING AN EFFECTIVE DATE OF 2/16/2012. FOR APPROXIMATE DELINEATION OF THE FLOOD ZONE LIMITS, REFER TO AFOREMENTIONED FIRM PANELS.

Michael T Owen
Digitally signed by Michael T Owen
Date: 2025.10.06 17:00:21 -04'00'

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5656
SIGNATURE DATE:

NO.	DATE	DESCRIPTION	BY	CHK

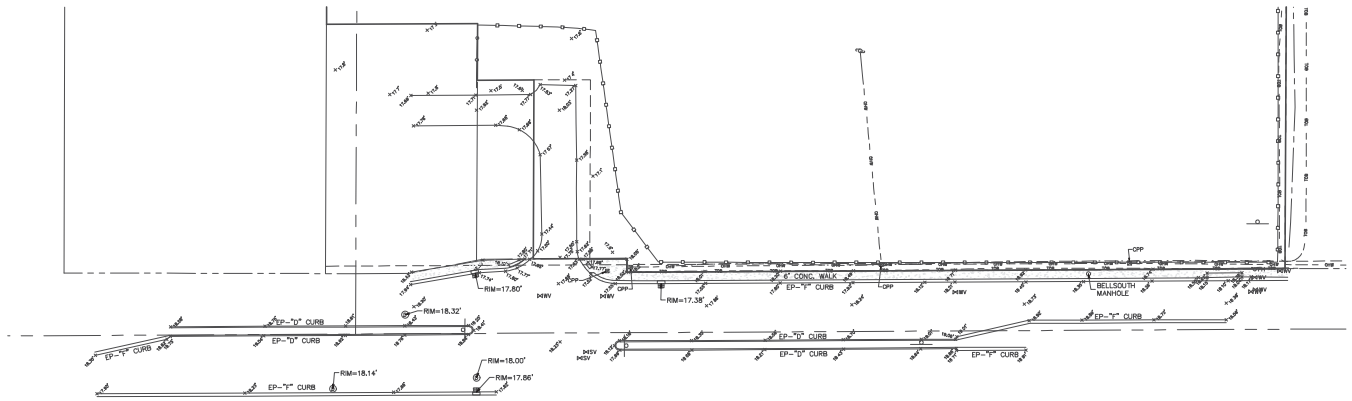
EDC — A DIVISION OF HALEY WARD, INC.
FLICE AUTHORIZATION NO. 33644
L.B. AUTHORIZATION NO. 8267
2320 Vilage Point Rd., Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
LANDMARC BUILDING DEVELOPMENT, INC.
ST. LUCIE COUNTY, FLORIDA

TITLE
BOUNDARY & TOPOGRAPHIC SURVEY

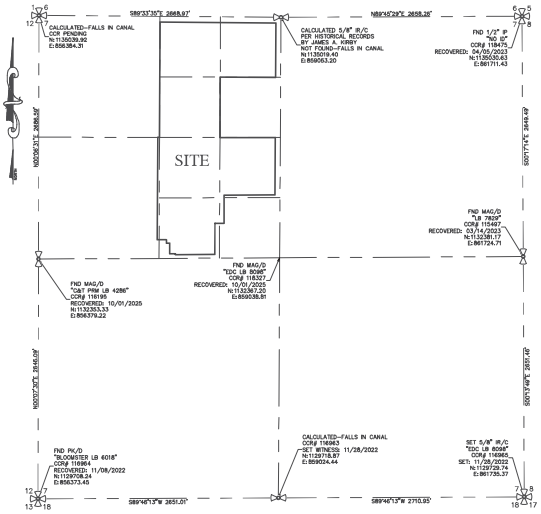
DATE	SCALE
10/2/2025	AS SHOWN
DRAWN BY	CHECKED BY
RJS/SPT	GH/PHS/VJR
PROJECT NO.	FILE NAME
25-144 (OLD 21-290)	MTO

SHEET 1 OF 3



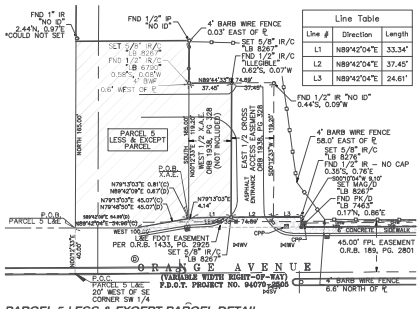
OFF-SITE TOPOGRAPHIC DETAIL

SCALE: 1"=30'



SEC. 07, TWP. 35S, RGE. 40E

1"=500'

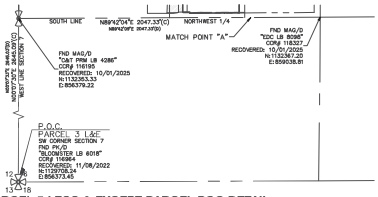


Line Table		
Line #	Direction	Length
L1	N89°42'04"E	33.34'
L2	N89°42'04"E	37.45'
L3	N89°42'04"E	24.61'

PARCEL 5 LESS & EXCEPT PARCEL DETAIL

SCALE: 1"=40'

NOTE: HATCHED AREA DEPICTS PARCELS DESCRIBED AS BEING LESS & EXCEPT FROM SUBJECT PROPERTY IN THE LEGAL DESCRIPTION PROVIDED.



PARCEL 5 LESS & EXCEPT PARCEL POC DETAIL

SCALE: 1"=400'

NO.	DATE	DESCRIPTION	BY	CHK

A DIVISION OF HALEY WARD, INC.
FLA. CERTIFICATE OF AUTHORIZATION NO. 30644
1201 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
LANDMARC BUILDING DEVELOPMENT, INC.
ST. LUCIE COUNTY, FLORIDA

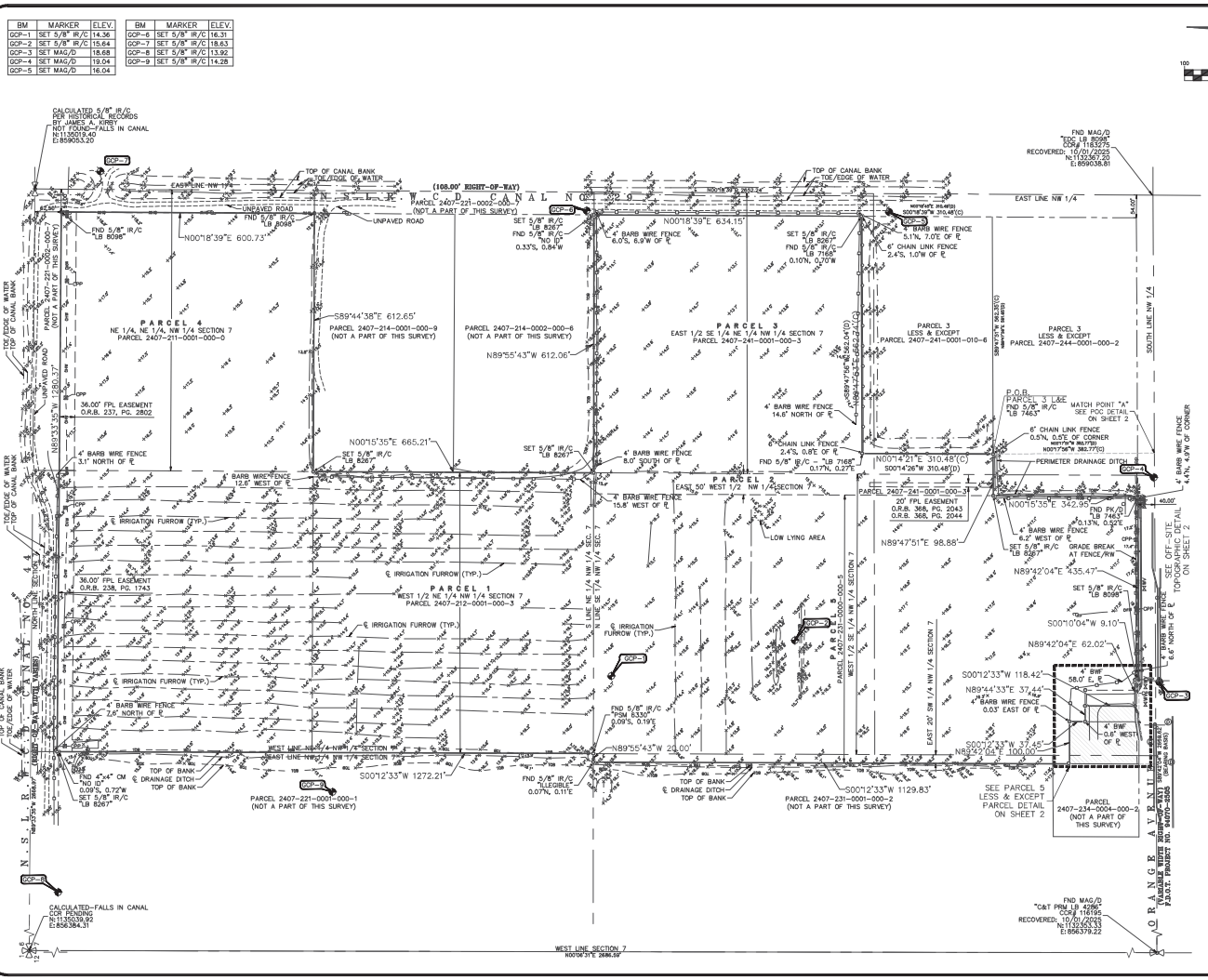
TITLE
BOUNDARY & TOPOGRAPHIC SURVEY

DATE	SCALE
10/2/2025	AS SHOWN
DRAWN BY	PROJ. MGR.
RJS/SPT	GH/PVS/JJB
PROJECT NO.	DESCRIPTION
25-144 (OLD 21-290)	MTO

SHEET NO.
SHEET 2 OF 3

BM	MARKER	ELEV.
GCP-1	SET 5/8" IR/C	14.36
GCP-2	SET 5/8" IR/C	15.64
GCP-3	SET MAG/D	18.68
GCP-4	SET MAG/D	19.04
GCP-5	SET MAG/D	16.04

BM	MARKER	ELEV.
GCP-6	SET 5/8" IR/C	16.31
GCP-7	SET 5/8" IR/C	18.63
GCP-8	SET 5/8" IR/C	13.92
GCP-9	SET 5/8" IR/C	14.28



A DIVISION OF HALEY WARD, INC.
FLE. AUTHORIZATION NO. 30644
C.A. AUTHORIZATION NO. 8267
(772) 462-2455
WWW.HALEYWARD.COM

LANDMARC BUILDING DEVELOPMENT, INC.
ST. LUCIE COUNTY, FLORIDA

BOUNDARY & TOPOGRAPHIC SURVEY

DATE	SCALE
10/2/2025	AS SHOWN
DRAWN BY	FIELD CREW
RJS/SPT	GH/PVS/VJR
CHECKED BY	
MTO	
PROJECT NO.	
25-144 (OLD 21-290)	
DRAWING NO.	REV.
SHEET 3 OF 3	

TECHNICAL REVIEW COMMITTEE STAFF ANALYSIS
PD2025-00006 (Final Planned Development / Site Plan)

PROJECT INFORMATION

Project Name: West Orange Planned Development – Phase 1 Final PD

Applicant: Orange Avenue Development II, LLC

Agent: Tod Mowrey, Redtail DG

Location:4918 & 5220 Orange Avenue

Parcel ID(s): 2407-211-0001-000-0; 2407-212-0001-000-3; 2407-231-0000-000-5; 2407-241-0001-000-3

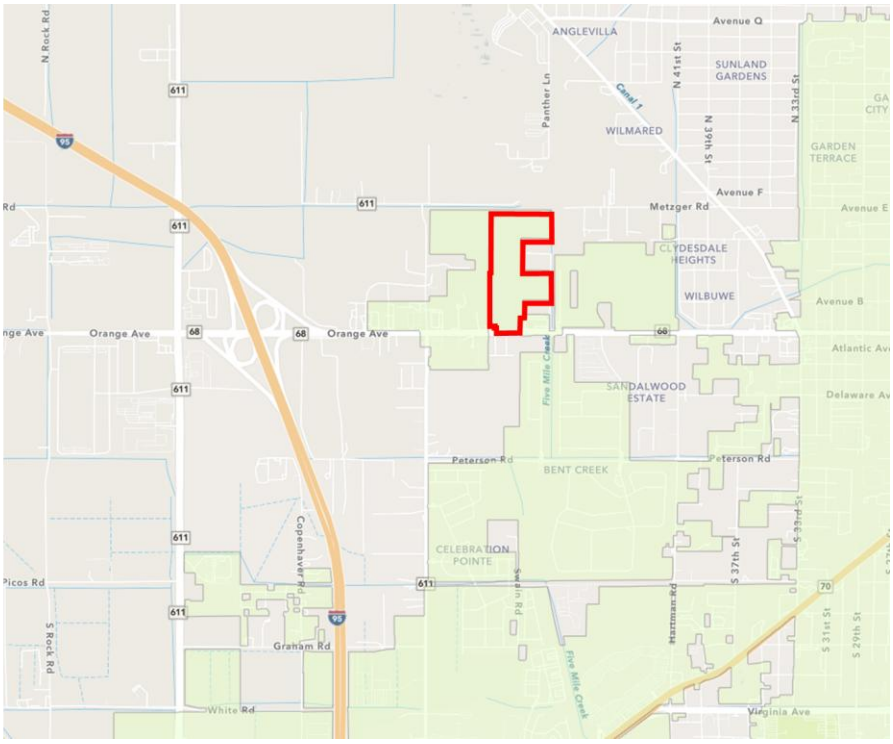
Acreage: ±56.62 acres (Phase 1 (Staff renamed 1.1, 1.2 and 1.3)

Request: Final Planned Development (PD) Site Plan Approval (Major Amendment to PD Zoning pursuant to Ordinance 23-013)

PROPERTY LOCATION

Municipal Limits

Unincorporated



1. PROJECT DESCRIPTION & SITE CONTEXT

The subject property consists of approximately 56.62 acres located along Orange Avenue, east of Jenkins Road, within the municipal limits of the City of Fort Pierce. The site is part of

the larger ±84.8-acre West Orange Planned Development approved under Ordinance No. 23-013.

The applicant proposes a Final Planned Development (PD) site plan for Phase 1 consisting of a residential townhome community totaling 450 units across phases, including a future commercial component. The proposed development program includes:

- 256 townhome units (Phase 1.1)
- 194 townhome units (Phase 1.2)
- Total: 450 dwelling units (7.89 du/ac overall)
- Future 4.25-acre commercial component (Phase 1.3)
- Development will not be platted

The site design incorporates:

- Internal roadway network and gated access
- Stormwater lakes and retention systems
- Central clubhouse and recreational amenities
- Sidewalk and pedestrian connectivity
- Right-of-way dedication along Orange Avenue
- Emergency access connection

The surrounding area consists of a mix of residential, agricultural, and developing suburban uses, with the property located within a broader planned growth area influenced by the Jenkins Road Overlay transportation framework.

2. STATUTORY ANALYSIS (F.S. 163)

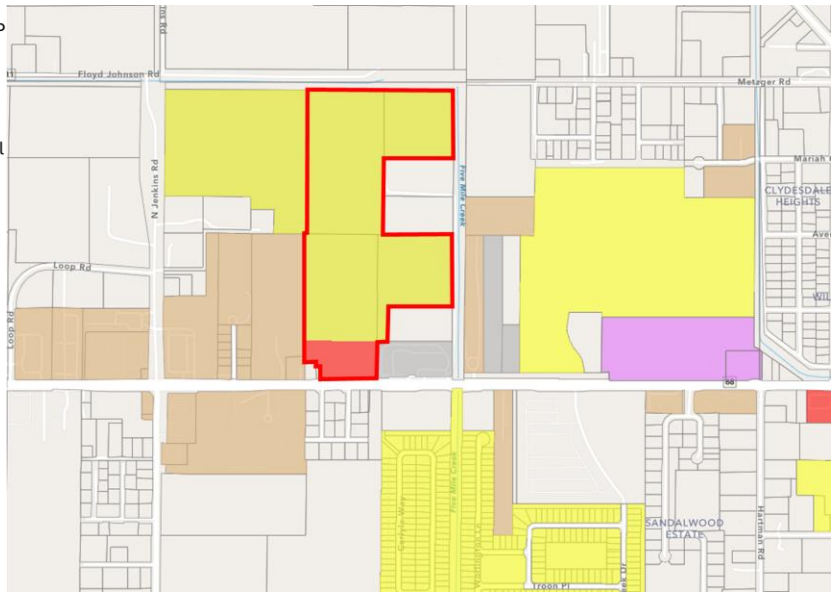
The proposed development is consistent with the Residential High Future Land Use designation, provides adequate public facilities, and complies with Urban Form & Anti-Sprawl (§163.3177, F.S.) The project demonstrates, Compact residential form, Internal circulation and walkability, Centralized amenities, and a Future mixed-use component

Staff Comment: The request satisfies applicable growth management requirements.

TECHNICAL REVIEW COMMITTEE STAFF ANALYSIS
PD2025-00006 (Final Planned Development / Site Plan)

FUTURE LAND USE MAP

FLU: Residential High & General Commercial



3. COMPREHENSIVE PLAN CONSISTENCY

The proposed development is consistent with the assigned Residential High Future Land Use designation. The proposed density (7.89 du/ac) is within allowable limits.

Adequate public facilities are available or will be provided concurrent with development.

The project does not create urban sprawl and promotes compact development patterns.

Demonstrate compliance with Comprehensive Plan Policy 7.4.11 Policy:

The City of Fort Pierce shall require that all future residential developments in excess of 100 dwelling units provide a community ***clubhouse,*** *recreation center or similar communal building that is* ***"hurricane hardened," and equipped with a generator and accessory fuel storage system to supply power in the event of prolonged power outages.***

Staff Comment: The request is generally consistent with the City of Fort Pierce Comprehensive Plan.

4. LAND DEVELOPMENT CODE

The property is zoned Planned Development (PD) and the request represents implementation of the approved master plan. Development program consistent with approved PD. Phasing plan provided. Site design generally meets PD intent

The project generally complies with site design standards including parking, sidewalks, lighting, and circulation.

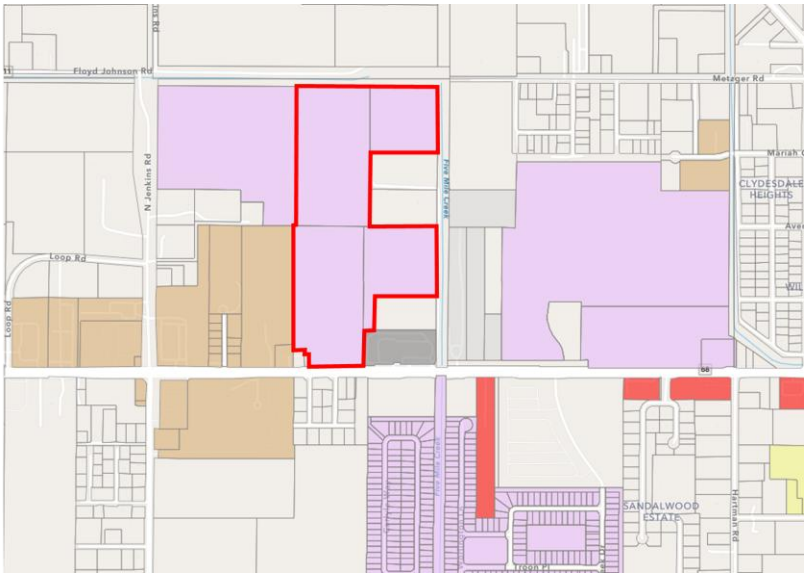
Outstanding items include final stormwater design, and tree mitigation (DPCR)

TECHNICAL REVIEW COMMITTEE STAFF ANALYSIS
PD2025-00006 (Final Planned Development / Site Plan)

Staff Comments: The request is generally consistent with the Land Development Code, subject to conditions.

ZONING

ZONING: West Orange PD (Phase 1)



5. UTILITIES & INFRASTRUCTURE

Water, wastewater, electricity, and gas services are available.

Staff Comment: Adequate infrastructure capacity exists.

6. FISCAL IMPACT

The project will expand the tax base and support housing growth.

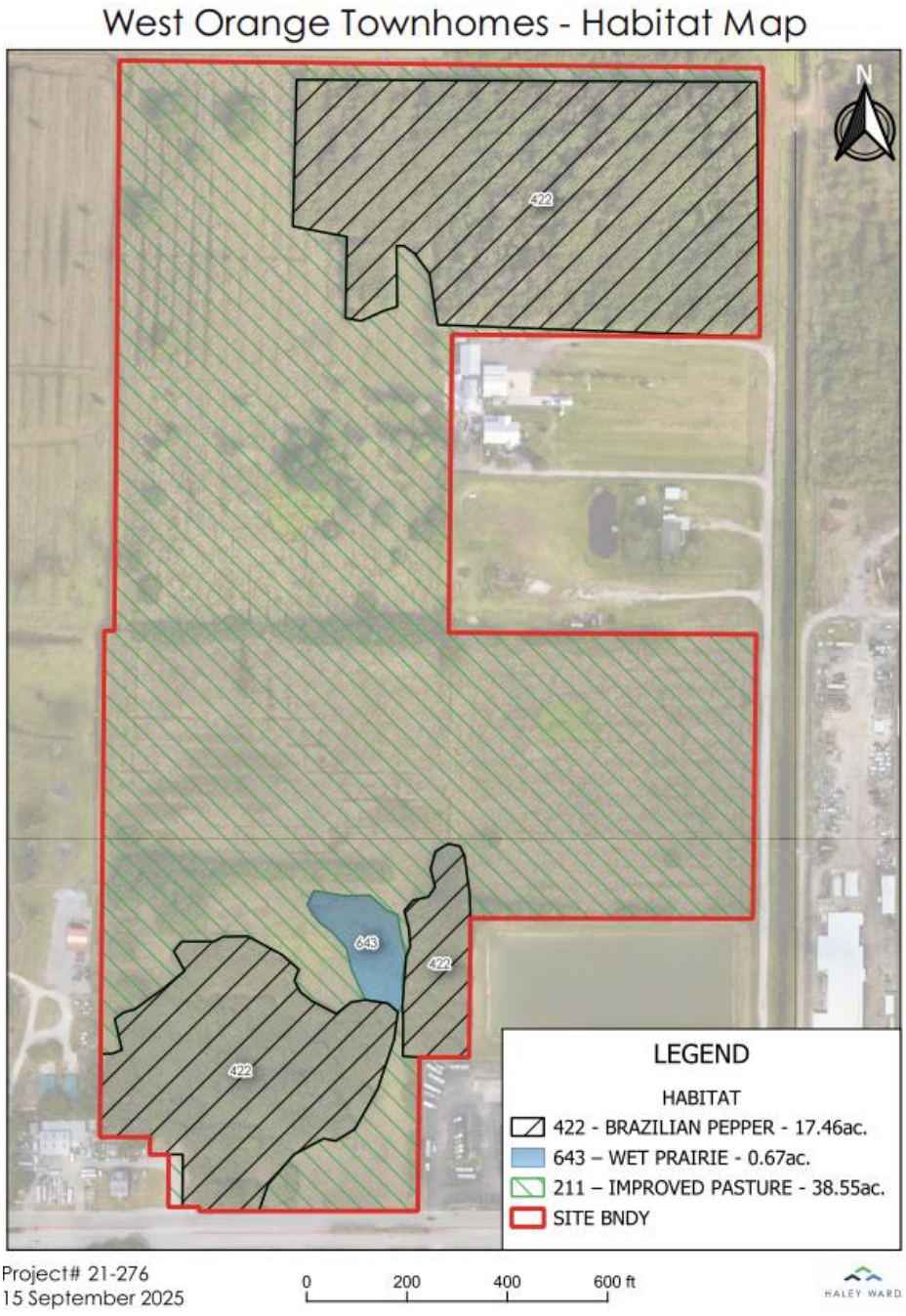
Staff Comment: Positive fiscal impact anticipated.

7. ENVIRONMENTAL & SITE CONSTRAINTS

The applicant's consultant, Haley Ward, reported that there is no native upland habitat located on site, which is identified as FLUCCS Code 212 -Improved Pasture. One wetland estimated to be half an acre or less in size was identified onsite. No gopher tortoises, burrows, or habitat were observed on site. In addition, no sandhill cranes or their nests were identified on site. Furthermore, no other state-listed species were observed.

A. Tree inventory identifies 118 protected trees on site
B. Mitigation assessed at (DPCR)
C. Wetland jurisdictional determination (DPCR)
D. Gopher tortoise survey (DPCR)
E. Wood stork habitat assessment (DPCR)

Staff Comment: Environmental issues addressed.



8. TRANSPORTATION & ACCESS

A. Primary access provided via Orange Avenue (FDOT approved the configuration through pre-application letter with conditions. 10/9/2025)

B. Traffic Impact Study indicates minimal impact and maintains LOS
C. Transportation overlay consistency issue remains unresolved with St. Lucie County
D. A 20' wide strip of the property adjacent to Orange Avenue will be dedicated
E. A designated school bus stop area has been incorporated for safe and convenient student pick-up and drop-off.

9. STAFF FINDINGS

A. Consistent with statutes and comprehensive plan.
B. Generally consistent with PD zoning.
C. Adequate public facilities available.

10. OUTSTANDING ITEMS

A. Wetland jurisdictional determination
B. Protected species surveys
C. Unity of Title / parcel combination
D. Final PD quantitative data tables (are they consistent with Master Plan lot planning?),
E. Phasing Timetable for Phase 1.1, 1.2 and 1.3
F. Final stormwater design
G. Resolution of Jenkins Overlay consistency

NOTES / CONDITIONS

A. Development shall comply with Ordinance No. 23-013 and all PD conditions. (Applicant to confirm all conditions are met or are to be carried through to the Final PD Development Agreement)
B. If the property will not be platted, then a Unity of Title shall be executed prior to issuance of development permits.
C. Final stormwater design and permitting shall be required (DPCR).
D. Tree mitigation and preservation requirements shall be satisfied (DPCR).
E. All applicable permits (FDOT, SFWMD, NSLRWCD) shall be obtained and reflect phasing breakdown to allow approval of phased development.
F. Transportation improvements and access shall be approved prior to final approval of Phase 1.1.
G. Compliance with all applicable City Code requirements is required.

STAFF RECOMMENDATION

Staff Comments: Additional review required.

PD and Site Plan West Orange
4918 & 5220 Orange Avenue
PD2025-00006

REDTAIL DG
100 S. 2nd Street
Fort Pierce, FL 34950

RESPONSE LETTER

TRC Comments

Comment	**Revise site plan to include a stop bar and stop sign at the main entrance/exit to Orange Avenue.**
Response	Added.

Comment	**Site Plan should include ADA mats at all necessary locations, including the crosswalk at the entrance**
Response	Included

Comment	**Include ADA signage at all necessary locations to match the City of Fort Pierce standard detail.**
Response	Included

Comment	**Parking stalls are required to be 19' long according to City of Fort Pierce standard detail. Overhang is only allowed into landscape areas. City of Fort Pierce Code 125-315(c)(1)**
Response	Acknowledged. All stalls are 19 feet long

Comment	**Add a bike rack near the clubhouse for short-term parking use**
Response	Added

Comment	**Revise preliminary drainage plan to include a note indicating that all storm drainage facilities shall conform to Chapters 119 and 125 and the Standards of Specification. See note in City of Fort Pierce Code 125-313(a)(3)(c)(14)(vi)**
Response	Added to sheets C-103 and C-104

Comment	**If no curb/sidewalk combination is proposed, please provide a wheel stop in accordance with City of Fort Pierce standards 125-315(c)(7)**
Response	Noted, there is a sidewalk with ADA ramps

Comment	**City of Fort Pierce Code 125-315(j)(2) states that the uniformity ratio is to have average/minimum ratio of 4:1. Lighting plan calls out a 3.33/1**
Response	The ration of 4:1 was achieved.

Comment	**Revise drainage plan to show mitered end sections at all outfall locations to the onsite lake, according to City of Fort Pierce Code 119-3(b)**
Response	Revised

Comment	**How will trash be collected? If roadside service is requested, it should be approved by solid waste**
Response	Yes, road service. Acknowledged.

Comment	**Provide sidewalks on both sides of the road at the entrance along Orange Avenue. Sidewalks should be provided on both sides of the street within the subdivision per 121-16(e)(1)**
Response	Provided

Comment	**Provide a minimum 26' pavement width at all perpendicular parking stalls**
Response	Provided

Comment	**Indicate the required lake maintenance easement**
Response	Indicated on sheets C-103 and C-104

Comment	**The property is compromised of two parcels; will the property be platted? Please provide a copy of the preliminary plat or update the site plan to include all the pertinent horizontal dimensions**
Response	The property will not be platted

Comment	**Update the landscape plans to mirror the site plan; refer to LD-03 and LD-04 near the on-street parking areas**
Response	Updated

Comment	**Drainage reports and preliminary drainage plans were given a preliminary review. review will be completed at time of DPCR**
Response	Acknowledged

Comment	**A NSLRWCD and SFWMD permit will be required for review at DPCR submittal**
Response	Acknowledged

Comment	**An FDOT connection permit will be required.**
Response	Acknowledged

Comment	**A formal Wetland Determination shall be provided at time of DPCR submittal based on the Environmental Assessment provided**
Response	Acknowledged

HALEY WARD

February 24, 2026

St. Lucie County Engineering Division - Public Works
Grant Chambers, P.E.
Senior Project Engineer
2300 Virginia Ave.
Fort Pierce, FL 34982
Grant.M.Chambers@stlucieco.gov

Re: West Orange Phase 1
REF: PD2025-00006

Dear Mr. Chambers,

We offer the following responses to your comments addressed to Mr. Kevin Freeman dated November 19, 2025.

1. A Traffic analysis is required for review by the County's third party reviewer at the cost of the applicant. Please provide the traffic analysis email to Kori.Benton@stlucieco.gov with written acknowledgement of the cost and authorization to proceed.

Response: At the request of the City of Fort Pierce, the Traffic Impact Study (TIS) prepared for the Site Plan Application for the West Orange project was submitted to St. Lucie County. The operational analyses contained in the TIS were also provided to the Florida Department of Transportation (FDOT) as part of the access management pre-application process. The County's review of the TIS was received via email on December 1, 2025, along with additional comments from the County's traffic consultant dated November 28, 2025, which were authorized and funded by the applicant. The TIS under review is dated September 24, 2025.

As documented in the TIS, and given the lack of available right-of-way to provide cross-connections to the north or west, all project trips were assigned to Orange Avenue (SR 68). Exhibit A, which contains the latest adopted Jenkins Overlay District Map, confirms that no roadways from the Overlay District traverse the West Orange project site. To improve accessibility and mobility in the area, the proposed Site Plan includes a cross-access connection on the western side of the site that, once right-of-way becomes available, will directly connect the site to Jenkins Road. In the interim, since no right-of-way is available to connect the site to the east, north, or west, the TIS assumed that 100 percent of project trips would utilize Orange Avenue (SR 68),

a State Road facility.

Accordingly, the proposed project does not directly impact County or City roads. The project's first connection to the Major Road Network occurs at Orange Avenue between Jenkins Road and Hartman Road, specifically at the intersection of Orange Avenue and Vista Court. The TIS demonstrates that the project will consume 3.29% of the peak-hour, peak-direction capacity on this roadway segment. All remaining analyzed roadway segments will operate with a project impact of less than five percent of their available peak-hour, peak-direction capacity. Importantly, the TIS shows that Orange Avenue between Jenkins Road and Hartman Road will continue to operate at the adopted Level of Service (LOS) at project buildout.

Exhibit D includes FDOT's conceptual approval letter for West Orange. FDOT recommended minor modifications at the intersection of Okeechobee Road and Vista Court. Specifically, FDOT recommended adjustments to the nose of the eastbound left-turn lane at this intersection. The TIS recommends maintaining the existing geometry, which provides 200 feet of storage and a 50-foot taper, or as otherwise required at the time of permit. In addition, both FDOT and the TIS recommended the construction of a westbound right-turn lane consisting of 135 feet of storage and a 50-foot taper, or as otherwise required at the time of permit.

In summary, the West Orange project cannot establish a meaningful connection to the roadways identified within the Jenkins Overlay District Map. Furthermore, FDOT, the agency with jurisdiction over Orange Avenue, has provided conceptual approval of the proposed site access and concurred with the findings of the TIS for the most impacted intersection within the study network, Orange Avenue and Vista Court. Accordingly, the project will not adversely affect the adopted LOS on any County-maintained roadway facilities while the only significantly impacted roadway will operate at the adopted LOS at project build out. Therefore, the review comments issued by the County on December 1, 2025, as well as those dated November 28, 2025, from the County's traffic consultant, are not applicable to this project.

2. The site is located within the Jenkins Overlay District. The proposed plan does not appear to align with the Jenkins Overlay District Map. The plan would need to be revised to match the approved map or a text amendment will be required. A north south roadway along the western edge of the proposed project limits is recommended to align with the previous approval and provide for a future extension of Road A to the north.

Response: Based on our review of the Jenkins Overlay Map (Exhibit A), none of the future roads cross the project area (Exhibit B), and the proposed site plan is consistent with the previously approved PD Preliminary Site Plan (Exhibit C).

The proposed gated residential final site plan development provides three strategic vehicular connections designed to manage traffic flow while ensuring safety and future scalability:

1 - Primary Access (Orange Avenue):

The main ingress and egress point is located on Orange Avenue (FDOT-owned). This two-way connection is regulated by a gated entry and has been formally reviewed and approved by FDOT (Exhibit D).

2 - Eastern Connection (NSLWCD ROW):

The plan currently proposes an emergency-only access point to the existing NSLWCD service road. To meet fire and safety requirements, this connection will utilize stabilized sod and a break away gate. It is not intended for vehicular traffic for the development and exists solely to assist with emergency responses. As shown in our traffic report, this development phase does not require any additional access points in order to handle traffic demands.

3 - Western Connection (PD Interconnectivity):

To the west, we have put additional effort into revising the final site plan layout to provide an access point that aligns with the approved PD Preliminary Plan. This will ensure future interconnectivity with the adjacent westerly portion of the Planned Development (PD) once that property is developed.

Regarding the specific mention of Road A and Metzger Road as shown on the Jenkins Overlay Map:

Both roadways are situated on the opposite side of a North St Lucie River Water Control District (NSLRWCD) canal. Road A is located above NSLRWCD and currently has zero ROW either on our project site or above the site. Metzger Road is also above both our property and the NSLRWCD canal property and has significant water hurdles to even connect near our project. Road A and Metzger Road do not touch our property and importantly, neither of these roadways were ever shown to have a connection on our approved PD Preliminary Site Plan. They are not required per our traffic study and this project is a gated community with private roads. Due to the significant infrastructure requirements and jurisdictional constraints associated with connections and canal crossings, a direct connection is not feasible. Additionally, the development does not intend to connect to any other road, including Mariah or Garner Courts, which are both well over 700 feet away, lack any ROW and also are on the opposite side of NSLRWCD property.

By adhering to the previously approved Preliminary PD Plan and ensuring that no future roadway corridors identified in the latest Jenkins Overlay Map are obstructed

or excluded, we maintain that the proposed plan is fully aligned with the County's long-term vision. We respectfully request the Engineering Department's approval of the current configuration.

EXHIBIT A
Jenkins Road Overlay Plan

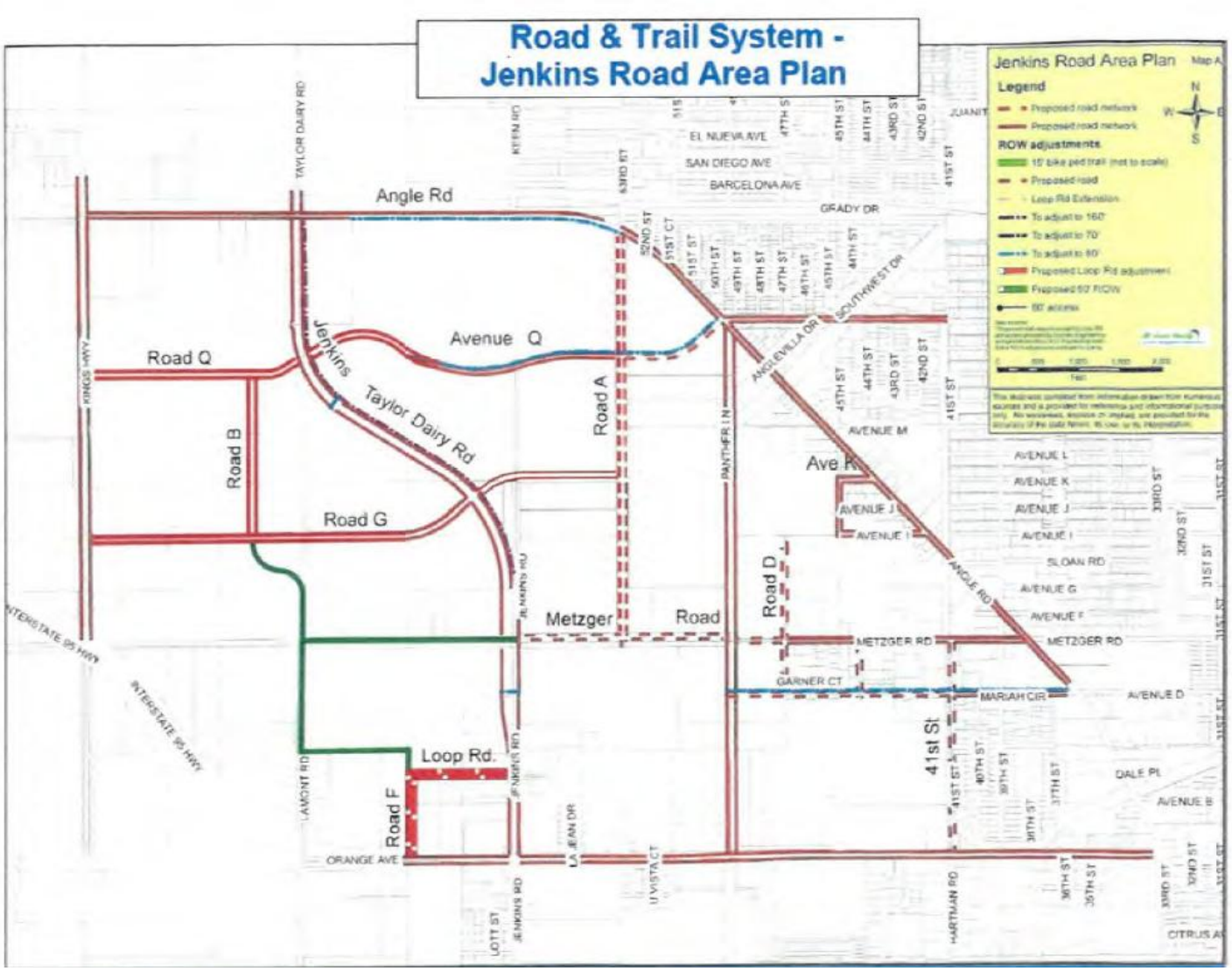


EXHIBIT B

Jenkins Road Overlay Plan showing the project Area

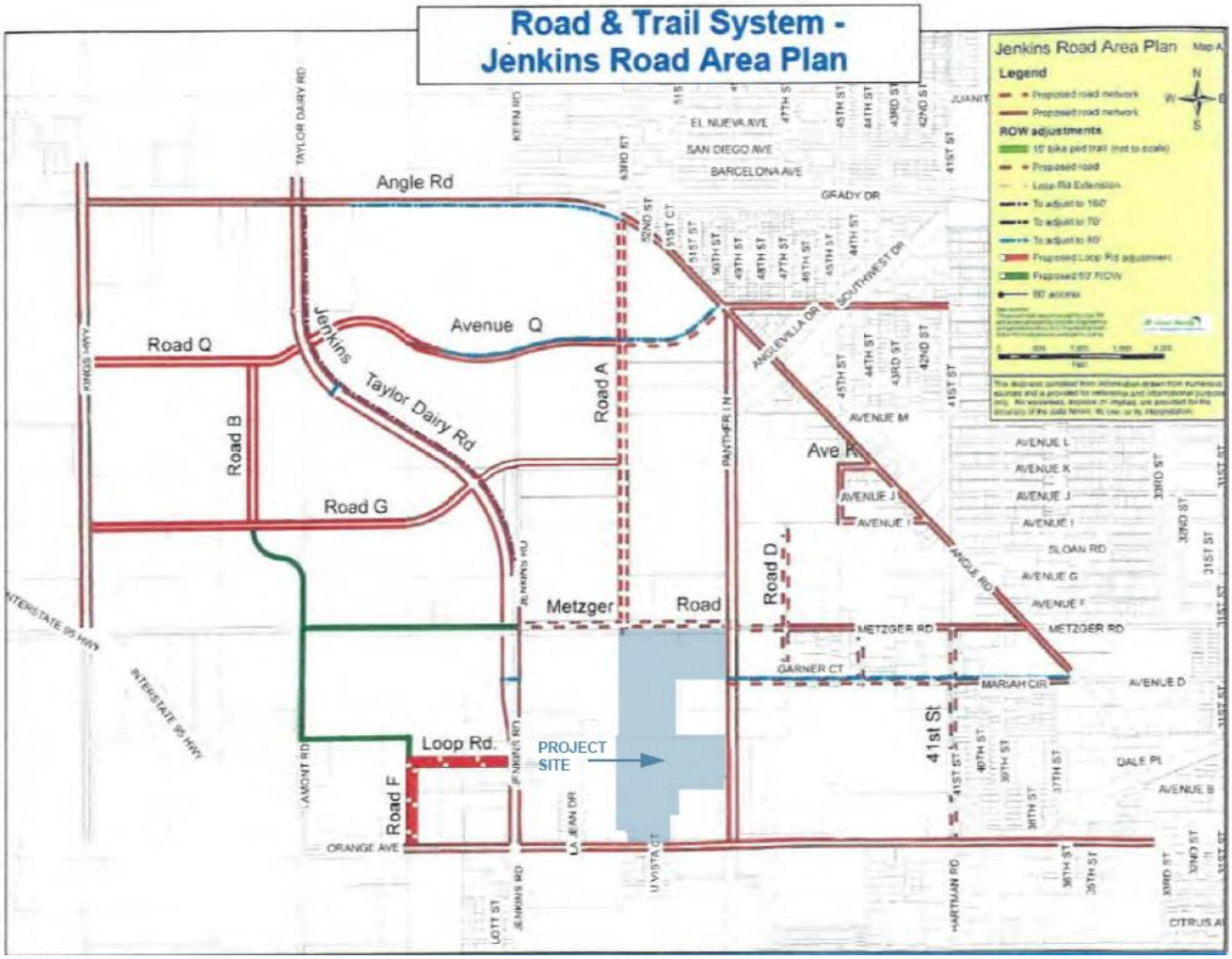


EXHIBIT C

Proposed Residential Phase (in blue) overlapped over the approved preliminary site plan

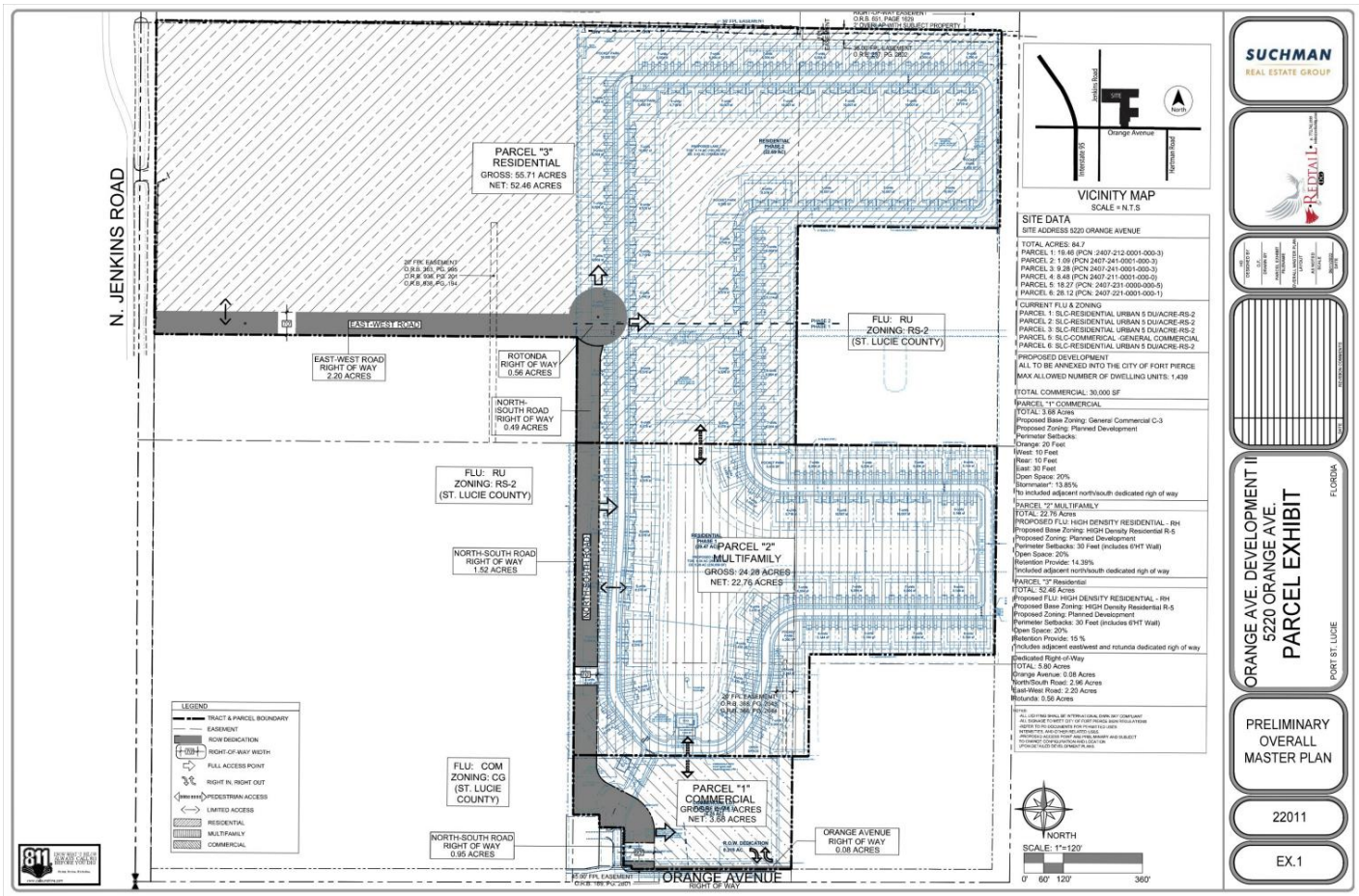


EXHIBIT D
FDOT Preapplication Letter

FDOT

Florida Department of Transportation

RON DESANTIS
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

JARED W. PERDUE, P.E.
SECRETARY

October 10, 2025

THIS PRE-APPLICATION LETTER IS VALID UNTIL – October 10, 2026
THIS LETTER IS NOT A PERMIT APPROVAL

Dr Juan F Ortega, PE
JFO GROUP INC
6671 W. Indiantown Rd, Suite 50-324, Jupiter, FL 33458

Dear Dr Juan F Ortega, PE:
RE: Pre-Application Review for **Category D Driveway**, Pre-Application Meeting Date: **10/9/2025, 10:30 AM**
St. Lucie County - Fort Pierce; SR 68; Sec. # 94070000; MP: 18.6; Access Class - 05;
Posted Speed - 45; SIS - Influence Area; FDOT Ref. Project: 449696.1 - Claudia Vinitskiy-Calvo

Request: Modify existing full access driveway along the north side of SR 68, located approximately 1,440 feet east of N Jenkins Road.

SITE SPECIFIC INFORMATION
Project Name & Address: **West Orange – 5220 Orange Ave, Fort Pierce, FL, 34947**
Property Owner: **Orange Avenue Development II LLC**; Parcel Size: **57 Acres**
Development Size: **450 Townhome Units**

REQUEST APPROVED

This decision is based on your presentation of the facts, site plan and survey - please see the conditions and comments below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 100 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided.**
- **If a gate is proposed, a minimum driveway length of 100 feet to the call box and/or gate house, and a turnaround area before the gate are required.**
- **A right turn lane is required and shall meet the minimum requirements in the Florida Design Manual (FDM) and shall provide space for a buffered bicycle lane.**
- **The queue length for the existing eastbound left turn lane and any adjacent affected left turn lanes must be determined by a traffic study.**
- **The eastbound median nose of the existing full access opening shall be extended and aligned to the proposed driveway, according to the Florida Design Manual (FDM) standards.**
- **No future driveway connections shall be allowed directly to SR 68 between the subject existing full access driveway and the east property line (frontage of approximately 470 feet.)**

Comments:
- **Modifications to the development intensity resulting in an increase in trip generation will require an additional pre-application meeting and revised letter.**
- All driveways not approved in this letter must be fully removed and the area restored.
- Drainage mitigation is required for any stormwater impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage.). The drainage mitigation shall meet all FDOT Drainage Manual criteria and will be reviewed/approved as part of an access permit.
- The applicant shall donate property to the Department if right-of-way dedication is required to implement the improvements.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway System and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval**. The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://osp.fdot.gov; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications. Please contact the District Traffic Operations Access Manager - Tel. # 954-777-4363 or e-mail: D4AccessManagement@dot.state.fl.us with any questions regarding the Pre-Approval Letter.

Sincerely,

Roya Edwards
2025.10.10
12:50:10 -04'00'

Roya Edwards, AICP
District Traffic Operations Access Manager

cc: Nesa Harden
File: S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2025-10-09\Pre-App 03 94070000 MP 18.60 SR 68 West Orange\94070000 MP 18.60 SR 68 West Orange.docx

3. For discussion regarding these comments and response, please contact me at 772-462-2741, chambersg@stlucieco.org.

Response: Acknowledged.

If you have any questions or need further clarification, please do not hesitate to contact me at 772-462-2455.

Regards,

Jayson R. Harrison
Project Engineer

Dr. Juan F. Ortega, PE
Traffic Engineer

Planning Board - 2:00 PM **6. b.**

Meeting Date: 09/17/2026

Re: Privilege-Sunrise Boulevard - Final Planned Development

Submitted For: Kev Freeman, Planning Director, Planning Department

Information

SUBJECT:

PD2025-00004
Final Planned Development
Privilege Development
3315 Sunrise Boulevard

SUMMARY:

Per Article V Sections 125-212, and 125-314 of the City Code, the applicant is requesting approval of a Final Planned Development of the Privilege-Sunrise Boulevard Planned Development (PD) Zoning District. The application proposes a one-hundred-and-eighty-four-unit (184) townhome residential final planned development community with a proposed recreation area, pool, a 508 sq ft hurricane hardened pool cabana, and associated site improvements. The subject parcels total 21.97 acres. Right-of-way dedications will be required as part of the development approval and are noted in the attached plan. The total acreage of the proposed development after the right-of-way dedication will total 21.71 acres.

The subject properties have a Future Land Use designation of Medium Density Residential (RM) and have a Zoning designation of Medium Density Residential (R-4). This allows for 6.5 – 12 du per acre. North of the parcels lies a large right-of-way owned and maintained by St. Lucie County. South of the eastern parcel lies developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Medium Density Residential (RM) and an underlying Zoning designation of Residential, Multiple-Family – 9 (RM-9). South of the larger parcel lies the right of way of Dade Road followed by developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Residential Urban (RU) and an underlying Zoning designation of Agricultural, Residential-1 (AR-1) to the southwest and Residential, Single-Family – 2(RS-2) to the southeast. East of the northernmost point of the parcel lies the right-of-way of Sunrise Boulevard followed by residential homes. These parcels have a Future Land Use Designation of Low Density Residential (RL) and have an underlying Zoning designation of Planned Development. Directly east of the eastern parcel lies developed residential parcels. These parcels have a Future Land Use designation of Medium Density Residential (RM) and have an underlying Zoning designation of Medium Density Residential (R-4).

RECOMMENDATION:

The proposed application meets the standards of the City's Code Section 125-212, and 125-314. Therefore, Staff recommends that the Planning Board recommend APPROVAL of the site plan subject to the Eleven (11) Conditions as noted.

1. Final Plat approval of the property shall be required prior to application for a building permit

for a residential building.
2. The minimum Open Space shall be maintained at a minimum of 35.77% of the **Final PD** site area.
3. The development shall comply with the permitted density, intensity and residential lot and building heights as outlined within the approved Sunrise Boulevard Development Agreement and **Final PD** site plan.
4. A detailed stormwater and drainage plan and statement shall be submitted at the time of Building Permit.
5. The **Final PD** Plan shall be governed by all agreements, provisions and covenants which govern the use, maintenance, and continued protection of the planned development and any of its common open space or other shared areas. This shall include the binding of successors in title to any commitments concerning completion of the project and its maintenance and operation.
6. A tree mitigation calculation shall be submitted and approved prior to issuance of a site clearing or vegetation removal permit.
7. A landscape maintenance agreement shall be required prior to the final certificate of occupation.
8. All applicable state or federal permits shall be obtained before commencement of the development.
9. After completion of the Final Plat, a General Address Request Form for the newly created Parcel ID(s) and for any and each proposed building and residential unit shall be submitted to the Planning Department.
10. Coordinate with the City of Fort Pierce Public Works Department on their approval of trash pick-up.
11. Coordinate with St. Lucie Area Regional Transit to discuss a transit contribution along the corridor of South 25th Street.

ALTERNATIVES:

Recommend **APPROVAL** – with Amended/Additional Conditions
OR
Recommend **DISAPPROVAL/DENIAL**

RESPONSIBLE STAFF:

Vennis Gilmore, Historic Preservation Officer/Senior Planner

COORDINATED WITH:

Kevin Freeman, Planning Director
Chris Suneson, Assistant Planning Director
Technical Review Committee

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Staff Report
Site Plan
Project Narrative
Design Review Narrative
Draft Development Agreement
Landscape Plan
Tree Inventory
Tree Mitigation
Location Map
Deed
Agent Authorization
Irrevocable License Agreement
Legal Description
State of Emergency Previous Site Plan Extension
Capacity Analysis
Contextual Photos of Subject Property
Contextual Photos of Neighborhood
Floor Plans & Elevations
Traffic Impact Analysis
Environmental Assessment
Lighting Plan
Stormwater Report
Drainage Analysis
Preliminary Engineering Plans
Construction Plans
Water Main Sizing & Fire Flow Calculations
Horizontal Control Plan
FPUA Service Availability
Auto-turn & Garbage Analysis
St. Lucie Schools Bus Stop Approval
Bioswale Approval
Erosion Control Affidavit
Debris Removal Affidavit
Neighborhood Meeting Sign-In Sheet 9.2.26
TRC Comments Combined
Applicant TRC Response Letter

Form Review

Form Started By: Vennis Gilmore
Started On: 09/10/2026 01:03 PM
Final Approval Date: 09/11/2026

CITY OF FORT PIERCE

PLANNING DEPARTMENT

PROJECT: **PRIVILEGE-SUNRISE BOULEVARD PLANNED DEVELOPMENT – ZONING ATLAS MAP AMENDMENT (FINAL DEVELOPMENT PLAN) – PROJECT #: PD2025-00004**

REVIEWER: **VENNIS GILMORE, HISTORIC PRESERVATION OFFICER/SENIOR PLANNER**

BOARD DATE: 9/17/2026

STAFF REPORT

Owner: Mandeep Singh, GPS Developments, LLC

Applicant: Patricia Sesta, Haley Ward

Requested Action: A review of an application for a Final Development Plan of two (2) parcels within the Pulte-Cornerstone Planned Development (PD) Zone

Location: Generally located at or near 3315 Sunrise Boulevard in Fort Pierce, FL.

Parcel IDs: 2428-601-0252-000-6 & 2428-321-0001-000-3

Site Area: 21.97 +/- Acres

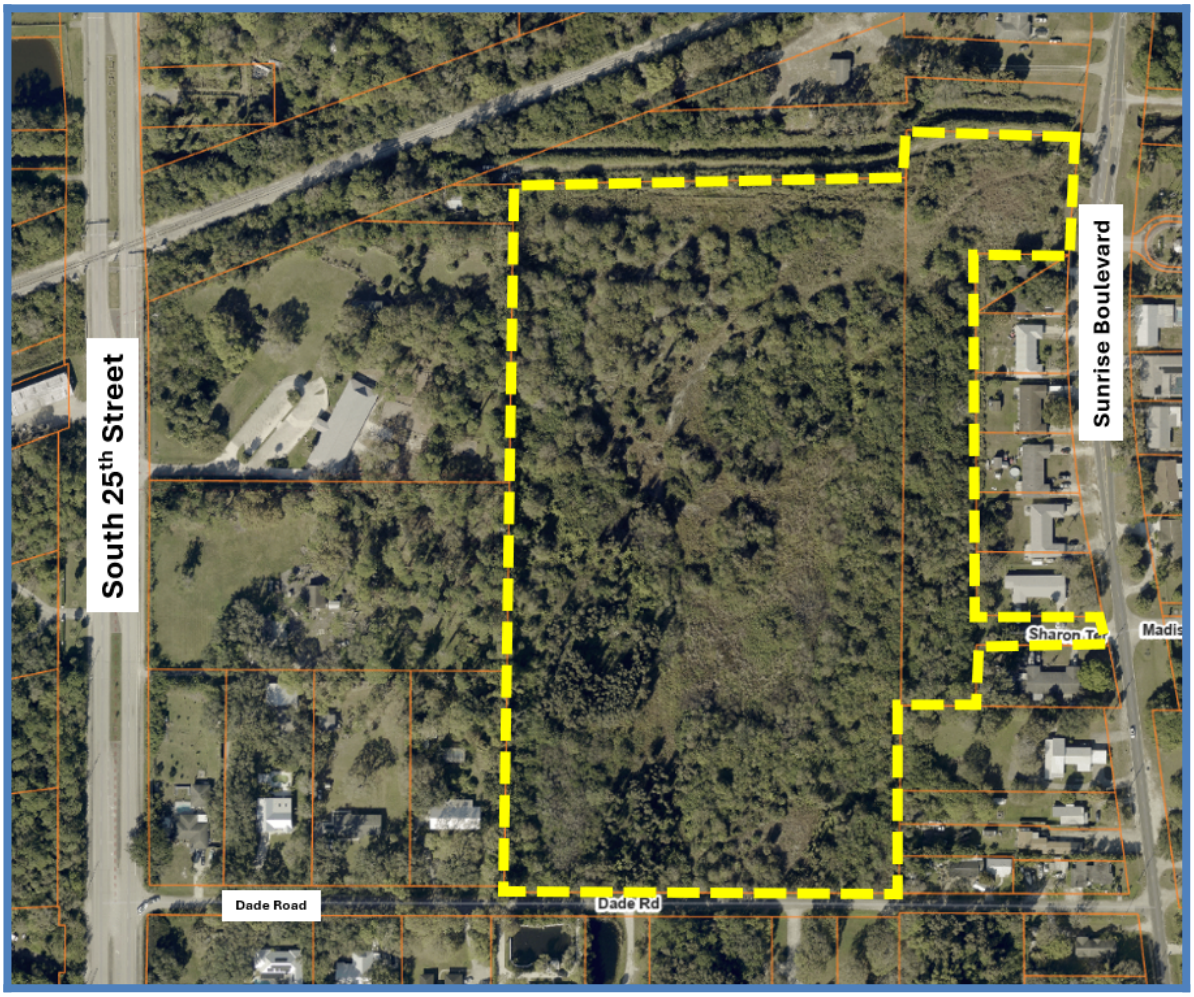
Current FP Zoning: R-4, Medium Density Residential Zone

Current FP Future Land Use: RM, Medium-Density Residential

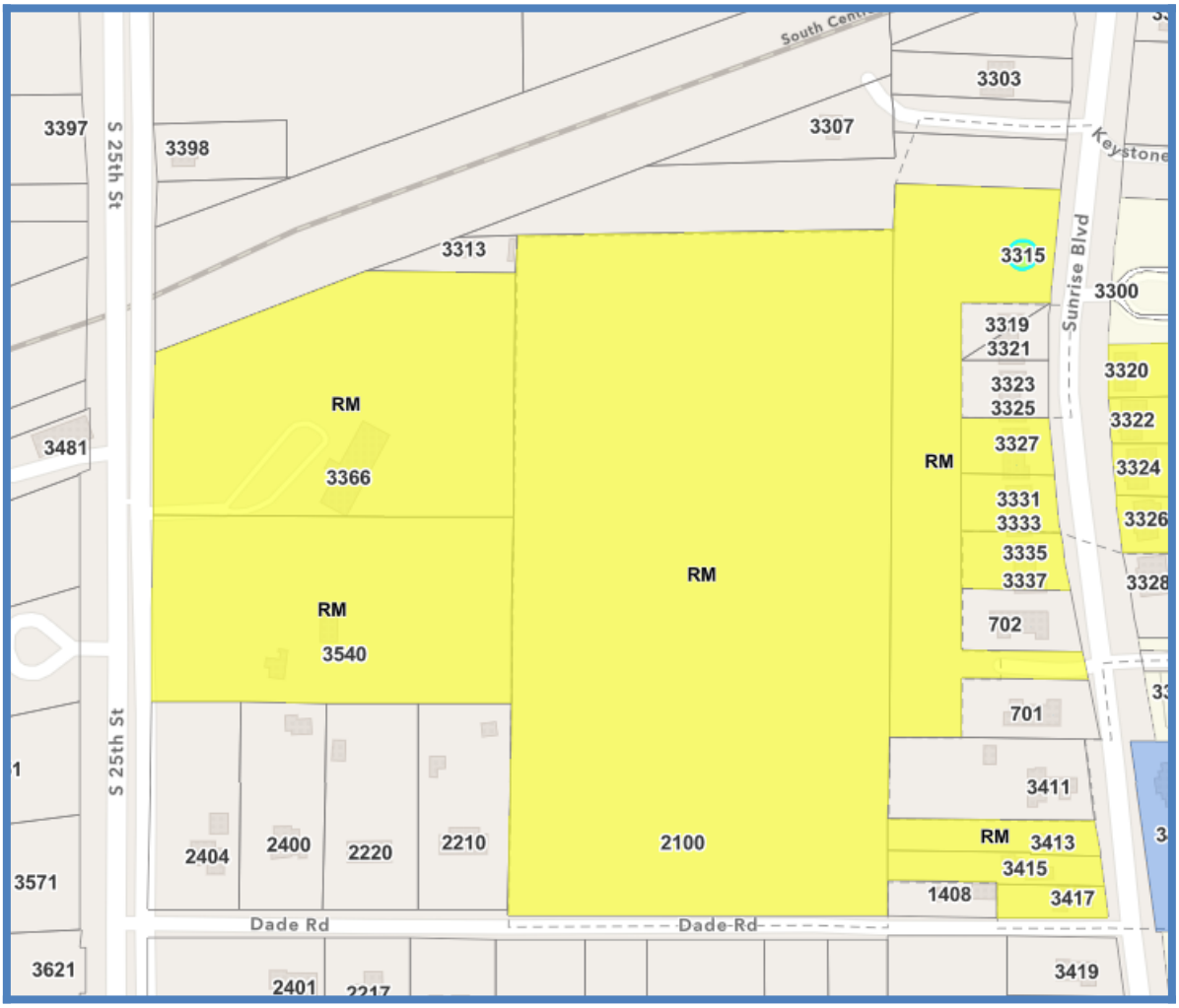
Proposed FP Zoning: PD, Planned Development Zone

Utilities: Located within FPUA Service Area

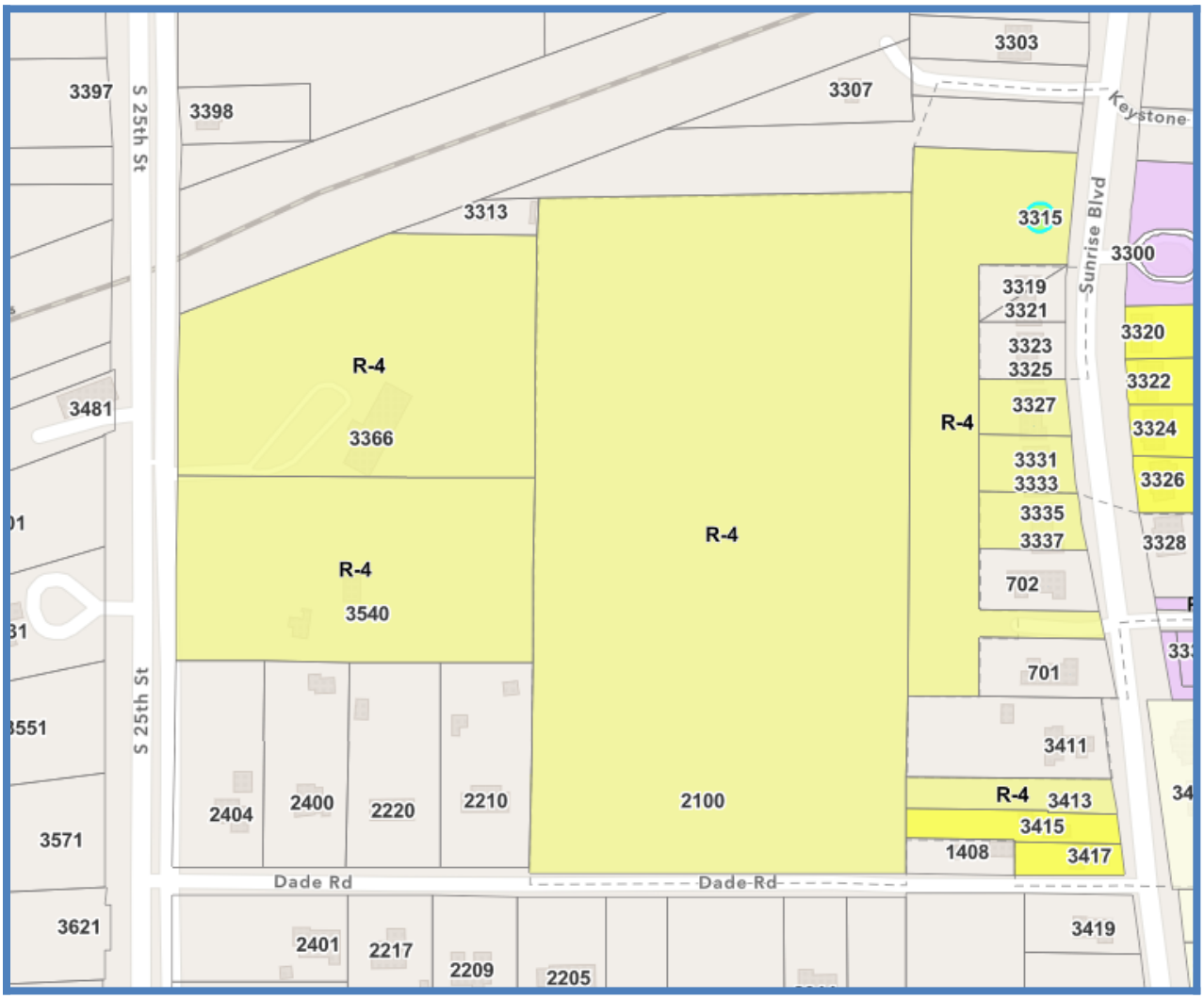
Location Map:



FP Future Land Use Map:



FP Zoning Map:



Request

Per Article V Sections 125-212, and 125-314 of the City Code, the applicant is requesting approval of a Final Planned Development of the Privilege-Sunrise Boulevard Planned Development (PD) Zoning District. The application proposes a one-hundred-and-eighty-four-unit (184) townhome residential final planned development community with a proposed recreation area, pool, a 508 sq ft hurricane hardened pool cabana, and associated site improvements. The subject parcels total 21.97 acres. Right-of-way dedications will be required as part of the development approval and are noted in the attached plan. The total acreage of the proposed development after the right-of-way dedication will total 21.71 acres.

The subject properties have a Future Land Use designation of Medium Density Residential (RM) and have a Zoning designation of Medium Density Residential (R-4). This allows for 6.5 – 12 du

per acre. North of the parcels lies a large right-of-way owned and maintained by St. Lucie County. South of the eastern parcel lies developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Medium Density Residential (RM) and an underlying Zoning designation of Residential, Multiple-Family – 9 (RM-9). South of the larger parcel lies the right of way of Dade Road followed by developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Residential Urban (RU) and an underlying Zoning designation of Agricultural, Residential-1 (AR-1) to the southwest and Residential, Single-Family – 2(RS-2) to the southeast. East of the northernmost point of the parcel lies the right-of-way of Sunrise Boulevard followed by residential homes. These parcels have a Future Land Use Designation of Low Density Residential (RL) and have an underlying Zoning designation of Planned Development. Directly east of the eastern parcel lies developed residential parcels. These parcels have a Future Land Use designation of Medium Density Residential (RM) and have an underlying Zoning designation of Medium Density Residential (R-4).

History

The subject parcels are located in the City of Fort Pierce and have a Future Land Use designation of Medium Density Residential (RM) and an underlying Zoning designation of Medium Density Residential (R-4). These parcels received prior site plan approval on March 6, 2023, for a 216-unit condominium development. A site plan extension was granted as allowed under Senate Bill
250 which extended the expiration of this site plan to March 6, 2028. The parcels have changed ownership, and the new owner is proposing a 184-unit townhome development, a reduction to the previously approved density. The applicant is proposing a rezone of the subject parcels to Planned Development zoning.

Zoning: Sec. 125-212. – (PD) Planned Development Zone

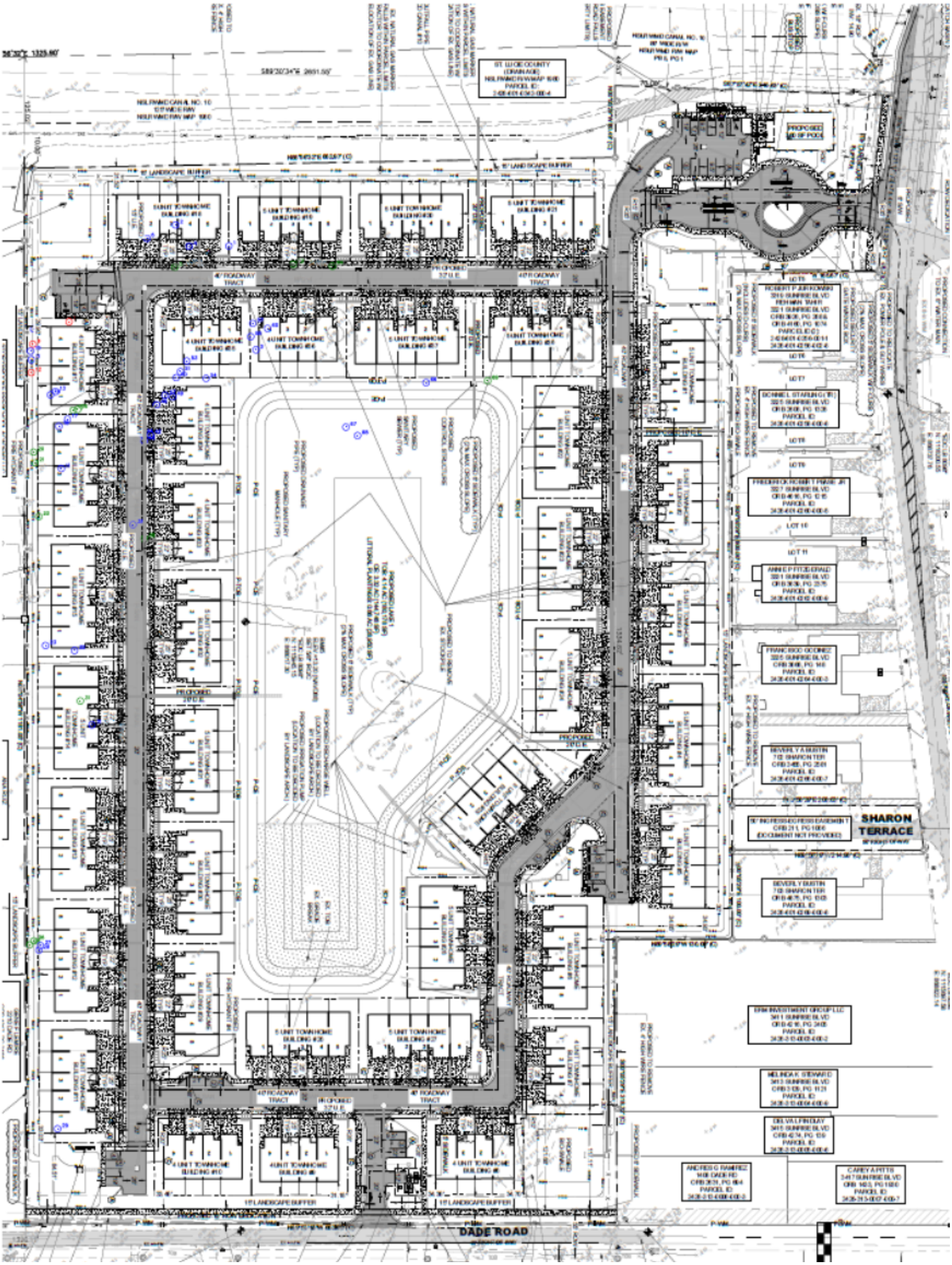
Purpose. The Planned Development (PD) Zone District is to provide a process for the evaluation of developments which are not otherwise permitted in the zoning districts established by this chapter. The PD District is a voluntary process commenced by an applicant for such zoning designation. The intent is to establish a resilient living and working environment through the application of enlightened and imaginative approaches to community planning, stormwater infrastructure and property design. A PD should provide a variety of natural features and scenic areas, efficient and economical land use, improved amenities, orderly and economic development, and the protection of adjacent existing and future development. Therefore, the

PD alternative may allow uses and design concepts which are not specifically allowed in standard zoning districts. To the extent that any provisions of this section conflict with any other provisions of this Code, the provisions of this section shall prevail.

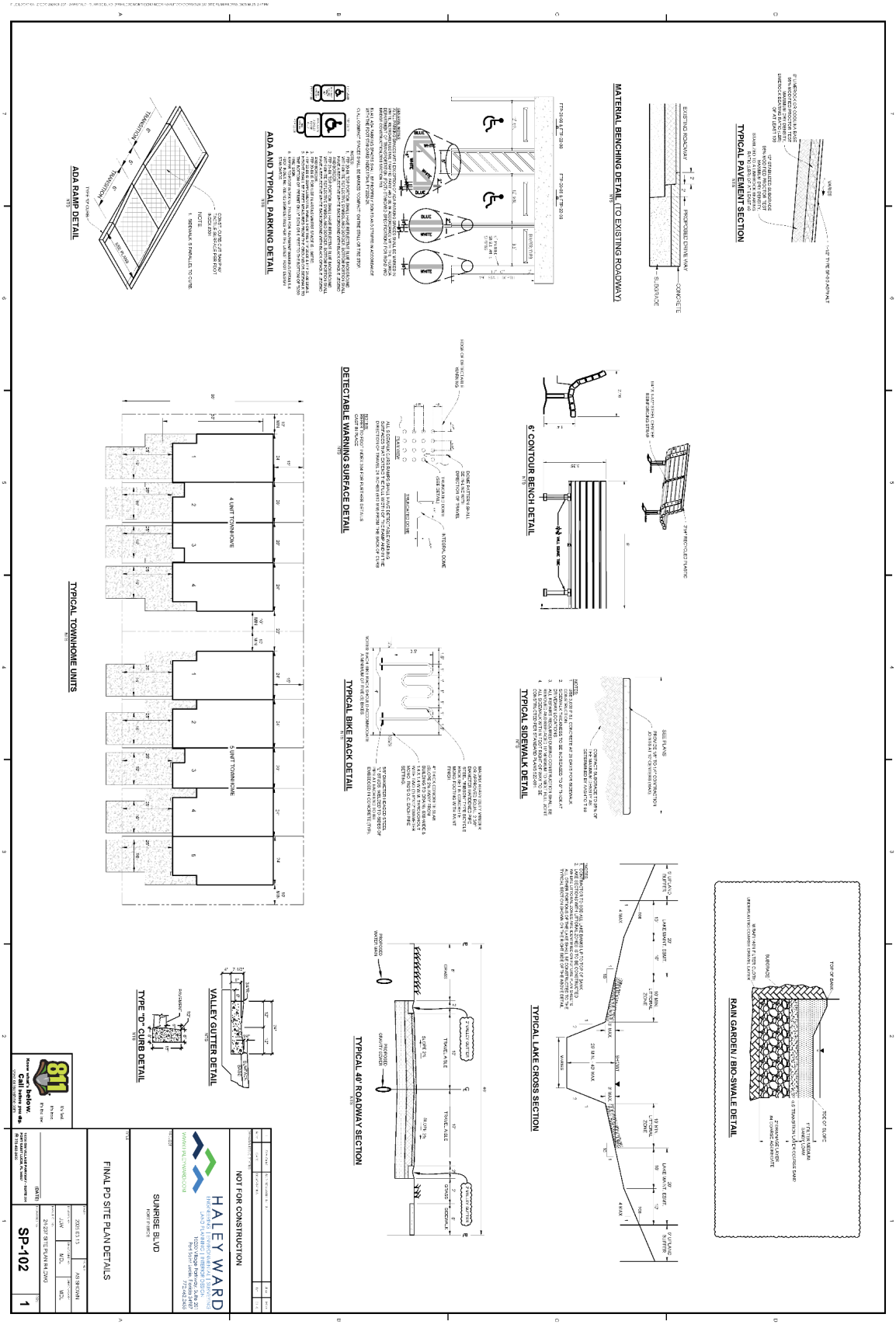
Future Land Use: Comprehensive Plan, 1.1.6 Policy (A) Residential

Medium Density Residential (RM): The Medium Density Residential (RM) designation is intended for parcels that are best suited for multifamily residential uses ranging in density from six and one-half to 12 dwelling units per acre. This category allows small-lot single family units and multifamily dwellings including duplexes, condominiums and townhomes. Limited commercial uses intended to serve the residential uses shall be allowed. Compatible public, quasi-public, and special uses including parks, churches, non-profit clubs, schools and daycare facilities shall also be allowed. This category combines the previously allowed Medium Density Residential (Rme) and Moderate Density Residential (Rmo) categories.

Final Site Plan



Site Plan Details


TYPICAL PAVEMENT SECTION
MATERIAL BENCHING DETAIL TO EXISTING ROADWAY
ADA AND TYPICAL PARKING DETAIL
ADA RAMP DETAIL
6' CONTOUR BENCH DETAIL
DETECTABLE WARNING SURFACE DETAIL
TYPICAL SIDEWALK DETAIL
TYPICAL TOWNHOME UNITS
TYPICAL BIKE RACK DETAIL
TYPICAL LAKE CROSS SECTION
RAIN GARDEN / BIO-SWALE DETAIL
VALLEY GUTTER DETAIL
TYPE "D" CURB DETAIL
TYPICAL 40' ROADWAY SECTION
4 UNIT TOWNHOME
5 UNIT TOWNHOME
NOT FOR CONSTRUCTION
HALEY WARD
SUNRISE BLVD
FORT PIERCE
FINAL PD SITE PLAN DETAILS
SP-102
1

SITE DATA

LEGAL DESCRIPTION

PARCEL 1:

THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

PARCEL 2:

LOTS 1 THROUGH 4; THE WEST 130 FEET OF LOTS 5 THROUGH 16; ALL OF LOT 17; THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

VICINITY MAP

SCALE: 1:1,000

SECTION: 28
TOWNSHIP: 35S
RANGE: 40E
PARCEL ID #: PARCEL 1 - 2428-321-0001-000-3
PARCEL 2 - 2428-601-0252-000-6

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0186J
CITY OF FT PIERCE
120286

TOTAL DRAINAGE PROVIDED: 4.88 AC. (22.48% OF 21.71 AC.) @ TOB

PROJECT NAME: SUNRISE BLVD

OWNER: GPS DEVELOPMENTS LLC
10465 NW 29TH TERRACE
DORAL, FL 33172-2530

FUTURE LAND USE: RM
CURRENT ZONING: R-4 (10 DU/AC.)
PROPOSED ZONING: PUD (10 DU/AC.)
PROJECT AREA: 21.67 AC. (944,072 S.F.) (EXCLUDES 15' R.O.W. DEDICATIONS OF 9,946 S.F. & 2,946 S.F.)
(956,972 S.F. EX. GROSS SITE AREA - 12,900 S.F. R.O.W. DEDICATION = 944,072 S.F. = 21.67 AC)

BUILDING DATA

CABANA (1-STORY): 508 S.F.
TOTAL ALLOWABLE UNITS: 217 UNITS (10 DU/AC. X 21.74 AC.) PER APPROVED SITE PLAN
TOTAL PROPOSED MULTI-FAMILY UNITS: 184 UNITS - (28) 5 UNIT TOWNHOME & (11) 4 UNIT TOWNHOME (SEE TYP. ON SHEET SP-102)

MULTI-FAMILY BUILDINGS (2-STORY): 39 BUILDINGS

NAME	UNIT COUNT	FOOTPRINT	NAME	UNIT COUNT	FOOTPRINT
BUILDING 1	5 UNIT	5,225 SF	BUILDING 21	5 UNIT	5,225 SF
BUILDING 2	5 UNIT	5,225 SF	BUILDING 22	5 UNIT	5,225 SF
BUILDING 3	5 UNIT	5,225 SF	BUILDING 23	5 UNIT	5,225 SF
BUILDING 4	5 UNIT	5,225 SF	BUILDING 24	5 UNIT	5,225 SF
BUILDING 5	5 UNIT	5,225 SF	BUILDING 25	5 UNIT	5,225 SF
BUILDING 6	5 UNIT	5,225 SF	BUILDING 26	5 UNIT	5,225 SF
BUILDING 7	4 UNIT	4,205 SF	BUILDING 27	5 UNIT	5,225 SF
BUILDING 8	4 UNIT	4,205 SF	BUILDING 28	5 UNIT	5,225 SF
BUILDING 9	4 UNIT	4,205 SF	BUILDING 29	5 UNIT	5,225 SF
BUILDING 10	4 UNIT	4,205 SF	BUILDING 30	5 UNIT	5,225 SF
BUILDING 11	5 UNIT	5,225 SF	BUILDING 31	5 UNIT	5,225 SF
BUILDING 12	5 UNIT	5,225 SF	BUILDING 32	5 UNIT	5,225 SF
BUILDING 13	5 UNIT	5,225 SF	BUILDING 33	5 UNIT	5,225 SF
BUILDING 14	5 UNIT	5,225 SF	BUILDING 34	4 UNIT	4,205 SF
BUILDING 15	5 UNIT	5,225 SF	BUILDING 35	4 UNIT	4,205 SF
BUILDING 16	5 UNIT	5,225 SF	BUILDING 36	4 UNIT	4,205 SF
BUILDING 17	4 UNIT	4,205 SF	BUILDING 37	4 UNIT	4,205 SF
BUILDING 18	4 UNIT	4,205 SF	BUILDING 38	5 UNIT	5,225 SF
BUILDING 19	4 UNIT	4,205 SF	BUILDING 39	5 UNIT	5,225 SF
BUILDING 20	5 UNIT	5,225 SF			

PROVIDER OF UTILITIES:

WATER:	FPUA
WASTEWATER:	FPUA
IRRIGATION:	PRIVATE WELL

PARKING DATA

PARKING FOR 508 S.F. CABANA

TOTAL CABANA PARKING PROVIDED	15 SPACES (2 HC)

PARKING REQUIRED FOR RESIDENT - 2 SPACES PER DWELLING

TOTAL REQUIRED RESIDENT PARKING	368 SPACES
GARAGES:	184 SPACES
DRIVEWAYS:	184 SPACES
ROW PARKING:	22 SPACES
TOTAL RESIDENT PARKING PROVIDED:	390 SPACES

DEVELOPMENT REGULATIONS

	EXISTING (R-4)	PROPOSED (PD)
MIN LOT AREA	1,500 SF	1,800 SF
MIN LOT WIDTH	16'	20'
MAX LOT WIDTH	24'	45' MAX
MIN LOT DEPTH	90'	90'
MIN FRONT SETBACK	10'	25'
MIN SIDE SETBACK	10'	10'
MIN SIDE CORNER SETBACK	15'	10'
MIN REAR YARD SETBACK	15'	15'
MIN BUILDING HEIGHT	45' MAX	30' MAX
MIN PARKING	2 SP/DWELLING	2 SP/DWELLING
BUILDING COVERAGE	50% MAX	20.45%
OPEN SPACE	20% MIN	35.95%

VERTICAL DATUM NOTE:

ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

NOTES:

1. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE RIGHT-OF-WAY
2. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 119 & 125

LAND USE TABLE

EXISTING GROSS SITE AREA	956,972 S.F. (21.97 AC)
R.O.W. DEDICATION	12,900 S.F. (0.30 AC)
PROPOSED NET SITE AREA	944,072 S.F. (21.67 AC) = 100.00%
IMPERVIOUS AREA	424,527 S.F. (9.74 AC) = 44.97%
PROPOSED BUILDING	193,063 S.F. (4.43 AC) = 20.45%
PROPOSED PAVEMENT	92,420 S.F. (2.12 AC) = 9.79%
PROPOSED CONCRETE	139,044 S.F. (3.19 AC) = 14.73%
PERVIOUS AREA (OPEN SPACE AREA):	339,367 S.F. (7.79 AC) = 35.95%
COMMON AREA	274,766 S.F. (6.31 AC) = 29.11%
DETENTION TOP OF BANK (EXCLUDES LAKE AREA)	64,601 S.F. (1.48 AC) = 6.84%
WATER MANAGEMENT AREA:	180,178 S.F. (4.14 AC) = 19.08%
LAKE TOP OF BANK	180,178 S.F. (4.14 AC) = 19.08%
LAKE CONTROL ELEVATION	144,746 S.F. (3.32 AC) = 15.33%

STORMWATER DRAINAGE:

THE STORMWATER MANAGEMENT SYSTEM FOR THE SITE WILL CONSIST OF A SERIES OF INLETS CONNECTED VIA UNDERGROUND PIPES WHICH CONVEY STORMWATER TO AN ONSITE WET DETENTION AREA. THE WET DETENTION AREA WILL TREAT AND ATTENUATE STORMWATER PRIOR TO DISCHARGING OFFSITE TO THE NSLRWCD CANAL NO. 10.

SOLID WASTE:

BASED ON THE INTENDED USE OF THE BUILDING, THIS PROJECT WILL UTILIZE CURBSIDE SERVICE FOR SOLID WASTE AND RECYCLABLE ITEMS.

HAZARDOUS WASTE:

ANY AND ALL HAZARDOUS OR TOXIC MATERIALS GENERATED OR USED OR STORED ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LANDSCAPE:

REFER TO LANDSCAPE PLAN BY OTHERS.

ACCESSIBILITY AND ADA COMPLIANCE:

ALL SIDEWALKS AND RAMPS WILL MEET FDOT AND ADA REQUIREMENTS.

NEAREST FIRE HYDRANTS LOCATED WITHIN 1,000 FT.:

(APPROX. DISTANCE PER GOOGLE MAPS)

HYDRANTS:

1.	NORTHWEST SIDE OF SITE ALONG S 25TH STREET	968 FT.
2.	WEST SIDE OF SITE ALONG S 25TH STREET	714 FT.
3.	SOUTHWEST SIDE OF SITE ALONG S 25TH STREET	870 FT.
4.	SOUTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	707 FT.
5.	EAST SIDE OF SITE ALONG SUNRISE BLVD.	62 FT.
6.	NORTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	312 FT.

Public Benefits

Public Benefits include:

a. The project incorporates rain gardens throughout the site to improve stormwater quality, reduce runoff, promote groundwater recharge, and enhance the site's overall environmental performance.
b. Reduced Density: The current zoning allows for up to 217 dwelling units. The applicant is proposing a multi-family development consisting of 184 dwelling units. The proposed density is lower than the maximum permitted, resulting in reduced impacts on public facilities, transportation networks, and surrounding neighborhoods.
c. Construction of private infrastructure to serve the development. Internal roadways, utilities, drainage facilities, and associated infrastructure will be privately constructed and maintained, reducing long-term maintenance obligations for the City while providing high-quality services to residents.
d. Larger landscape buffers. The code requires a 10' perimeter landscape buffer. The site and landscape plans depict a 15' perimeter landscape plan with additional plantings in various locations.
e. Littoral plantings. Littoral planting enhances wading bird habitats by providing critical foraging, nesting, and protective cover, while improving water quality to support food sources. The City of Fort Pierce does not have a requirement for littoral plantings. The littoral plantings proposed exceed what is normally required in surrounding municipalities.
f. Increased open space. The development preserves and provides open space beyond minimum requirements, offering environmental, recreational, and aesthetic benefits while improving overall neighborhood livability.
g. Water main extension on Dade Road from stub out on Sunrise Boulevard to 25th Street. The project includes the extension of a public water main along Dade Road, improving water service availability, increasing system reliability, and supporting future development opportunities within the surrounding area.
h. 15' Right of Way dedication on Dade Road to the City of Fort Pierce. A fifteen-foot (15') right-of-way dedication along Dade Road will accommodate future roadway improvements, enhance transportation planning, and contribute to the City's long-term
mobility objectives.

i. The development incorporates sidewalks on both sides of the private roads and pedestrian circulation features that improve internal connectivity, encourage walking, promote healthy lifestyles, and provide safe access throughout the community and to adjacent areas.
j. Proposed ingress / egress easement at the northeast corner of subject parcel to allow access to Sunrise Boulevard for landlocked parcel # 2428-322-0001-000-6.

Design Review

Design Intent and Design Program

The design intent is to create a cohesive, high-quality residential neighborhood that complements the existing character of Fort Pierce while offering modern amenities and sustainable infrastructure.

Objectives include:

- Create a cohesive neighborhood identity through consistent architectural themes and landscaping.
- Provide attainable housing through two-story townhomes with modern floor plans.
- Promote walkability and social interaction through interconnected streets, sidewalks and open space.
- Ensure compatibility with adjacent residential uses by respecting setbacks, scale and massing.

Buildings will feature pastel stucco walls, white trims, grey shingle roofs, gabled forms and front porches. A central lake and open space will serve as the heart of the community.

The 39 buildings are arranged around a central lake and open space. The site plan diagram below shows the arrangement of buildings, roadways, sidewalks and open spaces. A 15-foot landscape buffer surrounds the property, and the wet detention lake manages stormwater runoff while providing an amenity.

Design Character

The architectural style draws on coastal Florida vernacular. Townhomes are grouped in blocks of four or five units with gable roofs and front porches. The fa9ade design emphasizes rhythm and variety through subtle changes in trim, color accents and window proportions.

A monument sign will mark the entrance to Sunrise Landing. The sign design uses the same pastel stucco and stacked stone materials as the townhomes and includes raised lettering.

Materials and Colors

A consistent materials palette reinforces the community's identity. The following table summarizes the primary materials:

Building Component	Material/Color	Description
Primary Wall Finish	Pastel stucco	Light blue-green stucco finish applied to all exterior walls.
Trim & Fascia	White paint	Painted trim for eaves, columns and garage surrounds.
Roofing	Grey asphalt shingles	Dimensional shingles in a medium-grey tone.
Windows & Doors	White frames	Vinyl or aluminum frames painted white.
Driveways/Walkways	Grey concrete pavers	Interlocking pavers with varied grey tones.
Stone Accents	Stacked stone veneer	Natural or manufactured stone used at sign columns.

Color Swatches



Architectural Example



Monument Sign Rendering



Typical Townhome Building Rendering

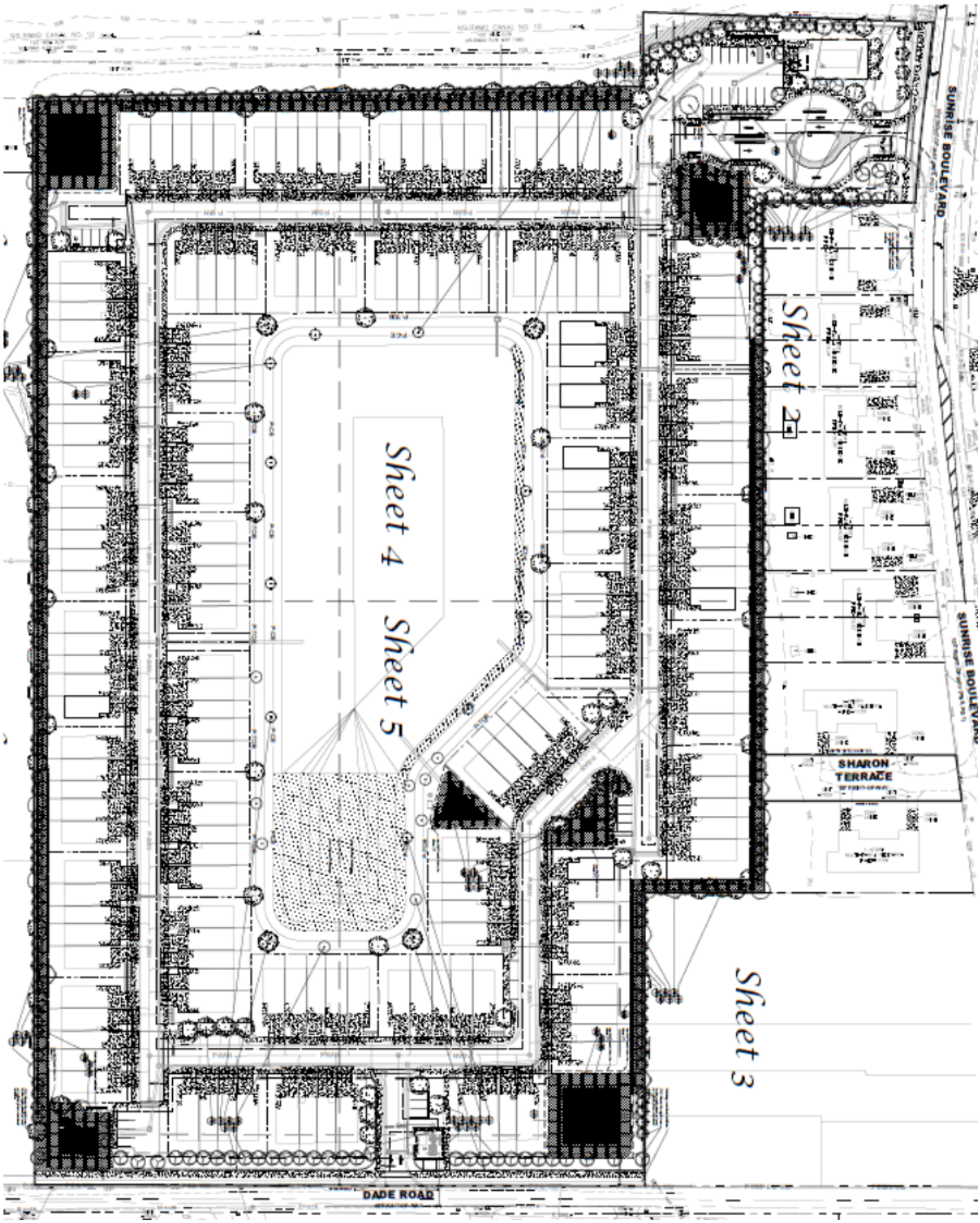


Existing Architectural Examples





Landscape Plan



Landscape Data

Specifications

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part 1 and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species.
2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.
3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.
4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.
5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Enviromulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area.
7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems.
8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of backfill and before installing mulch.
9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail)
10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:0:2 or 3:0:3 (e.g. one labeled 12-0-8). Similar analysis such as 16-0-8 (4:0:2) can also be used. Fertilizers that are slow release, controlled release, sulphur

coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water insoluble or slow release.
Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

Agriform 20-0-5 twenty-one gram planting tablets may be substituted for granular fertilizer. If utilized, the following rates shall be utilized: Position plant in hole. Backfill halfway up the rootball. Place tablet(s) beside rootball about 1" from root tips. Do not place tablet(s) in bottom of hole.

1 Gallon 1 Tablet
3 Gallon 2 Tablets
25 Gallon & B&B Trees 2 per 1" caliper

11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers and mulch. Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by City and project is released by the General Contractor to Client.
13. Prune trees and shrubs only to remove damaged branches as directed by the Landscape Architect.
14. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus Floritam (unless otherwise noted), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly.
15. Maintain positive drainage, no planting is to block drainage.
16. Drainage Testing
    Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage.

- Dig each planting pit to the minimum specified size.
- Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required.
- When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)
- Discard all material removed from the drainage channel.
- When backfilling the planting pit, add course gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.

NOTES:

1. Contractor to include drainage testing for all trees and palms in bid. If drainage is inadequate, the soil specification in item #8 above shall be revised for site conditions. Contractor shall notify the Owner and Landscape Architect of poor drainage conditions in writing and written direction will be provided to the contractor of appropriate soil mixture specification to be used.
2. All fertilizers shall meet the City of Port St. Lucie's fertilizer ordinance.

Plant List

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	DROUGHT TOLERANCE
CANOPY / ORNAMENTAL TREES							
12	BS*	BURSERA SIMARUBA	GUMBO LIMBO	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
46	IE*	ILEX x ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
9	LI	LAGERSTROEMIA INDICA 'TUSKEGEE'	CREPE MYRTLE 'RED'	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 2.5' C.T. MIN.	HIGH
184	PE*	PINUS ELLIOTTI	SLASH PINE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
4	PP	PELTOPHORUM DUBIUM	YELLOW POINCIANA	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
23	QL*	QUERCUS LAURIFOLIA	LAUREL OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
88	QV*	QUERCUS VIRGINIANA	LIVE OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
15	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
PALMS							
9	SP*	SABAL PALMETTO	SABAL PALM	12' C.T.	A.S.	RELOCATED - SLICK TRUNKS	HIGH
SHRUBS / GROUNDCOVERS							
98	MYR-1*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#7, 4' x 2'	2' O.C.	FULL & THICK	HIGH
1,195	MYR*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
1,145	FOS*	FORESTIERA SEGREGATA	FLORIDA PRIVET	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
765	POC*	PONTEDERIA CORDATA	PICKEREL WEED	BARE ROOT	3' O.C.	FULL & THICK	HIGH
765	SAS*	SAGITTARIA SPP.	ARROWHEAD	BARE ROOT	3' O.C.	FULL & THICK	HIGH
56,850	SPB*	SPARTINA BAKERI	SAND CORDGRASS	LINER	12" O.C.	SEE DRY RETENTION NOTES	HIGH
	SOD-1	PASPALUM NOTATUM	BAHIA SOD			SEE SPECS	

* = Florida Native

NOTES:
1. D.B.H.IS MEASURED 4.5' ABOVE GRADE
2. ALL AREAS NOT MULCHED FOR INDIVIDUAL PLANT MATERIALS AND PLANTING BEDS SHALL BE SODDED. NO EXPOSED SOIL AREAS SHALL REMAIN ON SITE. THIS INCLUDES ALL OPEN AREAS, LAKE BANKS, DRY RETENTION AREAS, DRY DETENTION AREAS, AND ANY OTHER AREAS NOT COVERED BY IMPERVIOUS MATERIALS OR PLANTING MATERIALS.

Landscape Data

Landscape Data

Vehicular Use Area Landscaping Adjacent to R.O.W. (South Buffer) 664'
Sec. 123-37(4)(b)
Trees Required = 15' Wide Landscape Strip with 1 Tree/300 s.f.
664 l.f. x 15' = 9,960 s.f. / 300 = 33 Trees
Provided = 33 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
664 l.f. / 2' o.c. = 332 Shrubs
Provided = 332 Shrubs

Vehicular Use Area Landscaping Adjacent to R.O.W. (North-East Buffer) 196'
Sec. 123-37(4)(b)
Trees Required = 15' Wide Landscape Strip with 1 Tree/300 s.f.
196 l.f. x 15' = 2,940 s.f. / 300 = 10 Trees
Provided = 10 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
196 l.f. / 2' o.c. = 98 Shrubs
Provided = 98 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (East Buffer) 1,349'
Sec. 123-37(6)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,349 l.f. x 15' = 20,235 s.f. / 200 = 102 Trees
Provided = 102

Shrubs Required = Continuous Hedge @ 2' o.c.
1,349 l.f. / 2' o.c. = 675 Shrubs
Provided = 675 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (West Buffer) 1,182'
Sec. 123-37(6)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,182 l.f. x 15' = 17,730 s.f. / 200 = 87 Trees
Provided = 87

Shrubs Required = Continuous Hedge @ 2' o.c.
1,182 l.f. / 2' o.c. = 591 Shrubs
Provided = 591 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (North Buffer) 1,060'
Sec. 123-37(6)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,060 l.f. x 15' = 15,900 s.f. / 200 = 80 Trees
Provided = 80

Shrubs Required = Continuous Hedge @ 2' o.c.
1,060 l.f. / 2' o.c. = 530 Shrubs
Provided = 530 Shrubs

Interior Vehicular Use Area
Sec. 123-37(7)(a & b)
Required = 1 s.f. of interior landscaping per
15 s.f. of vehicular use area (92,711 s.f./15 = 6,180 s.f.)
Landscape Area Provided = 6,185 s.f.
Trees Required = 1 Tree/100 s.f. of interior landscape area
92,711 s.f./15 = 6,180 s.f. / 100 = 62 Trees
Trees Provided = 62

Maximum Use of Palm Trees
Sec. 123-37(1)(a)(3)
Required = Fifty (50) percent of the required trees shall be species other than palm trees
Total Trees Required = 381 Trees
Maximum Palms Allowed = 191 (381 / 2 = 191)
Total Palms Provided = 0 (0%)

Total Trees Required = 381 Trees
Total Trees Provided = 381 Trees
381 Trees + 0 Palms @ 3:1 = 0 Trees = 381 Trees

Total Trees Required = 381 Trees
Total Native Trees Provided = 381 (100%)

Total Palms Required = 0
Total Native Palms Provided = 0 Relocated (0%)

Total Shrubs Required = 2,226
Total Native Shrubs Provided = 2,226 (100%)

Tree Mitigation Data

SITE TREE SUMMARY				
TYPE OF TREE	TOTAL # TREES	TOTAL SIZE (INCHES)	PRESERVATION CREDIT	REQUIRED MITIGATION
OAK TREES PRESERVED	5	119.8	119.8	
OAK TREES TO BE REMOVED	24	470		419.8
PALM TREES TO BE PRESERVED	5	0		
PALM TREES TO BE RELOCATED	9	0		
PINE TREES TO BE PRESERVED	2	32.4	32.4	
PINE TREES TO BE REMOVED	1	17.5	17.5	17.5
TOTAL # OF TREES FOR THIS PROJECT	46	639.7	169.7	437.3

TREE COUNT (MITIGATION)
12 (TO BE PRESERVED)
24 (OAKS TO BE REMOVED)
1 (PINES TO BE REMOVED)
-267.6 MITIGATION (CREDITS)

NOTE: TREES THAT DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION ARE NOT INCLUDED IN THE SITE TREE SUMMARY TABLE AND TREE COUNT TABLE

PINE TREES REMOVED				
#	TREE #	SIZE (INCHES)	MITIGATION CREDIT(S)	NOTES & REMARKS
1	7	17.5	17.5	
TOTAL		17.5	17.5	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

PINE TREES PRESERVED				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	9	15.1	15.1	
2	12	17.3	17.3	
TOTAL		32.4	32.4	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

OAK TREES REMOVED				
#	TREE #	SIZE (INCHES)	MITIGATION CREDIT(S)	NOTES & REMARKS
1	1	14.9	14.9	LAUREL OAK
2	2	15.2	15.2	LAUREL OAK
3	4	24.1	24.1	LAUREL OAK
4	6*	12.7	0	LAUREL OAK
5	13*	12.5	0	LAUREL OAK
6	18*	12.9	0	LAUREL OAK
7	19	16.2	16.2	LAUREL OAK
8	23*	12.1	0	LAUREL OAK
9	29	15	15	LAUREL OAK
10	30	15.9	15.9	LAUREL OAK
11	32	15.8	15.8	LAUREL OAK
12	38	14.8	14.8	LAUREL OAK
13	42	14.4	14.4	LAUREL OAK
14	43	20.9	20.9	LAUREL OAK
15	44	23.5	23.5	LAUREL OAK
16	46	15.1	15.1	LAUREL OAK
17	47	23.2	23.2	LAUREL OAK
18	49	14.8	14.8	LAUREL OAK
19	50	17	17	LAUREL OAK
20	51	15.2	15.2	LAUREL OAK
21	53	19.8	19.8	LAUREL OAK
22	54	17	17	LAUREL OAK
23	57	19.4	19.4	LAUREL OAK
24	58	15.1	15.1	LAUREL OAK
25	59	21.4	21.4	LAUREL OAK
26	60	18	18	LAUREL OAK
27	67	14	14	LAUREL OAK
28	68	19.1	19.1	LAUREL OAK
TOTAL		470	419.8	

OAK TREES PRESERVED				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	8	23.3	23.3	LAUREL OAK
2	10*	12.9	12.9	LAUREL OAK
3	11	18.5	18.5	LAUREL OAK
4	27	27.5	27.5	LIVE OAK
5	28	37.6	37.6	LIVE OAK
6	66	18	18	LAUREL OAK
TOTAL		137.8	119.8	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

PALM TREES				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	5	---		RELOCATE
2	15	---		RELOCATE
3	16	---		RELOCATE
4	17	---		RELOCATE
5	20	---		PRESERVED
6	21	---		PRESERVED
7	22	---		PRESERVED
8	25	---		PRESERVED
9	26	---		PRESERVED
10	31	---		RELOCATE
11	39	---		RELOCATE
12	63	---		RELOCATE
13	64	---		RELOCATE
14	69	---		RELOCATE

Traffic Impact Statement

A traffic analysis has been submitted for the Final PD Site Plan in terms of any required improvements to Sunrise Boulevard, including the fifteen-foot (15') right-of-way dedication along Dade Road that will accommodate future roadway improvements, enhance transportation planning, and contribute to the City's long-term mobility objectives and the proposed ingress / egress easement at the northeast corner of subject parcel to allow access to Sunrise Boulevard for landlocked parcel # 2428-322-0001-000-6.

The proposed development is expected to generate the following net external and driveway trips:

• 1,255 daily, 80 AM peak hour (19 in/61 out), and 100 PM peak hour (63 in/37 out) trips.

Trip Generation Table

ITE Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								
Multi-family Housing (Low-rise)	184 DU	1,255	80	19	61	100	63	37
NET PROPOSED TRIPS		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***
Total Proposed Driveway Volumes		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multi-family Housing (Low-rise)	220	DU	T = 6.41(X) + 75.31	0%	24/76	T = 0.31(X) + 22.85	63/37	T = 0.43(X) + 20.55

Copyright ©2025 , MacKenzie Engineering and Planning, Inc.

ITE 11th Edition

Environmental

The opinion of EDC is that there is NO native upland habitat located on site. Exotic vegetation makes up over 50% of plant composition of each three strata: ground cover, mid-story, canopy.

The habitat associations were determined via onsite assessment and classified according to the Florida Cooperative Land Cover (CLC) System developed by the Florida Fish and Wildlife

Conservation Commission (FWC). The CLC incorporates classifications used by FWC, Florida Natural Areas Inventory (FNAI), and Florida's water management districts.

The following upland CLC code(s) were identified onsite; Freshwater Marsh and Brazilian Pepper. Please refer to the attached Florida CLC map for the approximate location of the habitat(s) delineated onsite.

Common Name	Species Name
Slash Pine	*Pinus elliottii*
Brazilian Pepper**	*Schinus terebinthifolia*
Cabbage Palm	*Sabal palmetto*
Melaleuca**	*Melaleuca quinquinervia*
Earleaf Acacia**	*Acacia auriculiformis*
Old-World Climbing Fern**	*Lygodium microphyllum*
Rosary Pea**	*Abrus precatorius*
Cogon Grass**	*Imperata cylindrica*

***Nuisance Vegetation**

****Exotic/Invasive Vegetation**

Table 1: This table lists a representative sample of vegetative species observed during the site visit.

WETLAND DELINEATION:

According to aerial photographs and site visits, it appears that there are State jurisdictional wetlands on site. Based on the State definition, a wetland consists of three components: 1) hydric soils, 2) wetland plants, and 3) hydrologic indicators. These components were found in conjunctions during the field reconnaissance on the property. SFWMD previously issued a Jurisdictional Determination over the wetland areas on the subject property under Application 060531-18. Mitigation credits for on-site wetlands was purchased. Documentation is attached.

WILDLIFE EVALUATION:

EDC, Inc. conducted a pedestrian survey throughout the property to investigate the presence of any plant or animal listed species. No state or federally listed plant/animal species or their habitats were observed onsite during the site reconnaissance. Common waterfowl were

observed in wetland areas on the subject property. A 100% gopher tortoise survey should be conducted by a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent (AGTA) 90-days prior to any land-disturbing activities.

SOIL COMPOSITION:

Based on a review of the U.S. Department of Agriculture (USDA) Web Soil Survey the site is composed of the following soil series:

Ankona and Farmton sands- The Ankona and Farmton series consist of very deep, very poorly drained, slowly permeable soils. These sands formed in sandy and loamy marine sediments. A water table is within depths of 6 to 18 inches for 1 to 4 months, primarily in the winter and early spring and it is at depths of 18 to 40 inches for 6 months or more during the rest of the year in most years. Ankona and Farmton soils are found in broad flats and depressional areas. Typical vegetation consists of longleaf pine, slash pine, saw palmetto, wax myrtle, gallberry, fetterbush, creeping bluestem, chalky bluestem, lopsided Indian grass, low panicums and pineland threeawn. Depressional areas are dominated by marsh vegetation consisting of maidencane, cutgrass, sand cordgrass, and St. John's wort.

Oldsmar fine sand, depressional- This soil is in wet depressions in the flatwoods and the soil is often ponded for six to nine months. The potential for cultivation is low without aggressive water management. Oldsmar sand is sandy, siliceous, poorly drained and slowly permeable sand. These soils are nearly level and found in broad areas of flatwoods and wet depressional areas. In most years the water stands above the surface for 6 to 9 months or more. These soils are saturated for long periods during the wet season. Natural vegetation includes sand weed, stillingia, longleaf threeawn, maidencane and sand cordgrass. The most common grasses are Florida threeawn and pineland threeawn. Water control measures are necessary to overcome excessive wetness. The potential for cultivation is low without aggressive water management. The soil is well suited for pasture and hay crops.

Pepper and EauGallie sand- sands are sandy, siliceous, nearly level, poorly drained soil in broad open areas of the flatwoods. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and within a depth of 40 inches for more than 6 months. Natural vegetation includes Florida pine, saw palmetto, oak, inkberry, and fetterbush. The most common grasses are Florida threeawn and pineland threeawn. The soil has high

potential for dwellings without basements, small commercial buildings and roads. Water control measures may be necessary to overcome excessive wetness.

It is the professional opinion of EDC that no native upland habitat is located onsite. Wetlands are located on the subject property, which have previously been mitigated for with SFWMD. A 100% gopher tortoise survey should be conducted by a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent (AGTA) 90-days prior to any land-disturbing activities. Lastly, trees meeting the City of Fort Pierce protection criteria were located onsite and a tree survey will be required as part of building approval process and vegetation removal.

Storm Drainage

The proposed stormwater management system for the site is comprised of 4.18-acre lake and 1.51 acres of dry retention. The lake can provide up to 35.96 ac-ft of permanent pool volume and the dry retention areas provide up to 1.38 ac-ft of retention volume to meet net improvement standards. The stormwater management system can provide 3.48 ac-ft of water quality treatment volume exceeding the required minimum.

The project proposes to treat the required water quality treatment volume based on three criteria. The three criteria are 1-inch over the project area, 2.5-inches times the percent impervious and net improvement. The following Table 4 outlines the results of the water quality treatment volume calculations. The controlling factor for water quality treatment volume is 1-inch over the project area. The calculations for 1-inch over the project area and 2.5-inches times the percent impervious are increased by 50% for an Outstanding Florida Waterbody (OFW).

Table 4-Water Quality Treatment Volume

1-inch Over the Project Area (acre-feet)	**2.5-inches Times Percent Impervious (acre-feet)**	**Net Improvement (acre-feet)**
2.71	1.95	1.38

The treatment volume for net improvement is reduced due to the portion of the treatment being provided in the permanent pool volume in the lake. The 1.38 acre-feet of remaining treatment is required in retention.

The minimum perimeter berm is determined by the results of the routing simulation for the 25-year/3-day storm event. The perimeter berm elevations are noted in Table 9.

Table 9-Minimum Perimeter Berm

Stormwise Result	Minimum Berm
15.24 NAVD	15.25 NAVD

A net improvement analysis was completed on the project to demonstrate that total nitrogen and phosphorus loading is reduced in the post development condition. Net improvement for the project is attained using a combination of the permanent pool volume in the lake and the dry retention ponds.

To provide assurance that the site can recover from a storm event without flooding, a back-to-back storm was simulated in the routing model. The ending stage of the 25-year/3-day storm was used as the starting stage for the second storm. The 100-year/3-day storm was routed without discharge for both the initial and secondary storm.

Table 10-Back-to-Back Storm Results

Storm	Maximum Stage Initial Storm (NAVD)	Maximum Stage Secondary Storm (NAVD)	Proposed Elevation (NAVD)	Note
10-1	14.41	15.23	15.70	Minimum Pavement
25-3	15.24	15.58	15.25	Perimeter Berm
100-3	16.25	16.84	17.75	Minimum FFE

Since the perimeter berm elevation is based on the initial storm results only, an increase in the proposed elevation is not warranted due to the results of the secondary storm.

The project known as Sunrise Blvd proposes to develop vacant land into a town-style product. The proposed dry retention and lake provide water quality and attenuation prior to discharging to the NSLRWCD Canal No. 10. The project meets all local and stormwater regulations.

Technical Review Committee

Affected departments have reviewed the proposed Final Development Plan for Planned Development Zoning District application with regard to the requirements of the City Code. Findings from the review by corresponding departments and the associated responses by the applicant are provided with the staff's supporting documents.

Recommended Conditions of Approval

1. Final Plat approval of the property shall be required prior to application for a building permit for a residential building.
2. The minimum Open Space shall be maintained at a minimum of 35.77% of the **Final PD** site area.
3. The development shall comply with the permitted density, intensity and residential lot and building heights as outlined within the approved Sunrise Boulevard Development Agreement and **Final PD** site plan.
4. A detailed stormwater and drainage plan and statement shall be submitted at the time of Building Permit.
5. The **Final PD** Plan shall be governed by all agreements, provisions and covenants which govern the use, maintenance, and continued protection of the planned development and any of its common open space or other shared areas. This shall include the binding of successors in title to any commitments concerning completion of the project and its maintenance and operation.
6. A tree mitigation calculation shall be submitted and approved prior to issuance of a site clearing or vegetation removal permit.
7. A landscape maintenance agreement shall be required prior to the final certificate of occupation.

8. All applicable state or federal permits shall be obtained before commencement of the development.
9. After completion of the Final Plat, a General Address Request Form for the newly created Parcel ID(s) and for any and each proposed building and residential unit shall be submitted to the Planning Department.
10. Coordinate with the City of Fort Pierce Public Works Department on their approval of trash pick-up.
11. Coordinate with St. Lucie Area Regional Transit to discuss a transit contribution along the corridor of South 25th Street.

Staff Recommendation:

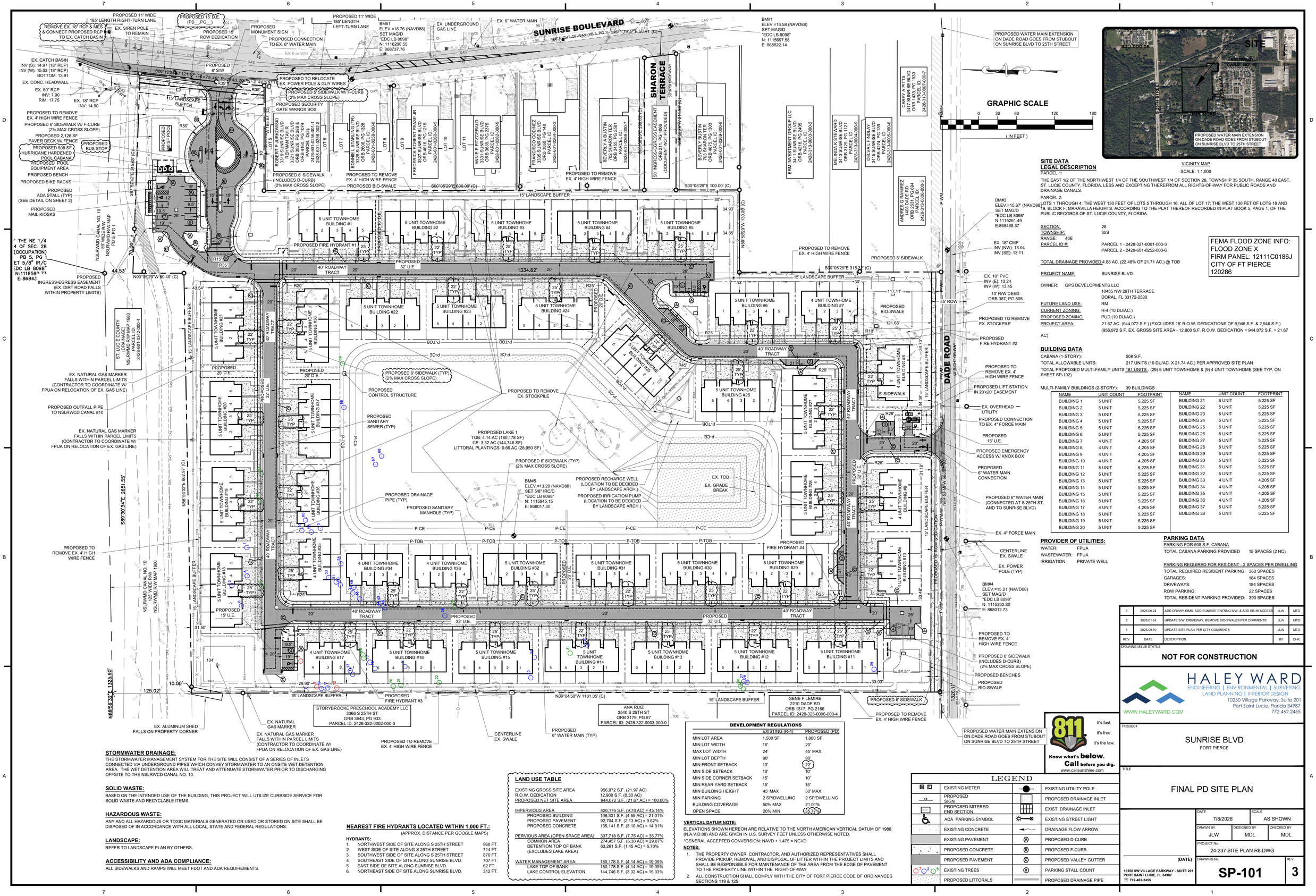
The proposed application meets the standards of the City's Code Section 125-212, and 125-314. Therefore, Staff recommends that the Planning Board recommend APPROVAL of the site plan subject to the Eleven (11) Conditions as noted.

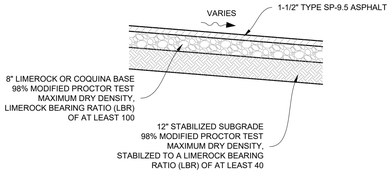
Alternative Recommendations:

Recommend **APPROVAL** – with Amended/Additional Conditions

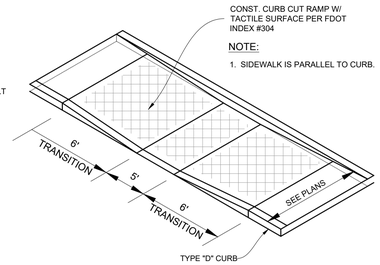
OR

Recommend **DISAPPROVAL/DENIAL**

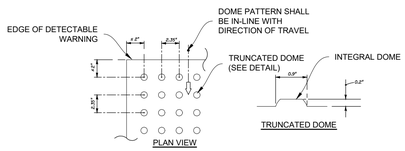

SUNRISE BOULEVARD
100' RIGHT-OF-WAY (PB 5, PG 1) S89°19'37"E 50.41' (C)
SHARON TERRACE
50' RIGHT-OF-WAY
DADE ROAD
40' RIGHT-OF-WAY
PROPOSED 11' WIDE 185' LENGTH RIGHT-TURN LANE
PROPOSED 11' WIDE 185' LENGTH LEFT-TURN LANE
REMOVE EX. 18" RCP & MES & CONNECT PROPOSED RCP TO EX. CATCH BASIN
EX. SIREN POLE TO REMAIN
PROPOSED 15' D.E. (PB PG)
PROPOSED 15' ROW DEDICATION
PROPOSED MONUMENT SIGN
PROPOSED CONNECTION TO EX. 6" WATER MAIN
EX 6-in WM
PROPOSED 6' S/W
PROPOSED TO RELOCATE EX. POWER POLE & GUY WIRES
PROPOSED 5' SIDEWALK W/ F-CURB (2% MAX CROSS SLOPE)
PROPOSED SECURITY GATE W/KNOX BOX
EX. CATCH BASIN INV (S): 14.97 (18" RCP) INV (W): 15.03 (18" RCP) BOTTOM: 13.91
EX. CONC. HEADWALL
EX. 60" RCP INV: 7.90 RIM: 17.75
EX. 18" RCP INV: 14.90
S06°12'54"E 121.10' (C) R=1140.29' Δ=2°49'26" (C)
R35'
15' LANDSCAPE BUFFER
PROPOSED TO REMOVE EX. 4' HIGH WIRE FENCE
PROPOSED 6' SIDEWALK W/ F-CURB (2% MAX CROSS SLOPE)
PROPOSED 2,128 SF PAVER DECK W/ FENCE
PROPOSED 508 SF (HURRICANE HARDENED) POOL CABANA
PROPOSED POOL EQUIPMENT AREA
PROPOSED BENCH
PROPOSED BIKE RACKS
PROPOSED ADA STALL (TYP) (SEE DETAIL ON SHEET 2)
PROPOSED MAIL KIOSKS
PROPOSED BUS STOP
PROPOSED 908 SF POOL
S87°57'42"E 356.63' (C)
NSLRWMD CANAL NO. 10 125' WIDE R/W NSLRWMD R/W MAP PB 5, PG 1
THE NE 1/4 OF SEC. 28 (OCCUPATION) PB 5, PG 1 ET 5/8" IR/C LDB 8098" N:1116590 E:868
70.00'
44.53'
N00°05'29"W 80.49' (C)
PROPOSED INGRESS-EGRESS EASEMENT (EX. DIRT ROAD FALLS WITHIN PROPERTY LIMITS)
ST. LUCIE COUNTY (DRAINAGE) NSLRWMD R/W MAP 1980 PB 5, PG 1 2428-601-0342-000-4
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
PROPOSED OUTFALL PIPE TO NSLRWCD CANAL #10
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
S89°30'34"E 2651.55'
N89°56'32"E 662.37' (C)
PROPOSED TO REMOVE EX. 4' HIGH WIRE FENCE
NSLRWMD CANAL NO. 10 125' WIDE R/W NSLRWMD R/W MAP 1980 PB 5, PG 1
15' LANDSCAPE BUFFER
PROPOSED 15' U.E.
31.50'
N85°56'32"E 1325.90'
125.02'
10.00'
104'
29.90'
EX. ALUMINUM SHED FALLS ON PROPERTY CORNER
EX. NATURAL GAS MARKER
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
STORYBROOKE PRESCHOOL ACADEMY LLC 3366 S 25TH ST ORB 3643, PG 933 PARCEL ID: 2428-322-0002-000-3
PROPOSED FIRE HYDRANT #3
PROPOSED TO REMOVE EX. 4' HIGH WIRE FENCE
CENTERLINE EX. SWALE
PROPOSED 6" WATER MAIN (TYP)
N00°04'58"W 1181.05' (C)
ANA RUIZ 3540 S 25TH ST ORB 3179, PG 87 PARCEL ID: 2428-322-0003-000-0
GENE F LEMIRE 2210 DADE RD ORB 1317, PG 2166 PARCEL ID: 2428-323-0006-000-4
PROPOSED TO REMOVE EX. 4' HIGH WIRE FENCE
PROPOSED 6' SIDEWALK
PROPOSED WATER MAIN EXTENSION ON DADE ROAD GOES FROM STUBOUT ON SUNRISE BLVD TO 25TH STREET
PROPOSED 15' LANDSCAPE BUFFER
PROPOSED 40' ROADWAY TRACT
PROPOSED 32' U.E.
1334.62'
5 UNIT TOWNHOME BUILDING #1
5 UNIT TOWNHOME BUILDING #2
5 UNIT TOWNHOME BUILDING #3
5 UNIT TOWNHOME BUILDING #4
5 UNIT TOWNHOME BUILDING #5
5 UNIT TOWNHOME BUILDING #6
4 UNIT TOWNHOME BUILDING #7
4 UNIT TOWNHOME BUILDING #8
4 UNIT TOWNHOME BUILDING #9
4 UNIT TOWNHOME BUILDING #10
4 UNIT TOWNHOME BUILDING #11
5 UNIT TOWNHOME BUILDING #12
5 UNIT TOWNHOME BUILDING #13
5 UNIT TOWNHOME BUILDING #14
5 UNIT TOWNHOME BUILDING #15
4 UNIT TOWNHOME BUILDING #16
4 UNIT TOWNHOME BUILDING #17
4 UNIT TOWNHOME BUILDING #18
4 UNIT TOWNHOME BUILDING #19
5 UNIT TOWNHOME BUILDING #20
5 UNIT TOWNHOME BUILDING #21
5 UNIT TOWNHOME BUILDING #22
5 UNIT TOWNHOME BUILDING #23
5 UNIT TOWNHOME BUILDING #24
5 UNIT TOWNHOME BUILDING #25
5 UNIT TOWNHOME BUILDING #26
5 UNIT TOWNHOME BUILDING #27
5 UNIT TOWNHOME BUILDING #28
4 UNIT TOWNHOME BUILDING #29
4 UNIT TOWNHOME BUILDING #30
4 UNIT TOWNHOME BUILDING #31
4 UNIT TOWNHOME BUILDING #32
4 UNIT TOWNHOME BUILDING #33
4 UNIT TOWNHOME BUILDING #34
4 UNIT TOWNHOME BUILDING #35
5 UNIT TOWNHOME BUILDING #36
PROPOSED FIRE HYDRANT #1
PROPOSED FIRE HYDRANT #2
PROPOSED FIRE HYDRANT #4
PROPOSED 6' SIDEWALK (TYP) (2% MAX CROSS SLOPE)
PROPOSED CONTROL STRUCTURE
PROPOSED TO REMOVE EX. STOCKPILE
PROPOSED SANITARY SEWER (TYP)
PROPOSED LAKE 1 TOB: 4.14 AC (180,178 SF) CE: 3.32 AC (144,746 SF) LITTORAL PLANTINGS: 0.66 AC (28,950 SF)
PROPOSED 6' SIDEWALK (TYP) (2% MAX CROSS SLOPE)
PROPOSED RECHARGE WELL (LOCATION TO BE DECIDED BY LANDSCAPE ARCH.)
PROPOSED IRRIGATION PUMP (LOCATION TO BE DECIDED BY LANDSCAPE ARCH.)
EX. TOB
EX. GRADE BREAK
PROPOSED DRAINAGE PIPE (TYP)
PROPOSED SANITARY MANHOLE (TYP)
PROPOSED 5' SIDEWALK
PROPOSED BIO-SWALE
PROPOSED 6' SIDEWALK (INCLUDES D-CURB) (2% MAX CROSS SLOPE)
PROPOSED BENCHES
PROPOSED 10' ROW
PROPOSED 6' WATER MAIN CONNECTION
PROPOSED 6" WATER MAIN (CONNECTED AT S 25TH ST. AND TO SUNRISE BLVD)
PROPOSED EMERGENCY ACCESS W/ KNOX BOX
PROPOSED LIFT STATION IN 20'x20' EASEMENT
EX. OVERHEAD UTILITY
PROPOSED CONNECTION TO EX. 4" FORCE MAIN
EX. 4" FORCE MAIN
CENTERLINE EX. SWALE
EX. POWER POLE (TYP)
EX. 6" WATER MAIN
EX. UNDERGROUND GAS LINE
BM#1 ELEV.=18.76 (NAVD88) SET MAG/D "EDC LB 8098" N: 1116200.55 E: 868737.76
BM#1 ELEV.=16.58 (NAVD88) SET MAG/D "EDC LB 8098" N: 1115697.58 E: 868822.14
BM#3 ELEV.=15.67' (NAVD88) SET MAG/D "EDC LB 8098" N:1115261.49 E:868468.37
BM#4 ELEV.=15.21 (NAVD88) SET MAG/D "EDC LB 8098" N: 1115262.80 E: 868012.73
BM#5 ELEV.=13.20 (NAVD88) SET 5/8" IRC/C "EDC LB 8098" N: 1115945.15 E: 868017.30
EX. 18" CMP INV (NW): 13.04 INV (SE): 13.11
EX. 10" PVC INV (E): 13.24 INV (W): 13.45
10' R/W DEED ORB 387, PG 805
ROBERT P JURKOWSKI 3321 SUNRISE BLVD REHMAN TAMIR 3321 SUNRISE BLVD ORB 4161, PG 1914 PARCEL ID(2): 2428-601-0256-001-1 2428-601-0256-000-6
BONNIE L STARLING (TR) 3326 SUNRISE BLVD ORB 3366, PG 1268 PARCEL ID: 2428-601-0258-000-8
FREDERICK ROBERT PEASLEE JR 3327 SUNRISE BLVD ORB 4618, PG 1215 PARCEL ID: 2428-601-0260-000-5
ANNE F FITZGERALD 3333 SUNRISE BLVD ORB 3639, PG 2375 PARCEL ID: 2428-601-0260-000-9
FRANCISCO GODINEZ 3339 SUNRISE BLVD ORB 3886, PG 148 PARCEL ID: 2428-601-0264-000-3
BEVERLY B BUSTIN 705 SHARON TER ORB 4875, PG 1301 PARCEL ID: 2428-601-0266-000-7
BEVERLY B BUSTIN 3345 SUNRISE BLVD ORB 4875, PG 1303 PARCEL ID: 2428-601-0269-000-8
ERM INVESTMENT GROUP LLC 3351 SUNRISE BLVD ORB 4216, PG 2405 PARCEL ID: 2428-313-0003-000-2
MELINDA K STEWARD 3357 SUNRISE BLVD ORB 3331, PG 1877 PARCEL ID: 2428-313-0004-000-9
DELVAL FINDLAY 3419 SUNRISE BLVD ORB 4274, PG 139 PARCEL ID: 2428-313-0005-000-6
CAREY A PITTS 3417 SUNRISE BLVD ORB 4274, PG 1500 PARCEL ID: 2428-313-0007-000-7
ANDRES G RAMIREZ 3501 SUNRISE BLVD ORB 2931, PG 694 PARCEL ID: 2428-313-0006-000-3
LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11
S00°05'29"E 600.00' (C)
S00°05'29"E 100.00' (C)
S00°05'29"E 318.32' (C)
N89°30'29"W 1303.07' (C)
N89°30'29"W 1303.07' (C)
N89°30'29"W 1303.07



TYPICAL PAVEMENT SECTION
NTS



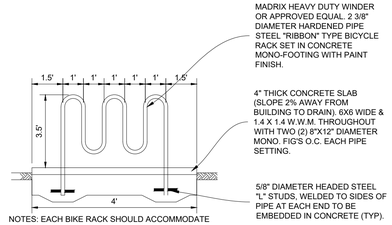
ADA RAMP DETAIL
NTS



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB

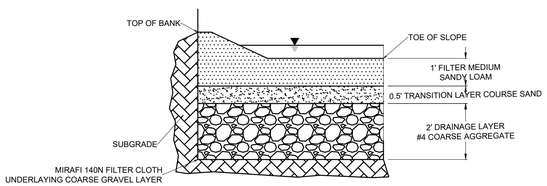
NOTES:
REFER TO FDOT INDEX 304 FOR FURTHER DETAILS
CAST IN PLACE

DETECTABLE WARNING SURFACE DETAIL
NTS

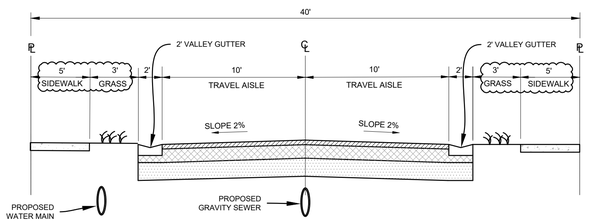


NOTES: EACH BIKE RACK SHOULD ACCOMMODATE A MINIMUM OF FIVE (5) BIKES.

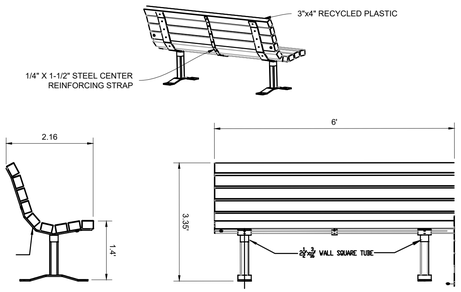
TYPICAL BIKE RACK DETAIL
NTS



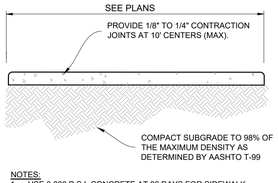
RAIN GARDEN / BIO-SWALE DETAIL



TYPICAL 40' ROADWAY SECTION
NTS

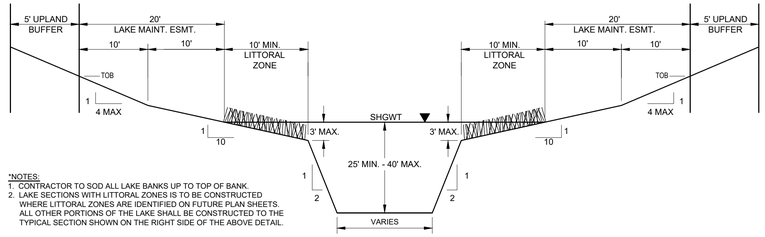


6' CONTOUR BENCH DETAIL
NTS



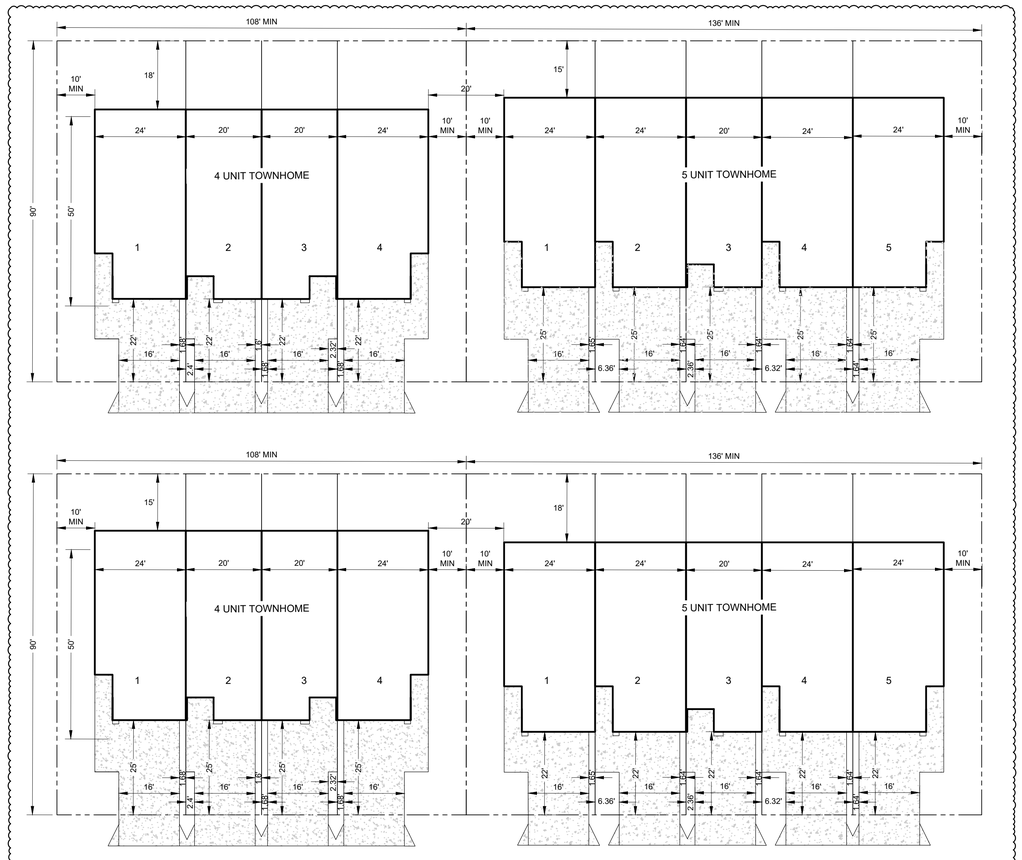
NOTES:
1. USE 3,000 P.S.I. CONCRETE AT 28 DAYS FOR SIDEWALK CONSTRUCTION.
2. SIDEWALK THICKNESS TO BE INCREASED TO 6" THICK AT DRIVEWAY LOCATIONS.
3. ALL REPAIRS REQUIRED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED 10' MINIMUM TO NEXT FULL JOINT.
4. ALL SIDEWALK WITHIN FDOT RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD PLANS 522-001.

TYPICAL SIDEWALK DETAIL
NTS

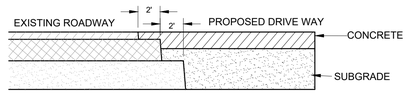


*NOTES:
1. CONTRACTOR TO SOD ALL LAKE BANKS UP TO TOP OF BANK.
2. LAKE SECTIONS WITH LITTORAL ZONES IS TO BE CONSTRUCTED WHERE LITTORAL ZONES ARE IDENTIFIED ON FUTURE PLAN SHEETS. ALL OTHER PORTIONS OF THE LAKE SHALL BE CONSTRUCTED TO THE TYPICAL SECTION SHOWN ON THE RIGHT SIDE OF THE ABOVE DETAIL.

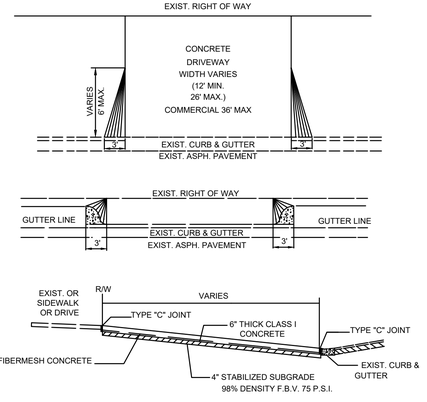
TYPICAL LAKE CROSS SECTION



TYPICAL TOWNHOME UNITS
NTS



MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS



GENERAL CONSTRUCTION NOTES:
1. CONCRETE STRENGTH TO BE 2500 P.S.I. AT 28 DAYS.
2. SUBBASE TO BE 98% DENSITY - F.B.V. 75 P.S.I.
3. THE CONCRETE SHALL BE GIVEN A BROOM FINISH AND THE EDGES OF THE SIDEWALK SHALL BE FINISHED WITH A EDGING TOOL HAVING AN RADIUS OF 1/2 INCH.

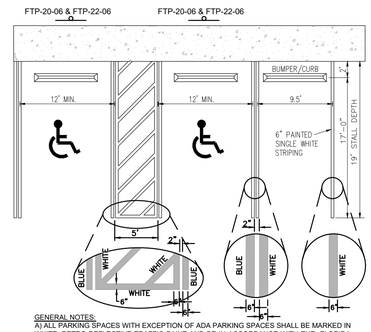
CITY OF FORT PIERCE DEPARTMENT OF ENGINEERING
TECHNICAL SPECIFICATIONS AND DETAILS

DRIVEWAY DETAILS

SCALE: N.T.S. | ISSUED AUGUST 1998

REVISIONS

SHEET No. D1



GENERAL NOTES:
A) ALL PARKING SPACES WITH EXCEPTION OF ADA PARKING SPACES SHALL BE MARKED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,2010 SECTION 710.

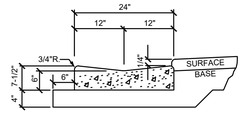
B) ALL ADA PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, FY 2025-26.

C) ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.

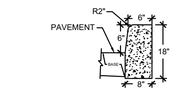


NOTES:
1. FTP 20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP 21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP 22-06 IS SUPPLEMENTAL PANEL FOR THE FTP 20-06 & FTP 21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "$250 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

ADA AND TYPICAL PARKING DETAIL
NTS



VALLEY GUTTER DETAIL
NTS



TYPE "D" CURB DETAIL
NTS

REV.	DATE	DESCRIPTION	BY	CHK.
2	2026.01.15	UPDATE TYPICAL TOWNHOME UNITS & ADD DRIVEAY DETIAL	---	---
1	2025.09.02	ADD BIO-SWALE DETAIL	JLW	MTO

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

FINAL PD SITE PLAN DETAILS

DATE	SCALE
2025.03.13	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No. 24-237 SITE PLAN R8.DWG

DRAWING No. SP-102 REV. 2

(DATE)

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

FILE LOCATION: I:\FLI2013370\PORT_RICHEY_VILLAGE_INVESTMENTS,_LLC\24-237 - MOVED 2013370 GWOFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\R8\24-237 SITE PLAN R8.DWG, 2026.07.08, 11:47 AM

HALEY WARD

PROJECT NARRATIVE & COVER LETTER

Sunrise Blvd.

Final PD Rezone

July 7, 2026

REQUEST

On behalf of the petitioner, Haley Ward, Inc. is requesting approval of a Rezone Application to Planned Development for a multi-family development known as Sunrise Boulevard located east of Sunrise Boulevard and north of Dade Road in the City of Fort Pierce, Florida. The subject parcels total approximately 21.97 acres.

SITE CHARACTERISTICS & PROJECT HISTORY

The subject properties are located in the City of Fort Pierce. Below is a list of the parcels associated with this request:

Parcel ID	Jurisdiction	FLU	Zoning
2428-601-0252-000-6	Fort Pierce	RM	R-4
2428-321-0001-000-3	Fort Pierce	RM	R-4
TOTAL ACREAGE:	**21.97 Acres**		

The subject parcels are located in the City of Fort Pierce and have a Future Land Use designation of Medium Density Residential (RM) and an underlying Zoning designation of Medium Density Residential (R-4). These parcels received prior site plan approval on March 6, 2023, for a 216-unit condominium development. A site plan extension was granted as allowed under Senate Bill 250 which extended the expiration of this site plan to March 6, 2028. The parcels have changed ownership, and the new owner is proposing a 184-unit townhome development, a reduction to the previously approved density. The applicant is proposing a rezone of the subject parcels to Planned Development.

The applicant is proposing a townhome development consisting of 184 units with a proposed recreation area with associated site improvements. The subject parcels total 21.97 acres. Right-of-way dedications will be required as part of the development approval and are noted on the attached plan. The total

10250 SW VILLAGE PARKWAY, SUITE 201, PORT ST. LUCIE, FL 34987 772.462.2455 | HALEYWARD.COM

acreage of the proposed development after the right-of-way dedication will total 21.71 acres.

The subject properties have a Future Land Use designation of Medium Density Residential (RM) and have a Zoning designation of Medium Density Residential (R-4). This allows for 6.5 – 12 du per acre.

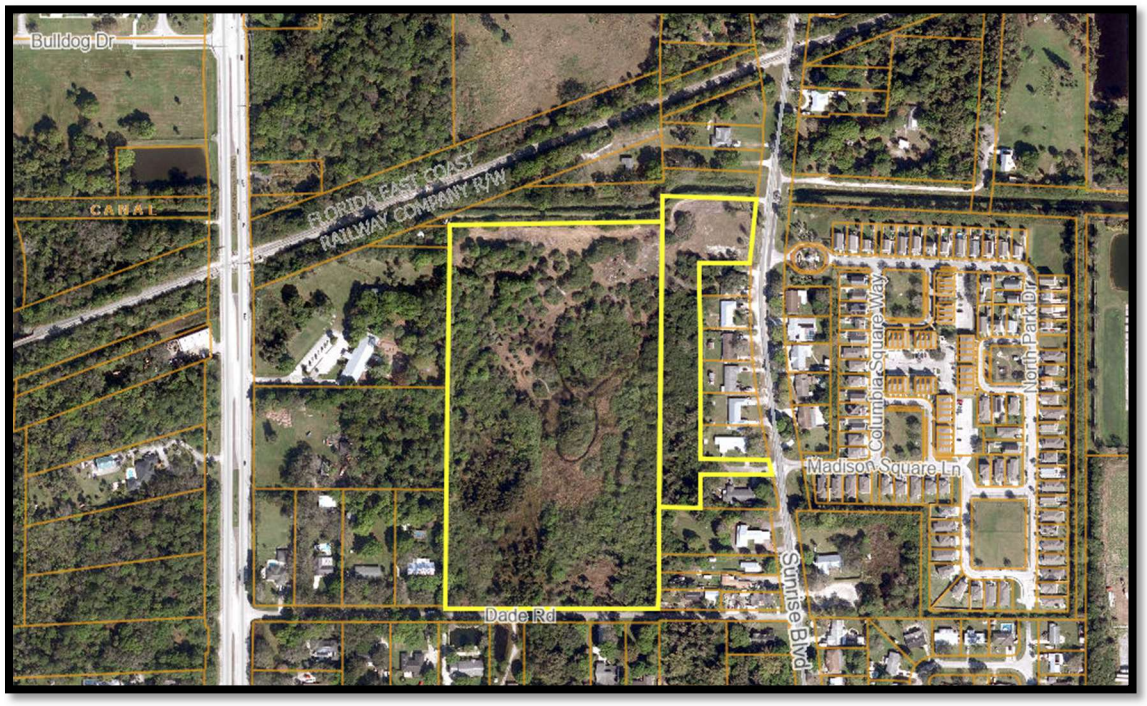
North of the parcels lies a large right-of-way owned and maintained by St. Lucie County.

South of the eastern parcel lies developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Medium Density Residential (RM) and an underlying Zoning designation of Residential, Multiple-Family – 9 (RM-9). South of the larger parcel lies the right of way of Dade Road followed by developed and undeveloped residential parcels. These parcels are located in St. Lucie County and have a Future Land Use designation of Residential Urban (RU) and an underlying Zoning designation of Agricultural, Residential-1 (AR-1) to the southwest and Residential, Single-Family – 2(RS-2) to the southeast.

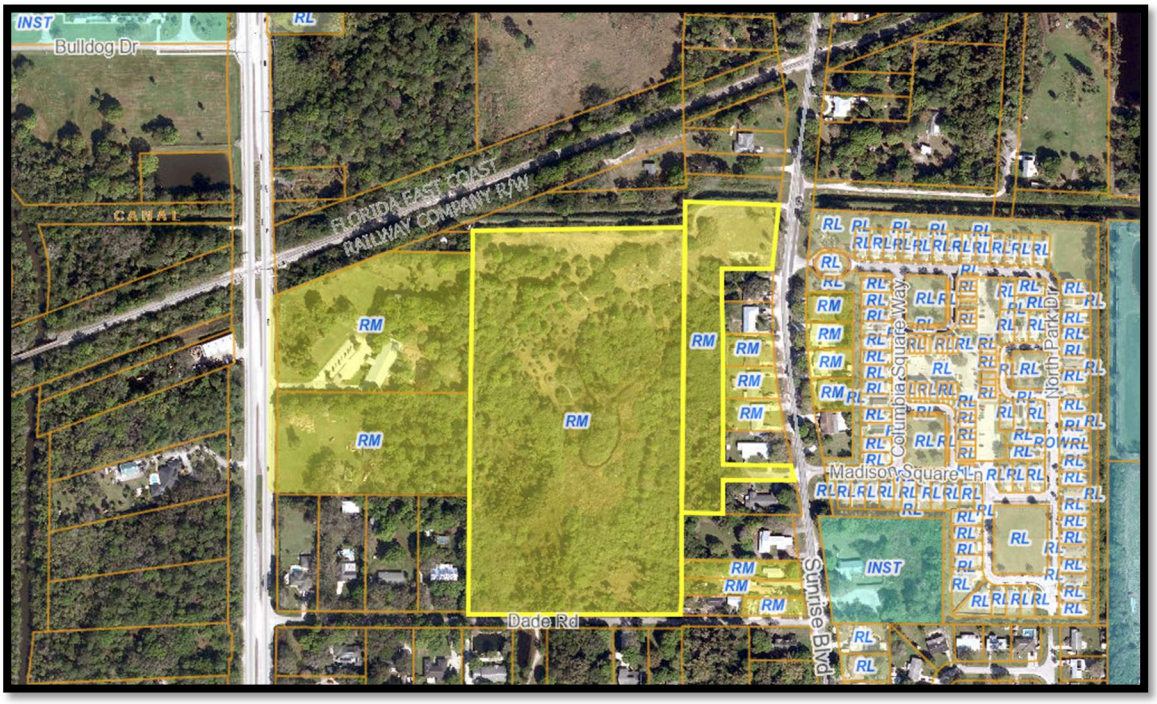
East of the northernmost point of the parcel lies the right-of-way of Sunrise Boulevard followed by residential homes. These parcels have a Future Land Use Designation of Low Density Residential (RL) and have an underlying Zoning designation of Planned Development. Directly east of the eastern parcel lies developed residential parcels. These parcels have a Future Land Use designation of Medium Density Residential (RM) and have an underlying Zoning designation of Medium Density Residential (R-4).

(Continue to next page)

Aerial Photo of Subject Parcel



Future Land Use Map



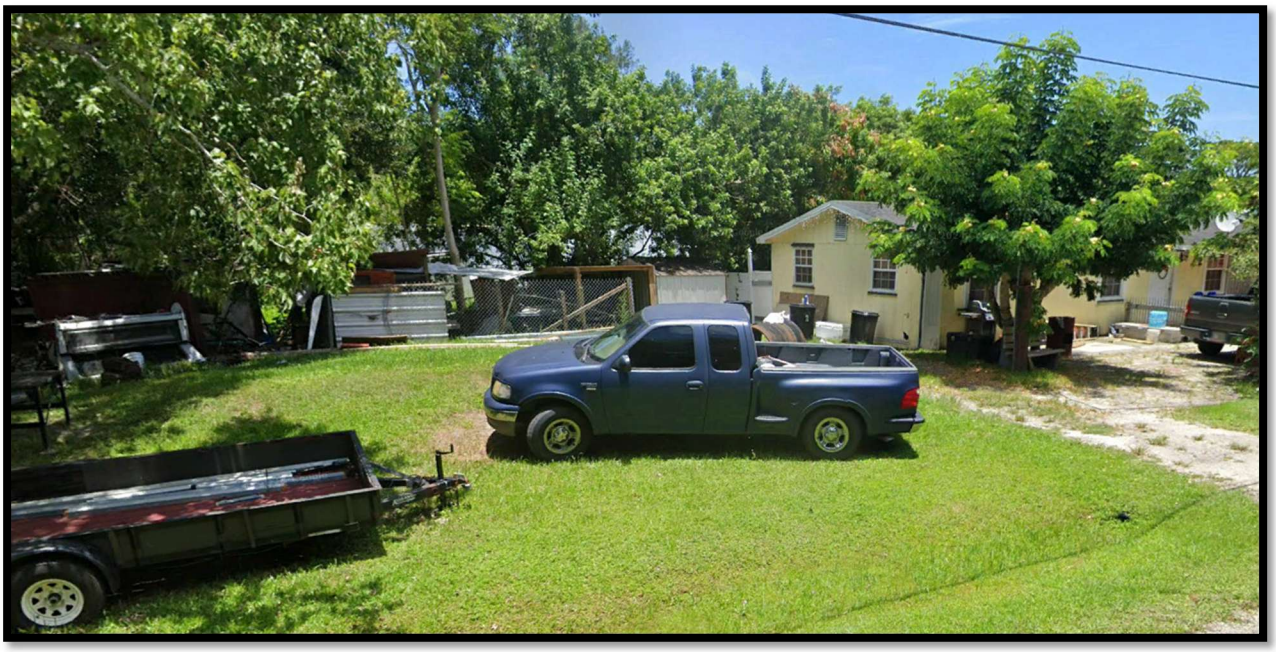
Zoning Map



Neighborhood – East of Subject Parcel



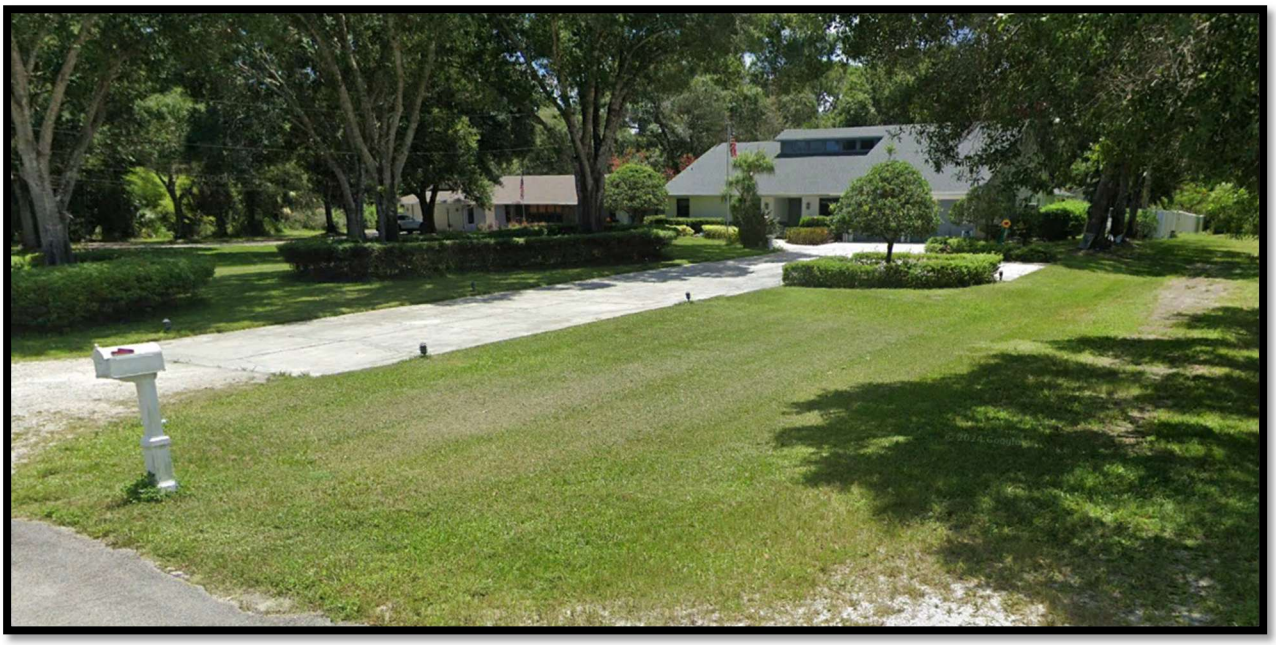
Neighborhood – South / East of Subject Parcel



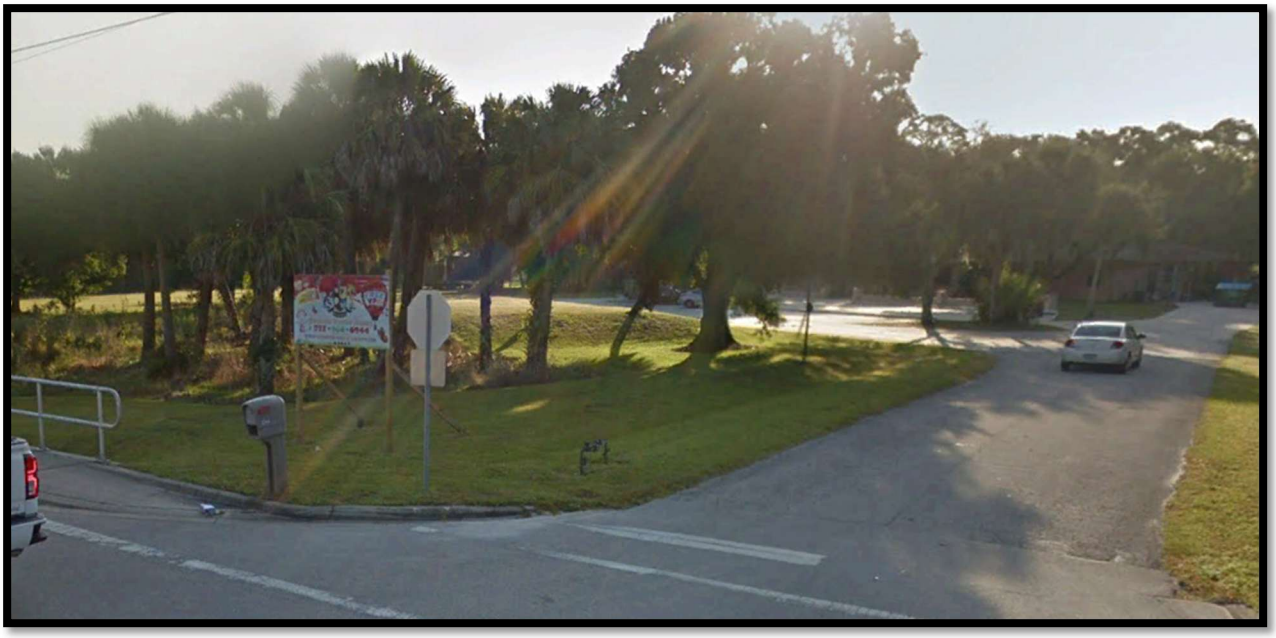
Neighborhood – South / West of Subject Parcel



Neighborhood –South of Dade Road



Neighborhood –West of Subject Parcel



Section 125-212 of the Fort Pierce Land Development Code outlines the materials required for review and approval of a Final PD.

1) **The legal description for the proposed development is as follows:**
   PARCEL 1:

THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

PARCEL 2:
LOTS 1 THROUGH 4; THE WEST 130 FEET OF LOTS 5 THROUGH 16; ALL OF LOT 17; THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

CONTAINING 21.97 ACRES, MORE OR LESS.

2) Name of ownership

GPS Developments, LLC
10465 NW 29th Terrace
Miami, FL 33172

3) Development timeline

2026-2029

4) Phasing

There is no phasing proposed.

5) Development Regulations & Comparison Analysis

	Existing (R-4)	Proposed (PD)
Min. Lot Area	1,500 sf.	1,800 sf.
Min. Lot Width	16 ft.	20 ft.
Max. Lot Width	24 ft.	45 ft.
Min. Lot Depth	90 ft.	90 ft.
Min. Front Setback	10 ft.	22 ft.
Min. Side Setback	10 ft.	10 ft.
Min. Side Corner Setback	15 ft.	10 ft.
Min. Rear Yard Setback	15 ft.	15 ft.
Max. Building Height	45 ft.	30 ft.
Min. Parking	2 sp. per dwelling	2 sp. per dwelling
Building Coverage	50% max	21.01%

Open Space	20% min	35.82%
Density	217 DU Allowed	184 DU Proposed

6) Statement of PD Benefits

The applicant is providing housing to the residents of the City of Fort Pierce. Properties cannot be developed residentially unless they meet all the requirements of the South Florida Water Management District drainage requirements, buffering requirements and well as right-of-way requirement. It is impossible to meet the drainage requirements, minimum private right-of-way requirement, buffering requirements based on straight zoning. The only way to meet the requirements by the authorities having jurisdiction while developing market rate housing in the City of Fort Pierce is to proceed with a rezone of the subject parcels to Planned Development (PD).

Public Benefits include:

a. The project incorporates rain gardens throughout the site to improve stormwater quality, reduce runoff, promote groundwater recharge, and enhance the site's overall environmental performance.
b. Reduced Density: The current zoning allows for up to 217 dwelling units. The applicant is proposing a multi-family development consisting of 184 dwelling units. The proposed density is lower than the maximum permitted, resulting in reduced impacts on public facilities, transportation networks, and surrounding neighborhoods.
c. Clustering of density. Multi-family units are clustered to provide more common open space for the use and enjoyment of the residents.
d. Construction of private infrastructure to serve the development. Internal roadways, utilities, drainage facilities, and associated infrastructure will be privately constructed and maintained, reducing long-term maintenance obligations for the City while providing high-quality services to residents.
e. Larger landscape buffers. The code requires a 10' perimeter landscape buffer. The site and landscape plans depict a 15' perimeter landscape plan with additional plantings in various locations.

f. Littoral plantings. Littoral plantings enhance wading bird habitats by providing critical foraging, nesting, and protective cover, while improving water quality to support food sources. The City of Fort Pierce does not have a requirement for littoral plantings. The littoral plantings proposed exceed what is normally required in surrounding municipalities.
g. Increased open space. The development preserves and provides open space beyond minimum requirements, offering environmental, recreational, and aesthetic benefits while improving overall neighborhood livability.
h. Water main extension on Dade Road from stub out on Sunrise Boulevard to 25th Street. The project includes the extension of a public water main along Dade Road, improving water service availability, increasing system reliability, and supporting future development opportunities within the surrounding area.
i. 15' Right of Way dedication on Dade Road to the City of Fort Pierce. A fifteen-foot (15') right-of-way dedication along Dade Road will accommodate future roadway improvements, enhance transportation planning, and contribute to the City's long-term mobility objectives.
j. The development incorporates sidewalks and pedestrian circulation features that improve internal connectivity, encourage walking, promote healthy lifestyles, and provide safe access throughout the community and to adjacent areas.
k. Proposed ingress / egress easement at the northeast corner of subject parcel to allow access to Sunrise Boulevard for landlocked parcel # 2428-322-0001-000-6.

7) Public Facilities That Will Serve The Development

a. **Water / Wastewater:** Fort Pierce Utilities Authority shall provide water and wastewater to serve the proposed development. The applicant is proposing to construct a water main extension on Dade Road from Sunrise Boulevard to 25th Street.
b. **Road Infrastructure:** Sunrise Boulevard provides access to the proposed development. The applicant is proposing to construct a southbound 11'-wide right and northbound left turn lane on Sunrise Boulevard to serve the development. Emergency access is also

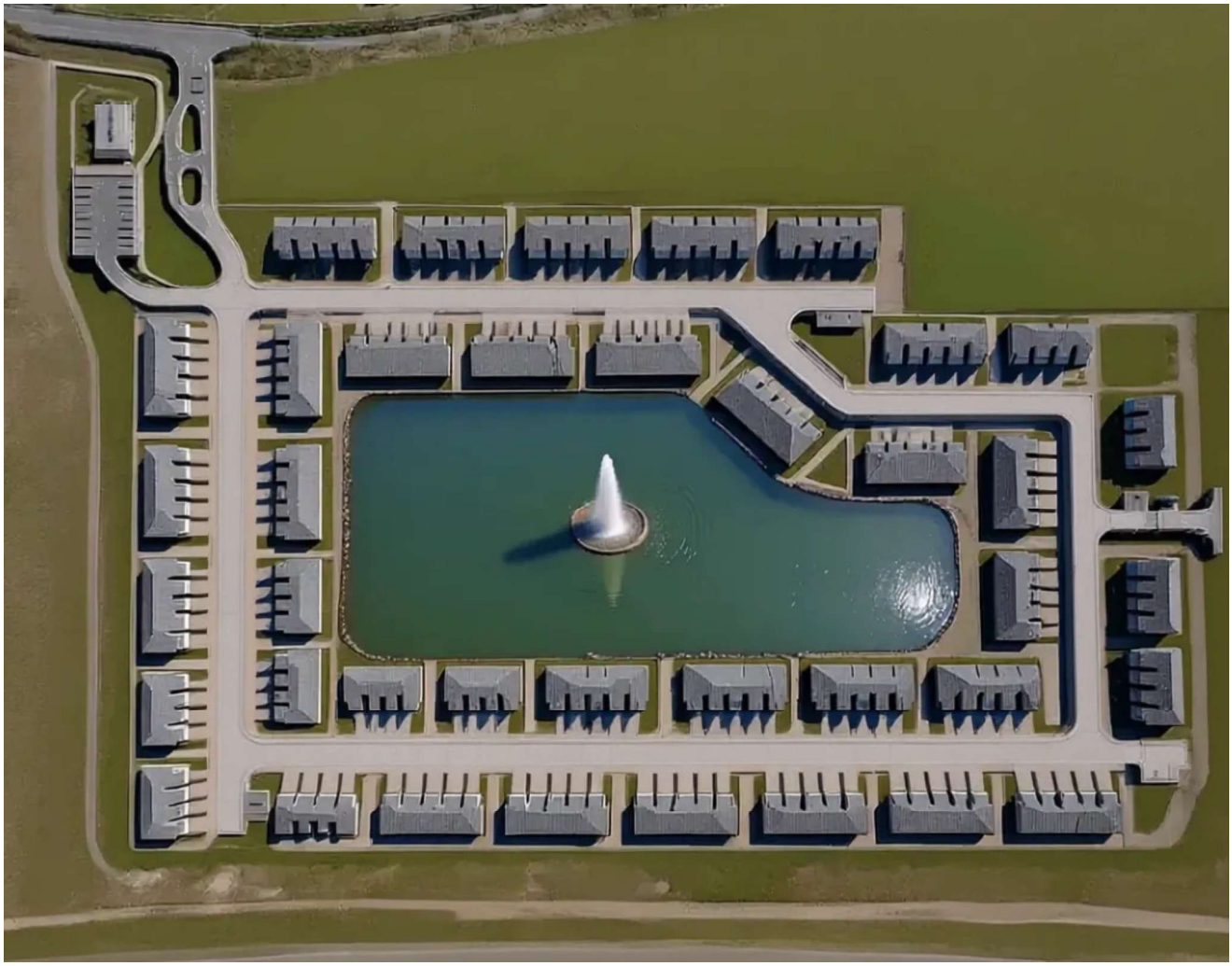
proposed from Dade Road which will include a Knox box for Fire Department access.

c. **Drainage:** The authorities having jurisdiction over drainage requirements for the subject parcels include South Florida Water Management District (SFWMD), North St. Lucie River Water Control District (NSLRWCD) and the City of Fort Pierce. The proposed development has been designed to meet the minimum drainage requirements for all authorities having jurisdiction. The project incorporates rain gardens throughout the site to improve stormwater quality, reduce runoff, promote groundwater recharge, and enhance the site's overall environmental performance.
d. **Public Schools:** St. Lucie County Public School system serves this location with capacity for the proposed development. Please refer to the capacity analysis which was submitted with this application.
e. **Description of Local Development Permits Required for this Development:**
    i. Engineering Approval
    ii. Fort Pierce Building Permits.
    iii. Fort Pierce Utilities Authority.
    iv. Florida Department of Environmental Protection
        1. Water Permit
        2. Wastewater Permit
    v. South Florida Water Management District
        1. Environmental Resource Permit
        2. Consumptive Use Permit
    vi. North St. Lucie River Water Control District
        1. Drainage Permit

Based on the above and attached information, the applicant respectfully requests review and approval of the requested rezone to Final Planned Development.

P:\FL\2013370-Port_Richey_Village_Investments_LLC\24-237 - MOVED 2013370 Garofalo - Sunrise Blvd. (Privilege North)\ENGINEERING\Documents\Submittal Documents\Justification Statement\2026-07-07_REVISED_Sunrise_Blvd_Final_PD_Justification_Statement_24-237.docx

SUNRISE LANDING

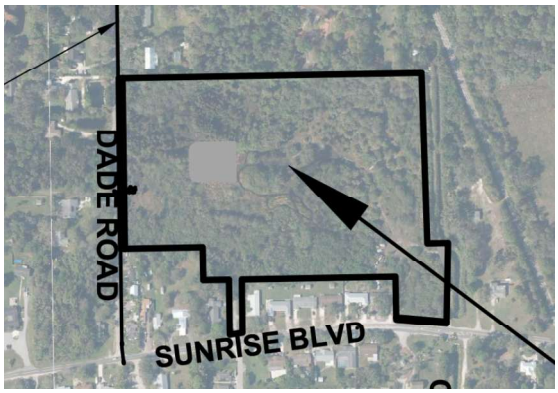


Design Narrative Review

SITE ANALYSIS

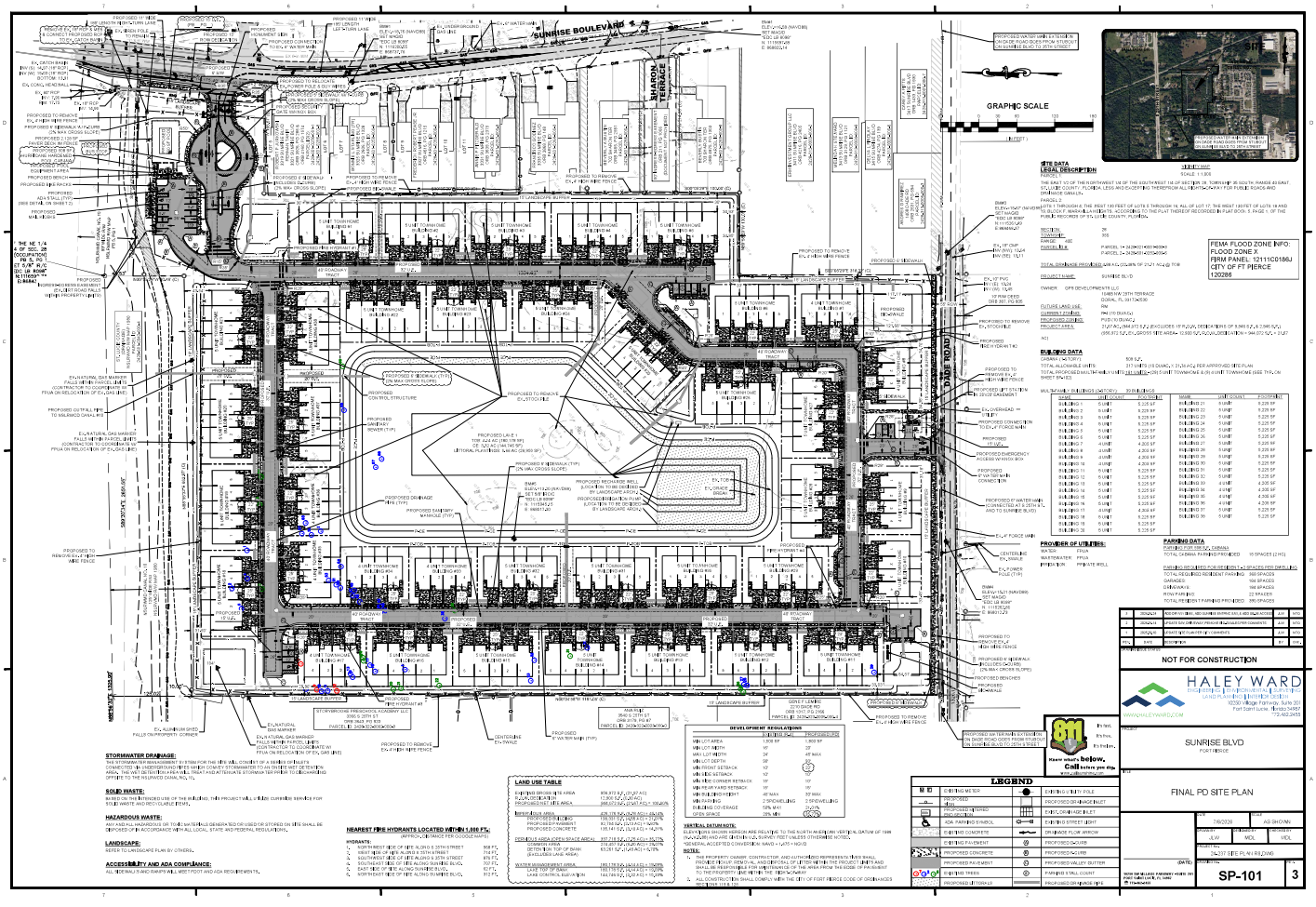
The project site encompasses approximately **21.7 acres** along *Sunrise Boulevard* in Fort Pierce, Florida. Bounded by Sunrise Boulevard to the east, Dade Road to the south and S 25th Street to the west, the site is currently undeveloped, with naturally occurring vegetation and scattered secondary growth.





(Aerial views of the existing Sunrise Landing site.)

The development proposes a planned unit community allowing up to ten dwelling units per acre, with **181 townhome units** arranged around a central lake.



DESIGN INTENT

The design intent is to create a cohesive, high-quality residential neighborhood that complements the existing character of Fort Pierce while offering modern amenities and sustainable infrastructure.

Objectives include:

- Create a cohesive neighborhood identity through consistent architectural themes and landscaping.
- Provide attainable housing through two-story townhomes with modern floor plans.
- Promote walkability and social interaction through interconnected streets, sidewalks and open space.
- Ensure compatibility with adjacent residential uses by respecting setbacks, scale and massing.

Buildings will feature pastel stucco walls, white trim, grey shingle roofs, gabled forms and front porches. A central lake and open space will serve as the heart of the community.





The 39 buildings are arranged around a central lake and open space. The site plan diagram below shows the arrangement of buildings, roadways, sidewalks and open spaces. A 15-foot landscape buffer surrounds the property, and the wet detention lake manages stormwater runoff while providing an amenity.

BUILDING DATA

CABANA (1-STORY): 508 S.F.

TOTAL ALLOWABLE UNITS: 217 UNITS (10 DU/AC. X 21.74 AC.) PER APPROVED SITE PLAN

TOTAL PROPOSED MULTI-FAMILY UNITS: 181 UNITS - (29) 5 UNIT TOWNHOME & (9) 4 UNIT TOWNHOME (SEE TYP. ON SHEET SP-102)

MULTI-FAMILY BUILDINGS (2-STORY): 39 BUILDINGS

NAME	UNIT COUNT	FOOTPRINT
BUILDING 1	5 UNIT	5,225 SF
BUILDING 2	5 UNIT	5,225 SF
BUILDING 3	5 UNIT	5,225 SF
BUILDING 4	5 UNIT	5,225 SF
BUILDING 5	5 UNIT	5,225 SF
BUILDING 6	5 UNIT	5,225 SF
BUILDING 7	4 UNIT	4,205 SF
BUILDING 8	4 UNIT	4,205 SF
BUILDING 9	4 UNIT	4,205 SF
BUILDING 10	4 UNIT	4,205 SF
BUILDING 11	5 UNIT	5,225 SF
BUILDING 12	5 UNIT	5,225 SF
BUILDING 13	5 UNIT	5,225 SF
BUILDING 14	5 UNIT	5,225 SF
BUILDING 15	5 UNIT	5,225 SF
BUILDING 16	5 UNIT	5,225 SF
BUILDING 17	4 UNIT	4,205 SF
BUILDING 18	5 UNIT	5,225 SF
BUILDING 19	5 UNIT	5,225 SF
BUILDING 20	5 UNIT	5,225 SF

NAME	UNIT COUNT	FOOTPRINT
BUILDING 21	5 UNIT	5,225 SF
BUILDING 22	5 UNIT	5,225 SF
BUILDING 23	5 UNIT	5,225 SF
BUILDING 24	5 UNIT	5,225 SF
BUILDING 25	5 UNIT	5,225 SF
BUILDING 26	5 UNIT	5,225 SF
BUILDING 27	5 UNIT	5,225 SF
BUILDING 28	5 UNIT	5,225 SF
BUILDING 29	5 UNIT	5,225 SF
BUILDING 30	5 UNIT	5,225 SF
BUILDING 31	5 UNIT	5,225 SF
BUILDING 32	5 UNIT	5,225 SF
BUILDING 33	4 UNIT	4,205 SF
BUILDING 34	4 UNIT	4,205 SF
BUILDING 35	4 UNIT	4,205 SF
BUILDING 36	4 UNIT	4,205 SF
BUILDING 37	5 UNIT	5,225 SF
BUILDING 38	5 UNIT	5,225 SF

ARCHITECTURAL CHARACTER

The architectural style draws on coastal Florida vernacular. Townhomes are grouped in blocks of four or five units with gable roofs and front porches. The façade design emphasizes rhythm and variety through subtle changes in trim, color accents and window proportions.



A monument sign will mark the entrance to Sunrise Landing. The sign design uses the same pastel stucco and stacked stone materials as the townhomes and includes raised lettering.



MATERIALS & COLORS

A consistent materials palette reinforces the community's identity. The following table summarizes the primary materials:

Building Component	Material/Color	Description
Primary Wall Finish	Pastel stucco	Light blue-green stucco finish applied to all exterior walls.
Trim & Fascia	White paint	Painted trim for eaves, columns and garage surrounds.
Roofing	Grey asphalt shingles	Dimensional shingles in a medium-grey tone.
Windows & Doors	White frames	Vinyl or aluminum frames painted white.
Driveways/Walkways	Grey concrete pavers	Interlocking pavers with varied grey tones.
Stone Accents	Stacked stone veneer	Natural or manufactured stone used at sign columns.

Color Swatches



Pastel Stucco White Trim Grey Roofing Grey Pavers Stone Veneer

Record and Return To:
This Instrument Prepared By:

Logan F. Wellmeier, Esq.
Dean, Mead, Minton & Moore
1903 S 25th Street, Suite 200
Fort Pierce, Florida 34947
(772) 464-7700

[blank space above line reserved for recording data]

PLANNED DEVELOPMENT (PD) ZONING AGREEMENT

THIS PLANNED DEVELOPMENT (PD) ZONING AGREEMENT (this "**Agreement**") is made and entered into this ____ day of_____, 2025, (the "**Effective Date**") by and between GPS DEVELOPMENTS LLC, a Florida limited liability company, whose address is 10465 NW 29th Terrace, Miami, FL 33172 (the "**Owner**"), and the CITY OF FORT PIERCE, a political subdivision of the State of Florida (the "**City**").

WITNESSETH:

WHEREAS, the Owner intends to develop certain real property within the city limits of the City, more particularly described in the legal description attached hereto and incorporated herein as **Exhibit "1"** (the "**Subject Property**"); and

WHEREAS, Owner is the current owner of the Subject Property; and

WHEREAS, the requirements for development of the Subject Property are specified by the Code of Ordinances of Fort Pierce, Florida (the "**Code**"); and

WHEREAS, the Subject Property consists of two (2) parcels totaling approximately twenty-one and ninety-seven hundreths (21.97) acres, more or less; and

WHEREAS, the Owner is proposing a one hundred and eighty-four (184) unit residential community with associated

DRAFT

amenities at 3315 Sunrise Boulevard, located northwest of the intersection of Sunrise Boulevard and Dade Road, to be known as "Sunrise Boulevard" (the "**Development**"); and

WHEREAS, Section 125-212 (a) of the Code indicates that the purpose of a planned development zone district ("**PD**") includes the allowance of developments which are not specifically otherwise permitted in standard zoning districts; and

WHEREAS, Section 125-212 (c)(10) of the Code provides that the specific development standards of a PD are contained in the approved development documents for each planned development, making a variance unnecessary; and

WHEREAS, Sections 125-212 (d)(1) and (f) of the Code allow a PD in the City subject to a Planned Development Zoning Agreement negotiated between the Owner and City in order to introduce flexibility into the development regulations in a manner that is mutually beneficial to the development and the City and to encourage enlightened and imaginative approaches to community planning; and

WHEREAS, the Development proposed is consistent with the City's comprehensive plan and land development regulations; and

WHEREAS, pursuant to Section 125-212(d)(2)(a), the Owner intends to move directly to a Final PD approval for the Development (the "**Final Approval**"), and this Agreement is meant to include the understanding and requirements of that approval.

NOW, THEREFORE, the parties do hereby agree as follows:

1. **Recitals.** The above recitals are hereby affirmed as being true and correct and are incorporated herein by reference.

2. **Legal Description.** This Agreement shall apply to the Subject Property, as described in **Exhibit "1"**.

3. **Term and Duration of Agreement.** The term of this Agreement shall be 5 years, during which all improvements contemplated herein must be completed. This Agreement shall be effective, shall run with the land and shall be binding on all parties and all persons claiming under it until the expiration of the term ~~of the Final Approval~~ (the "**Expiration Date**"). Unless otherwise agreed upon by the parties in writing, this Agreement shall not be renewed automatically for successive terms.

4. **Unified Control.** Owner hereby warrants that it has, as a result of fee simple ownership, unified ownership of all the Subject Property included in this Agreement and as described in **Exhibit "1"**.

DRAFT

5. **Phasing Requirements.** The Development shall be constructed in one (1) phase.

6. **Development Approvals and Requirements for the Development.** The Development shall conform to the following requirements:

A. **Site Plans:** The final planned development zoning district site plan (the "**Site Plan**") is attached hereto as **Exhibit "2"** and incorporated herein by reference. The Site Plan shall require approval by the City Commission.

B. **Development Timeline:** The development of the Subject Property shall be as specified in **Exhibit "3"**, attached hereto and by this reference incorporated herein (the "**Development Timeline**").

C. **Development Standards:** The landscaping and development standards specified in **Exhibit "4"**, attached hereto and by this reference incorporated herein (the "**Development Standards**") shall govern the Development.

D. **Entrances and Internal Road Network:** Sunrise Boulevard provides access to the Development. Further, Owner shall construct a southbound right and northbound left turn lane on Sunrise Boulevard to serve the Development. Emergency access is also proposed from Dade Road which will include a Knox Box for Fire Department access.

E. **Drainage:** The site shall incorporate creative use of storwater ailities as water-cleansing passive recreation areas and for natural vistas.

F. **Utilities:** The Development shall contain the following utility infrastructure:
   i. Water distribution and service lines,
   ii. Wastewater collection and service lines,
   iii. Lift station and related equipment,
   iv. Paving, and
   v. Stormwater retention and detention.

G. **Public Benefits:** The Development will provide the following public benefits:

- The Development will donate over a quarter of an acre along Dade Road to the City for road right-of-way.
- The Development will contain rain gardens and bio swales which will offer drainage as well as environmental and aesthetic benefits for the benefit of the surrounding properties.
- At one hundred and eighty-four (184) dwelling units, the Development will have less density than the two hundred and seventeen (217) dwelling units permitted in a "by right" development;
- The Development's density will be intelligently clustered for spatial efficiency and aesthetic appeal.
- The Development will save more native trees that would otherwise be required under the Code.

- The Site Plan includes larger landscape buffers than would otherwise be required under the Code.
- The Site Plan includes increased open space than would otherwise be required under the Code.
- The Development will construct a water main extension along Dade Road, spanning from Sunrise Boulevard west to 25th Street which will directly benefit the nearby surrounding residents.
- The Development will create a pathway along its northern border for resident Julio A. Rodriguez's landlocked parcel (ID # 2428-322-0001-000-6) allowing that parcel to have legal access to Sunrise Boulevard.

7. **Public Facilities that will Service the Development**.

A. **Water/Wastewater:** Fort Pierce Utilities Authority shall provide water and wastewater to the Development.

B. **Drainage:** The Development is located within the jurisdiction of the South Florida Water Management District ("**SFWMD**"), the North St. Lucie River Water Control District ("**NSLRWCD**") and the City. The Owner has designed the Development to meet the minimum drainage requirements for all authorities having jurisdiction.

C. **Local School District:** St. Lucie Public Schools serve this location with capacity to serve the anticipated needs of the Development.

8. **Traffic Contribution Improvements/Conditions of Approval.**

A. Owner agrees that traffic contribution improvements (the "Traffic Improvements") will be undertaken and carried out in accordance with the following:

i. _____

ii. _____

B. **Owner will construct the Traffic Improvements pursuant to the timetable for development, which is attached as Exhibit XX.**

C. **Owner understands and agrees to comply with conditions and requirements as set forth in the Special Conditions, attached and incorporated as Exhibit XX.**

DRAFT

D. **The City will grant necessary permits and authorizations in accordance with such laws, ordinances, and regulations as may be in effect at the time of such application by Owner.**

9. **Permitted Uses; Densities; Heights.**

A. **The following uses, densities, and heights shall be permitted:**

i. **Commercial:**

a. **The maximum square feet of commercial use permitted is 0.**

b. The commercial uses permitted are:

1. N/A

2.[1.] N/A

c.[b.] The conditional uses allowed upon proper approval are:

1. N/A

2. N/A

d.[c.] Any other commercial use not outlined above is prohibited.

ii. Single Family Detached Residences

a. A maximum of 0 Single Family Detached Residences may be built.

b. Height shall not exceed 0 feet.

iii. Townhomes:

a. A maximum of 184 Townhome units may be built.

b. Height shall not exceed 30 feet.

DRAFT

iv. Private recreational amenities permitted are:

a. _Pool–___

b. _Pool Cabana____

B. The maximum Gross Density of the PD shall not exceed _8.49___ DU/Acre.

C. Owner will abide by all Land Development Regulations ("LDR's") in place at the time the appropriate development permits are obtained.

~~**Permitted Uses; Densities; Height.**~~

10. **Description of Local Development Permits Required for the Development**. The Development shall require the following local development permits and approvals, which shall be obtained before commencing construction:

A. City of Fort Pierce Final Approval,
B. City of Fort Pierce Engineering approval,
C. Fort Pierce Building Permits,
D. Fort Pierce Utilities Authority Utility Agreement,
E. Florida Department of Environmental Protection,
    i. Water Permit
    ii. Wastewater Permit
F. South Florida Water Management District,
    i. Environmental Resource Permit
    ii. Consumptive Use Permit
G. North St. Lucie River Water Control District,
    i. Drainage Permit

DRAFT

H. Other permits as required.

11.[9.] **Development Compliance.** The Development as proposed by this Agreement is consistent with the City's Ceomprehensive Ppplan and the Code, to include the requirement of Concurrency at Section 105-6 of the Code . Any failure of this Agreement to address a particular permit, condition, term, or restriction shall not relieve the Owner of the necessity of complying with the law governing said permitting requirements, conditions, terms, or restrictions. Attached hereto as **Exhibit "5"** is a list of any conditions, terms, restrictions, and other requirements determined by the City for the public health, safety, or welfare of its citizens, which shall govern the Development and with which the Development shall comply.

12.[10.] **Destruction.** In the event that all or a portion of the Development should be destroyed by a storm, fire, or other common disaster, Owner, its grantees, successors or assigns shall have the right to rebuild and/or repair so long as there is strict compliance with the Site Plan, subdivision plat(s), and development orders.

13.[11.] **Unity of Control.** Owner agrees that the Subject Property shall be developed as one parcel of land, in one or more phases, consistent with the Site Plan as approved by the City and incorporating the entire Subject Property. The Subject Property may only be subdivided pursuant to a subdivision plat or lot split approved by the City in accordance with all applicable requirements of the Code. This paragraph shall not prohibit the conveyance of any lot, parcel or tract in accordance with a plat or lot split approved by the City and recorded in the public record, or the conveyance of right-of-way to any governmental entity.

14.[12.] **Modification, Amendment and Release.** This Agreement may not be modified, amended, or released, except by written instrument signed by the parties to this Agreement, provided that such modification, amendment, or release has been approved by the City after public hearing. Notwithstanding anything contained hereinto the contrary, Owner, its successors in interest and/or title, and the City may amend or terminate this Agreement without securing the consent of other property owners whose property is affected by this Agreement, unless such amendment or termination directly and materially modifies the allowable uses or entitlements of such owners' property.

15.[13.] **Governing Law.** This Agreement and the construction and enforcement thereof shall be interpreted under the laws of the State of Florida. **THE PARTIES HERETO AGREE WITHOUT RESERVATION OF ANY RIGHTS UNDER FEDERAL OR STATE LAW, THAT IN ANY LITIGATION ARISING UNDER THIS AGREEMENT, THE PARTIES HERETO KNOWINGLY AND VOLUNTARILY WAIVE THE RIGHT TO TRIAL BEFORE A JURY AND ALL SUCH LITIGATION SHALL BE LITIGATED ONLY IN A NON-JURY HEARING IN THE STATE COURTS OF FLORIDA, ST. LUCIE COUNTY.**

16.[14.] **Successors and Assigns.** This Agreement shall be deemed to be a covenant running with the land and shall be binding upon the legal representatives, successors, assigns and successors in title of the Owner and any person, firm, corporation, or entity who or which may become the successor in interest to the Subject Property. This Agreement may only be assigned by Owner after notice to the City.

DRAFT

17.[15.] **Notice.** Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served as elected by the party giving the notice by any of the following methods: (i) hand delivery to the other party; (ii) delivery by commercial overnight courier service; or (iii) mailed by registered or certified mail (postage prepaid), return receipt requested. For purposes of notice, the addressees are as follows:

CITY:
City Manager
City of Fort Pierce
100 N US Hwy 1
Fort Pierce, FL 34950

With a copy to:
City Attorney
City of Fort Pierce
100 N US Hwy 1
Fort Pierce, FL 34950

OWNER:
GPS DEVELOPMENTS LLC
10465 NW 29th Terrace,
Miami, FL 33172

With a copy to:
Dean, Mead, Minton & Moore
Attn: W. Lee Dobbins, Esq.
1903 South 25th Street, Suite 200
Fort Pierce, FL 34947

Notice given in accordance with the provisions of this Section shall be deemed to be delivered and effective on the date of hand delivery; or on the date received if deposited with an overnight courier; or on the date upon which the return receipt is signed, or delivery is refused. Either party may change its address for the purpose of this Section by written notice to the other party given in accordance with the provisions of this Section.

18.[16.] **Entire Agreement.** This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements, and understanding applicable to the matters contained herein, and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not

DRAFT

contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior or contemporaneous representations or agreements, whether oral or written.

19.[17.] **Severability.** If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

20.[18.] **Rights of Assignment to Lende**r. All rights of the Owner hereunder may be collaterally assigned to any lender for the Subject Property as security for any loan or construction loan, and in the event of a foreclosure or deed-in-lieu of foreclosure, the lender and/or grantee of any deed-in-lieu of foreclosure, and their respective successors and assigns, shall be bound by this Agreement and entitled to enforce the rights of the Owner hereunder.

21.[19.] **Counterparts.** This Agreement may be executed in any number of identical counterparts each of which shall be deemed to be an original for all purposes but all of which shall constitute one and the same instrument, and a copy of such signature received through electronic transmission shall bind the party whose signature is so received as if such signature were an original. In making proof of this Agreement, it shall not be necessary to produce or account for more of such counterparts than are required to show that each party hereto executed at least one such counterpart.

22.[20.] **Recording.** The City shall record this Agreement in the public records with the clerk of court in St. Lucie County within fourteen (14) days of the Effective Date. Failure of the City to record this Agreement shall not void this Agreement or be deemed a default.

23.[21.] **Hold Harmles.** The City shall be held harmless from any and all liability stemming from any disputes between Owner, its grantees, successors, assigns, predecessors in title or other property owners regarding any development undertaken by Owner, its grantees, successors, or assigns as provided for in this Agreement.

24.[22.] **Compliance/Vested Rights.**

A. Owner shall be required to construct all proposed improvements in accordance with applicable laws, ordinances, and regulations, the provisions and requirements of this Agreement, the final PD zoning ordinance, Site Plan, construction plans, landscape plans, preserve area management plans, and subdivision plats, hereinafter sometimes collectively referred to as development orders ("**Development Orders**."). In the event of any conflict between the Code and this Agreement or the Final Approval, this Agreement and the Final Approval shall govern.

B. Owner, its grantees, successors, or assigns shall have no vested rights in any expired Development Orders for this Development.

DRAFT

C. This Agreement will vest upon completion of the Development Timeline referenced in Section 5 above.

25.[23.] **Remedies.**

~~A.~~ In the event that the Owner fails to comply with any provision or condition of this Agreement or any Development Order, the City shall have the right to cease the processing of any applications or permits for development, including the issuance of building permits or certificates of occupancy for the Subject Property. In the event that the Owner fails to construct the improvements consistent with the Development Orders, the City may deliver to Owner written notice identifying each of such inconsistencies (a "Notice of Failure"). Upon receipt of the Notice of Failure, the Owner shall then have thirty (30) days to deliver a remedy (the "Cure") and a timeline to implement the Cure (the "Timeline") to the City for the City's sole but reasonable approval. Upon receipt of such approval, the Owner shall implement such Cure. The City may, in its sole but reasonable judgment, extend the time required for the Owner to Deliver the Cure and Timeline and for the Owner's implementation of the Cure, provided that the Owner diligently pursues the completion of both. If the Owner fails to deliver or to implement the Cure in accordance with the forgoing then the City may, in its sole discretion, take any action it deems necessary and appropriate as provided for in the Code, this Agreement, and other applicable law. ~~In the event that the Owner fails to construct the improvements consistent with this Agreement, the City may deliver to Owner written notice specifying such failure (a "**Notice of Failure**"). Owner shall remedy such specified failure within sixty~~ thirty ~~(360) days from receipt of a Notice of Failure, or if such failure cannot reasonably be cured within such sixty~~ thirty ~~(360) days, then Owner shall commence to cure within such sixty~~ thirty ~~(360) days and shall thereafter diligently pursue the cure to completion. If Owner fails to cure in accordance with the forgoing, then the City may, in its sole discretion, take any action it deems necessary and appropriate as provided for in the Code, this Agreement, and other applicable law.~~

[B.]

B.[C.] In the event that any person files a complaint with the City's manager alleging that a Development Order has been violated, that unauthorized development has occurred, or that misrepresentation, fraud, deceit, deliberate error or omission, or a material omission that should have been disclosed regarding information required in a development application has occurred, the City's manager will review and respond to such complaint and take appropriate action as provided for in the Code, this Agreement, and other applicable law.

C.[D.] The above provisions shall not be interpreted to provide an exclusive remedy, and the City may pursue any appropriate remedy at law or equity in the event Owner or their successors in interest fail to abide by the provisions of this Agreement.

~~26.[24.] **Amendment with Final PD Approval.** The parties agree this is a preliminary understanding of the Development and that upon Final PD approval, the terms of this Agreement may be reconsidered. With Final PD approval, Owner agrees and~~

DRAFT

~~acknowledges that terms contained in this Agreement may be amended and updated to provide more specific deliverables with respect to the Development. Further, Owner agrees and acknowledges that this Agreement may not encompass all terms that may be required by the City for Final PD approval.~~

27.[25.] **Failure to Address Requirements.** The failure of this Agreement to address a particular permit, condition, term, or restriction shall not relieve the Owner of the necessity of complying with any law, ordinance, rule, regulation, or legal requirement governing said permitting requirements, conditions, term, or restriction.

(SIGNATURE PAGES FOLLOW)

DRAFT

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be made and entered into the day and year first written. The date of this Agreement shall be the date on which this Agreement was approved by the City Commission of Fort Pierce.

WITNESSES:

_____

Print Name: _____

Address: _____

_____

Print Name: _____

Address: _____

_

OWNER:

GPS Developments LLC, a Florida limited liability company,

By: _____
Mandeep Singh, its President and Manager

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this _____day of _____, 2025, by Mandeep Singh, as President and Manager_____ of GPS Developments LLC, a Florida limited liability company on behalf of said company. Said person is (check one) □ personally known to me, □ produced a driver's license (issued by a state of the United States within the last five (5) years) as identification, or □ produced other identification, to wit:_____

_____
Print Name: _____

DRAFT

Notary Public, State of Florida
Commission No.: _____
(NOTARY SEAL) My Commission Expires: _____

DRAFT

CITY OF FORT PIERCE:

_____
Linda Hudson, Mayor

ATTEST:

_____
Linda W. Cox,
City Clerk

(SEAL)

APPROVED AS TO FORM AND CORRECTNESS:

_____
Sara K. Hedges, City Attorney

DRAFT

EXHIBIT 1
LEGAL DESCRIPTION

PARCEL 1:
THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

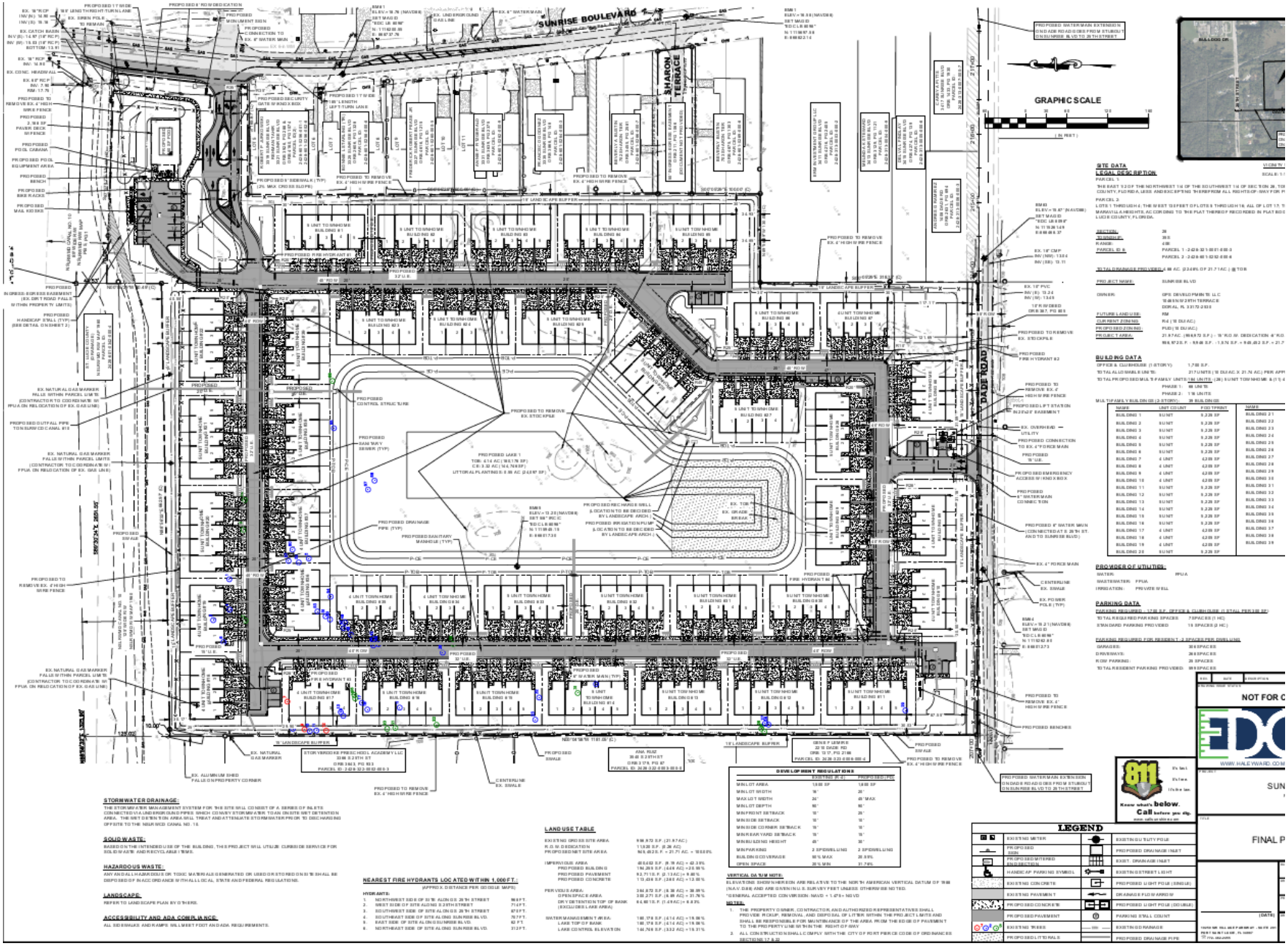
PARCEL 2:
LOTS 1 THROUGH 4; THE WEST 130 FEET OF LOTS 5 THROUGH 16; ALL OF LOT 17; THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

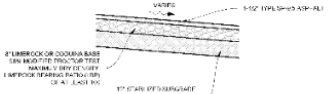
CONTAINING 21.97 ACRES, MORE OR LESS.

DRA

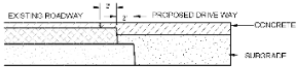
EXHIBIT 2
FINAL PLANNED DEVELOPMENT SITE PLAN

DRAFT

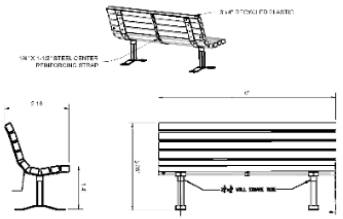

SUNRISE BOULEVARD
SHARON TERRACE
N DADE ROAD
GRAPHIC SCALE
LEGEND
SITE DATA
LEGAL DESCRIPTION:
BUILDING DATA
PROVIDER OF UTILITIES:
PARKING DATA
DEVELOPMENT REGULATIONS
LAND USE TABLE
VERTICAL DATUM NOTE:
NOTES:
STORMWATER DRAINAGE:
SOLID WASTE:
HAZARDOUS WASTE:
LANDSCAPE:
ACCESSIBILITY AND ADA COMPLIANCE:
NEAREST FIRE HYDRANTS LOCATED WITHIN 1,000 FT.:
NOT FOR C
FINAL P



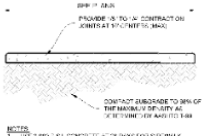
TYPICAL PAVEMENT SECTION
NTS



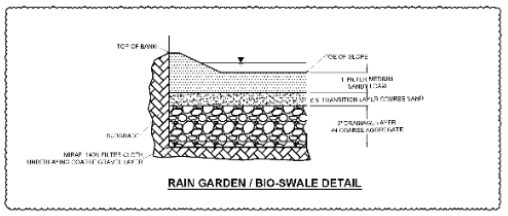
MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS



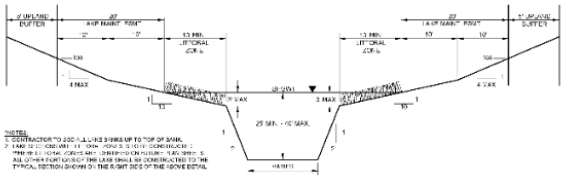
6' CONTOUR BENCH DETAIL
NTS



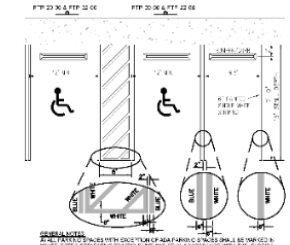
TYPICAL SIDEWALK DETAIL
NTS



RAIN GARDEN / BIO-SWALE DETAIL

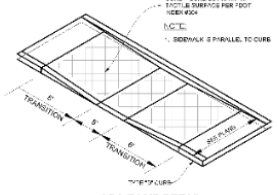


TYPICAL LAKE CROSS SECTION

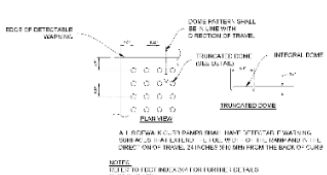




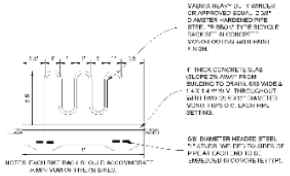
ADA AND TYPICAL PARKING DETAIL
NTS



ADA RAMP DETAIL
NTS



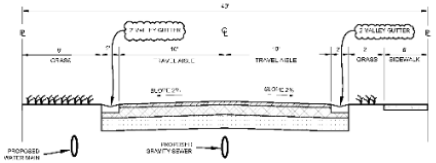
DETECTABLE WARNING SURFACE DETAIL
NTS



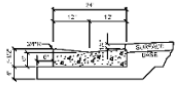
TYPICAL BIKE RACK DETAIL
NTS



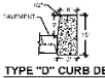
TYPICAL TOWNHOME UNITS
NTS



TYPICAL 40' ROADWAY SECTION
NTS



VALLEY GUTTER DETAIL
NTS



TYPE "D" CURB DETAIL
NTS

NOT FOR CONSTRUCTION

HALEY WARD
CIVIL ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
1600 Village Square Blvd, Ste 3-231
Ponte Vedra Beach, Florida 32082
WWW.HALEYWARD.COM

SUNRISE BLVD
PORT ST JOE

FINAL PD SITE PLAN DETAILS

DATE	2025.03.11
SCALE	AS SHOWN
DRAWN BY	JLW
CHECKED BY	MDL
APPROVED BY	MDL
PROJECT NO.	24-231 SITE PLAN R4.DWG
SHEET NO.	SP-102
REV	1

811 Know what's below. Call before you dig.

SITE DATA

LEGAL DESCRIPTION

PARCEL 1:

THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

PARCEL 2:

LOTS 1 THROUGH 4; THE WEST 130 FEET OF LOTS 5 THROUGH 16; ALL OF LOT 17; THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

VICINITY MAP

SCALE: 1:1,000

SECTION: 28

TOWNSHIP: 35S

RANGE: 40E

PARCEL ID #: PARCEL 1 - 2428-321-0001-000-3
PARCEL 2 - 2428-601-0252-000-6

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0186J
CITY OF FT PIERCE
120286

TOTAL DRAINAGE PROVIDED: 4.88 AC. (22.48% OF 21.71 AC.) @ TOB

PROJECT NAME: SUNRISE BLVD

OWNER: GPS DEVELOPMENTS LLC
10465 NW 29TH TERRACE
DORAL, FL 33172-2530

FUTURE LAND USE: RM

CURRENT ZONING: R-4 (10 DU/AC.)

PROPOSED ZONING: PUD (10 DU/AC.)

PROJECT AREA: 21.67 AC. (944,072 S.F.) (EXCLUDES 15' R.O.W. DEDICATIONS OF 9,946 S.F. & 2,946 S.F.)
(956,972 S.F. EX. GROSS SITE AREA - 12,900 S.F. R.O.W. DEDICATION = 944,072 S.F. = 21.67 AC)

BUILDING DATA

CABANA (1-STORY): 508 S.F.

TOTAL ALLOWABLE UNITS: 217 UNITS (10 DU/AC. X 21.74 AC.) PER APPROVED SITE PLAN

TOTAL PROPOSED MULTI-FAMILY UNITS: 184 UNITS - (26) 5 UNIT TOWNHOME & (11) 4 UNIT TOWNHOME (SEE TYP. ON SHEET SP-102)

MULTI-FAMILY BUILDINGS (2-STORY): 39 BUILDINGS

NAME	UNIT COUNT	FOOTPRINT	NAME	UNIT COUNT	FOOTPRINT
BUILDING 1	5 UNIT	5,225 SF	BUILDING 21	5 UNIT	5,225 SF
BUILDING 2	5 UNIT	5,225 SF	BUILDING 22	5 UNIT	5,225 SF
BUILDING 3	5 UNIT	5,225 SF	BUILDING 23	5 UNIT	5,225 SF
BUILDING 4	5 UNIT	5,225 SF	BUILDING 24	5 UNIT	5,225 SF
BUILDING 5	5 UNIT	5,225 SF	BUILDING 25	5 UNIT	5,225 SF
BUILDING 6	5 UNIT	5,225 SF	BUILDING 26	5 UNIT	5,225 SF
BUILDING 7	4 UNIT	4,205 SF	BUILDING 27	5 UNIT	5,225 SF
BUILDING 8	4 UNIT	4,205 SF	BUILDING 28	5 UNIT	5,225 SF
BUILDING 9	4 UNIT	4,205 SF	BUILDING 29	5 UNIT	5,225 SF
BUILDING 10	4 UNIT	4,205 SF	BUILDING 30	5 UNIT	5,225 SF
BUILDING 11	5 UNIT	5,225 SF	BUILDING 31	5 UNIT	5,225 SF
BUILDING 12	5 UNIT	5,225 SF	BUILDING 32	5 UNIT	5,225 SF
BUILDING 13	5 UNIT	5,225 SF	BUILDING 33	5 UNIT	5,225 SF
BUILDING 14	5 UNIT	5,225 SF	BUILDING 34	4 UNIT	4,205 SF
BUILDING 15	5 UNIT	5,225 SF	BUILDING 35	4 UNIT	4,205 SF
BUILDING 16	5 UNIT	5,225 SF	BUILDING 36	4 UNIT	4,205 SF
BUILDING 17	4 UNIT	4,205 SF	BUILDING 37	4 UNIT	4,205 SF
BUILDING 18	4 UNIT	4,205 SF	BUILDING 38	5 UNIT	5,225 SF
BUILDING 19	4 UNIT	4,205 SF	BUILDING 39	5 UNIT	5,225 SF
BUILDING 20	5 UNIT	5,225 SF			

PROVIDER OF UTILITIES:

WATER:	FPUA
WASTEWATER:	FPUA
IRRIGATION:	PRIVATE WELL

PARKING DATA

PARKING FOR 508 S.F. CABANA

TOTAL CABANA PARKING PROVIDED	15 SPACES (2 HC)

PARKING REQUIRED FOR RESIDENT - 2 SPACES PER DWELLING

TOTAL REQUIRED RESIDENT PARKING	368 SPACES
GARAGES:	184 SPACES
DRIVEWAYS:	184 SPACES
ROW PARKING:	22 SPACES
TOTAL RESIDENT PARKING PROVIDED:	390 SPACES

DEVELOPMENT REGULATIONS

	EXISTING (R-4)	PROPOSED (PD)
MIN LOT AREA	1,500 SF	1,800 SF
MIN LOT WIDTH	16'	20'
MAX LOT WIDTH	24'	45' MAX
MIN LOT DEPTH	90'	90'
MIN FRONT SETBACK	10'	25'
MIN SIDE SETBACK	10'	10'
MIN SIDE CORNER SETBACK	15'	10'
MIN REAR YARD SETBACK	15'	15'
MIN BUILDING HEIGHT	45' MAX	30' MAX
MIN PARKING	2 SP/DWELLING	2 SP/DWELLING
BUILDING COVERAGE	50% MAX	20.45%
OPEN SPACE	20% MIN	35.95%

VERTICAL DATUM NOTE:

ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

NOTES:

1. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE RIGHT-OF-WAY
2. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 119 & 125

LAND USE TABLE

EXISTING GROSS SITE AREA	956,972 S.F. (21.97 AC)
R.O.W. DEDICATION	12,900 S.F. (0.30 AC)
PROPOSED NET SITE AREA	944,072 S.F. (21.67 AC) = 100.00%
IMPERVIOUS AREA	424,527 S.F. (9.74 AC) = 44.97%
PROPOSED BUILDING	193,063 S.F. (4.43 AC) = 20.45%
PROPOSED PAVEMENT	92,420 S.F. (2.12 AC) = 9.79%
PROPOSED CONCRETE	139,044 S.F. (3.19 AC) = 14.73%
PERVIOUS AREA (OPEN SPACE AREA):	339,367 S.F. (7.79 AC) = 35.95%
COMMON AREA	274,766 S.F. (6.31 AC) = 29.11%
DETENTION TOP OF BANK (EXCLUDES LAKE AREA)	64,601 S.F. (1.48 AC) = 6.84%
WATER MANAGEMENT AREA:	180,178 S.F. (4.14 AC) = 19.08%
LAKE TOP OF BANK	180,178 S.F. (4.14 AC) = 19.08%
LAKE CONTROL ELEVATION	144,746 S.F. (3.32 AC) = 15.33%

STORMWATER DRAINAGE:

THE STORMWATER MANAGEMENT SYSTEM FOR THE SITE WILL CONSIST OF A SERIES OF INLETS CONNECTED VIA UNDERGROUND PIPES WHICH CONVEY STORMWATER TO AN ONSITE WET DETENTION AREA. THE WET DETENTION AREA WILL TREAT AND ATTENUATE STORMWATER PRIOR TO DISCHARGING OFFSITE TO THE NSLRWCD CANAL NO. 10.

SOLID WASTE:

BASED ON THE INTENDED USE OF THE BUILDING, THIS PROJECT WILL UTILIZE CURBSIDE SERVICE FOR SOLID WASTE AND RECYCLABLE ITEMS.

HAZARDOUS WASTE:

ANY AND ALL HAZARDOUS OR TOXIC MATERIALS GENERATED OR USED OR STORED ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LANDSCAPE:

REFER TO LANDSCAPE PLAN BY OTHERS.

ACCESSIBILITY AND ADA COMPLIANCE:

ALL SIDEWALKS AND RAMPS WILL MEET FDOT AND ADA REQUIREMENTS.

NEAREST FIRE HYDRANTS LOCATED WITHIN 1,000 FT.:

(APPROX. DISTANCE PER GOOGLE MAPS)

HYDRANTS:

1.	NORTHWEST SIDE OF SITE ALONG S 25TH STREET	968 FT.
2.	WEST SIDE OF SITE ALONG S 25TH STREET	714 FT.
3.	SOUTHWEST SIDE OF SITE ALONG S 25TH STREET	870 FT.
4.	SOUTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	707 FT.
5.	EAST SIDE OF SITE ALONG SUNRISE BLVD.	62 FT.
6.	NORTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	312 FT.

DRAFT

EXHIBIT 3

DEVELOPMENT TIMELINE

Preparation of Civil Construction Plans:	December 2026 – February 2027
Civil Construction Plan Approvals	February 2027 – August 2027
Onsite Civil Construction	August 2027 – August 2028
Onsite Vertical Construction	Assume 3 years for vertical sale / buildout (August 2031)

DRAFT

EXHIBIT 4

DEVELOPMENT STANDARDS

	Existing (R-4)	Proposed (PD)
Min. Lot Area	1,500 sf.	1,800 sf.
Min. Lot Width	16 ft.	20 ft.
Max. Lot Width	24 ft.	45 ft.
Min. Lot Depth	90 ft.	90 ft.
Min. Front Setback	10 ft.	25 ft.
Min. Side Setback	10 ft.	10 ft.
Min. Side Corner Setback	15 ft.	10 ft.
Min. Rear Yard Setback	15 ft.	15 ft.
Max. Building Height	45 ft.	30 ft.
Min. Parking	2 sp. per dwelling	2 sp. per dwelling
Building Coverage	50% max	20.55%
Open Space	20% min	31.76%
Density	217 DU Allowed	184 DU Proposed

EXHIBIT 5

CONDITIONS OF DEVELOPMENT (Example)

1. A Final PD shall be required prior to any development activities with the Master Site Plan by HJA Design Studio, Job No. 2024-31, 11.15.2024.

2. The minimum Open Space shall be 20% of the Final PD site area.

3. The maximum Density shall be 5 dwelling units per acre of the Final PD site area.

4. The Final PD plan shall conform to the requirements of the City Code of Ordinances and be subject to the general standards for approval of Planned Development Zoning.

5. The Final PD site plan submittal shall include a wetland jurisdictional survey.

6. Prior to submittal of a Final PD site plan, a Gopher Tortoise Survey shall be carried out on site.

7. Prior to submittal of a Final PD site plan, and if required by the USFWS (US Fish and Wildlife Service), a Wood Stork foraging Habitat Assessment shall be carried out on site.

8. After approval of the Final PD Site Plan, a detailed stormwater and drainage plan and statement shall be submitted at the time of Building Permit.

9. The Final PD site plan shall be in unified control and property ownership. All land intended to be included in the planned development shall be under the legal control of the owner.

10. The Final PD site plan shall include a general description of the buildings and streetscapes including standards for height, building coverage, parking areas, and public improvements proposed for the development.

11. The Final PD site plan shall include all agreements, provisions and covenants which govern the use, maintenance, and continued protection of the planned development and any of its common open space or other shared areas. This material shall include material which binds successors in title to any commitments concerning completion of the Development and its maintenance and operation.

12. If the owner intends to phase the Development, please include a development phasing schedule indicating:

    The approximate date when construction of the Development can be expected to begin.

    The number of phases in which the Development will be built and the approximate date when

DRAFT

construction of each phase can be expected to begin and completed.

A general description of the buildings and streetscapes including standards for height, building coverage, parking areas, and public improvements proposed for each phase of the development.

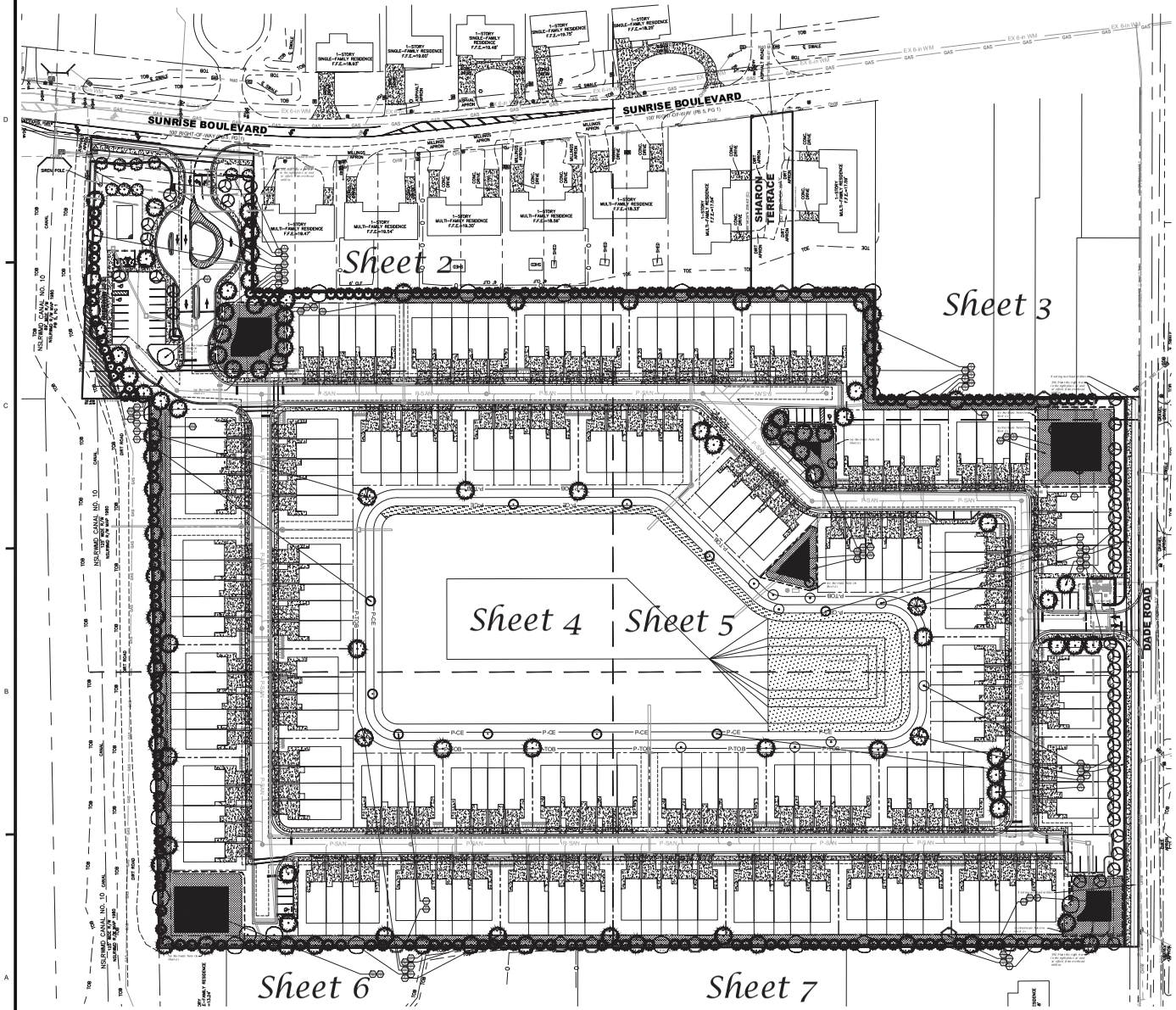
13. The Final PD site plan shall contain the following information, at minimum: a. A Landscape and irrigation plan per section 125-314. c. of the City Ordinance. b. Proposed lot lines and other divisions of land for management, use or allocation purposes. c. The location, size and height of present and proposed buildings and structures. d. The location and size of all areas proposed to be conveyed, dedicated, or reserved for streets, parks, playgrounds, public and semi-public buildings, and similar uses. e. The existing and proposed vehicular circulation system, including off-street parking, and loading areas. f. The pedestrian circulation system, including its interrelationships with the vehicular circulation system, within the development to adjacent streets, showing all curb cuts and sidewalks. g. The existing and proposed utility systems, including sanitary sewers, storm sewers and water, electric and gas lines. h. The proposed buffering treatment of the perimeter of the planned development, refuse stations, storage areas, or loading areas, including materials and techniques used such as screens, fences, and walls.

14. A Unity of Title with the St. Lucie County Clerk of Courts and a Parcel Combination with the St. Lucie County Property Appraiser shall be completed prior to the issuance of any Building Permit.

15. A Final Plat shall be obtained prior to first certificate of occupancy of a residential unit.

16. **NOTE:** The Issuance of a development permit or development order by a municipality does not create any right on the part of an applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Fort Pierce for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

DRAFT



Sheet Legend

Sheet L-1 Key Sheet
Sheet L-2 Landscape Plan - North East Section
Sheet L-3 Landscape Plan - South East Section
Sheet L-4 Landscape Plan - North Center Section
Sheet L-5 Landscape Plan - South Center Section - Littoral Plantings
Sheet L-6 Landscape Plan - North West Section
Sheet L-7 Landscape Plan - South West Section
Sheet L-8 Landscape Data, Plant List, Details & Specifications

Large Bio-Swale Areas

INSTALL PER MANUFACTURE'S SPECIFICATIONS "COIR MAT 900 COCONUT MAT" OR EQUAL" TO STABILIZE THE SLOPES OF THE LARGER BIO-SWALE AREAS TO PREVENT EROSION. ALL SLOPES SHALL BE PLANTED WITH SPARTINA BAKERI 12" ON CENTER. MAT SHALL BE ON THE SIDE SLOPES ONLY AND 3' PAST THE TOP OF BANK (UNDER THE SOD, NATIVE GRASSES, OR PLANTING MULCH BED) AND 3' PAST THE TOE OF SLOPE AT THE BOTTOM OF THE BASIN.
CONTRACTOR TO SUBMIT SAMPLE FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

Digitally signed by Jeffrey W Smith
Date: 2026.07.14 09:59:04 -04'00'

North
Scale: 1" = 60'
0 30' 60' 120'

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

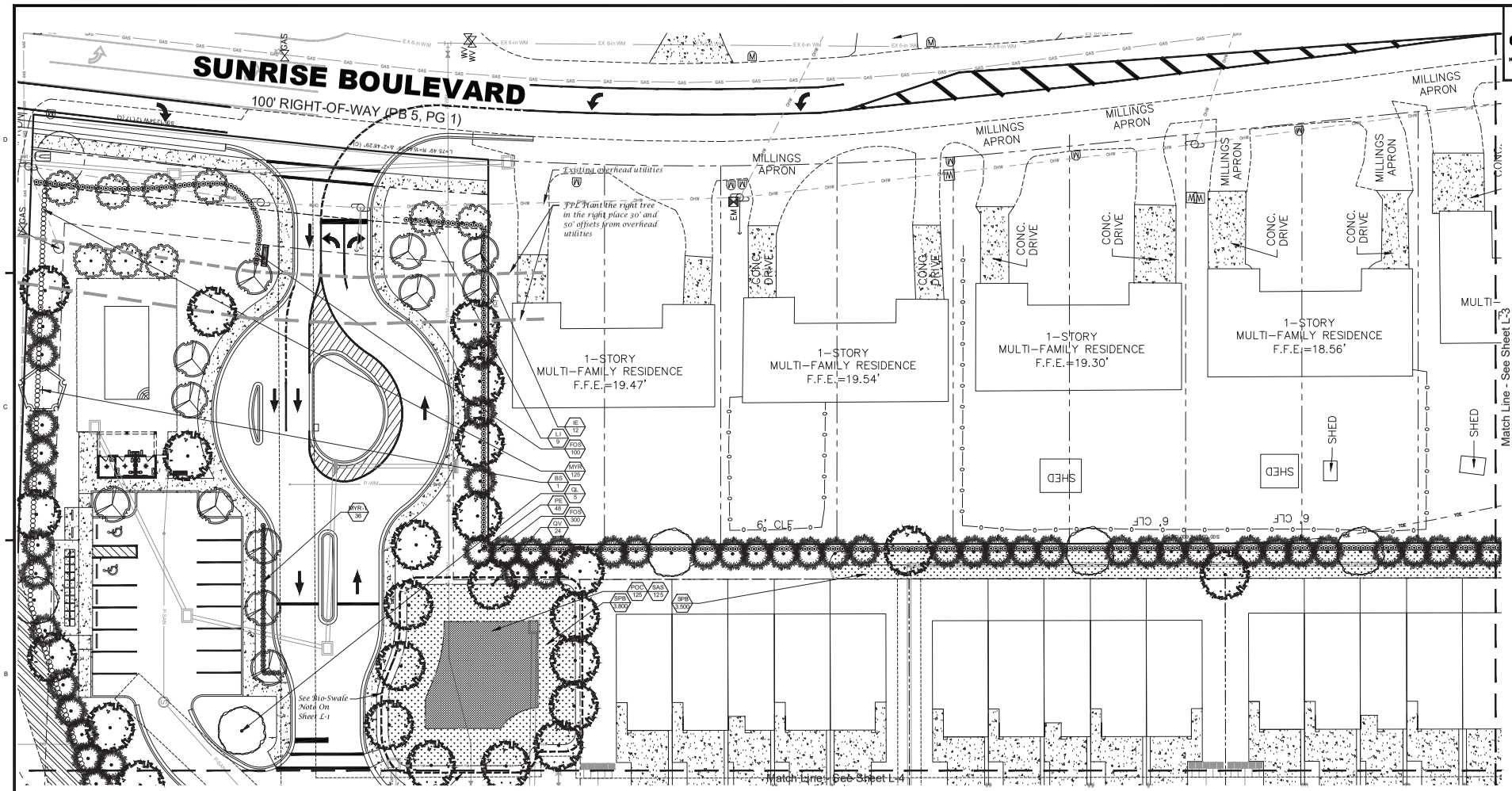
TITLE
Landscape Plan

DATE	SCALE
7-14-2026	As Noted
DRAWN BY: JS	FIELD CREW:
CHECKED BY: JWS	
PROJECT No: 24-237 (22-0301)	

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635

SHEET No. Sheet L-1 of 8

REV.



North
Scale: 1" = 20'
0 10' 20' 40'

REV.	DATE	DESCRIPTION	BY	CHK

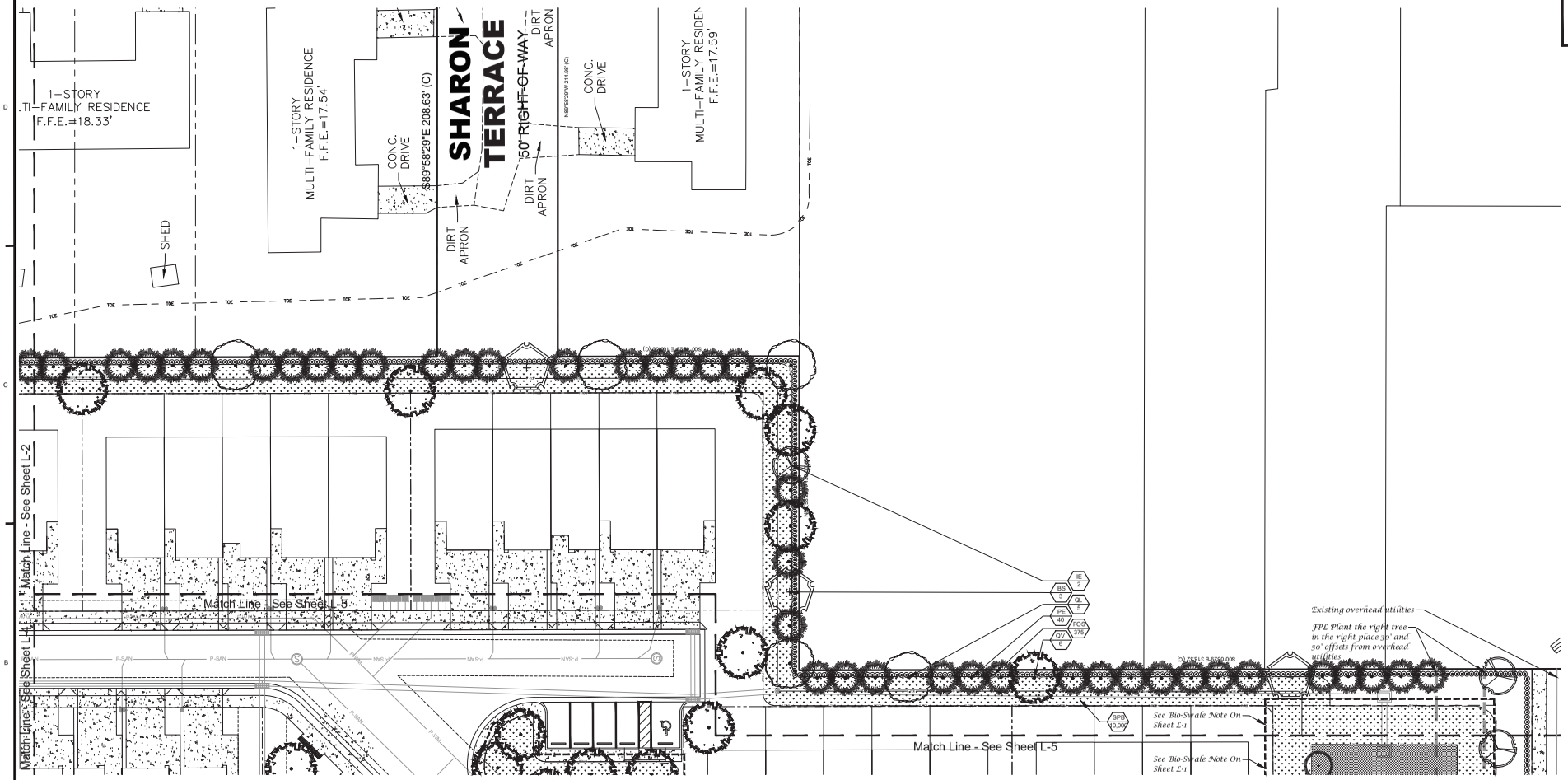
HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE
Landscape Plan

DATE	SCALE
7-14-2026	As Noted
DRAWN BY: JS	FIELD CREW:
CHECKED BY: JWS	
PROJECT No.: 24-237 (22-0301)	
SHEET No.: Sheet L-2 of 8	REV.

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635



North
Scale: 1" = 20'
0 10' 20' 40'

Know what's below. Call before you dig. 811 It's fast. It's free. It's the law. www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

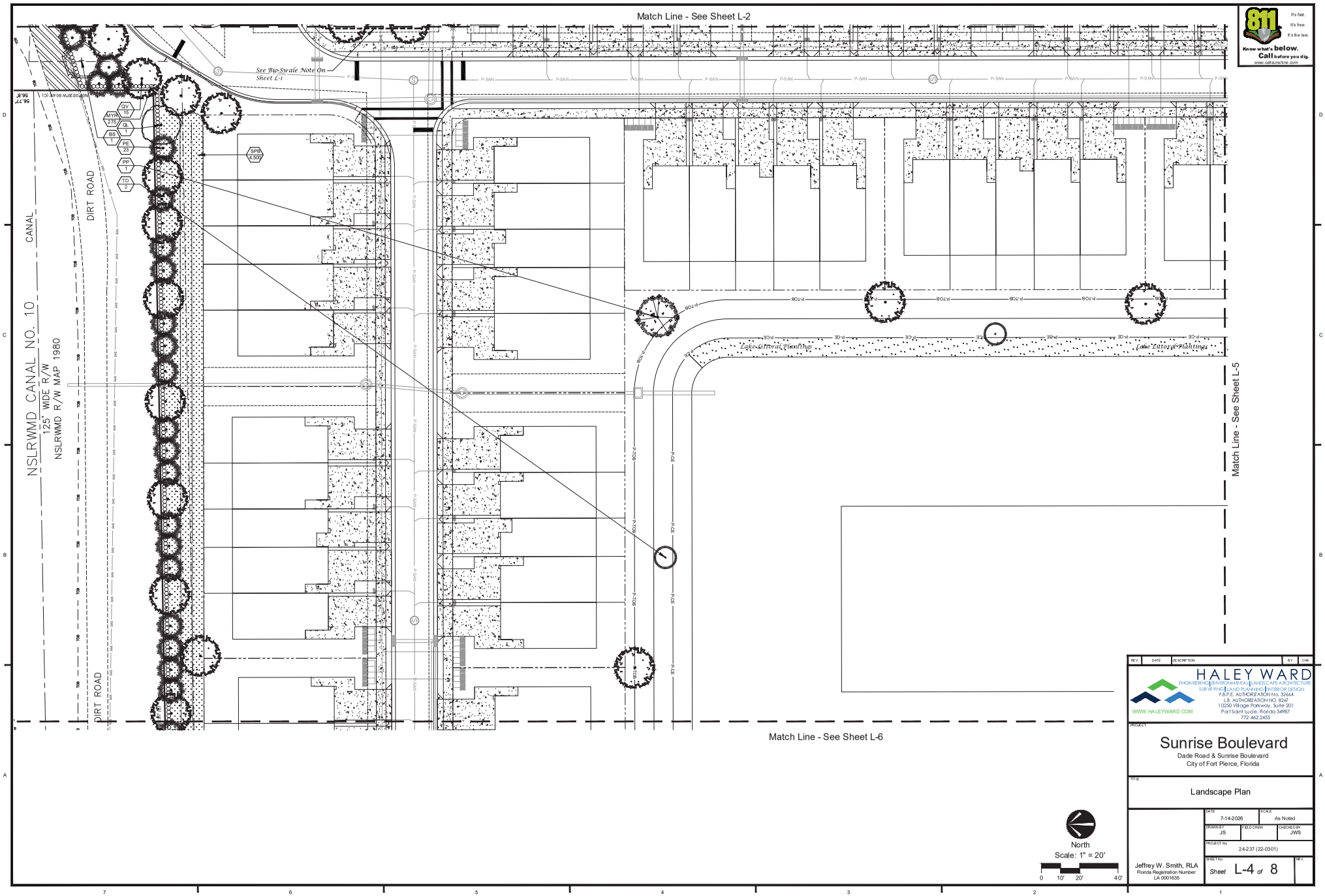
HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE
Landscape Plan

DATE	SCALE
7-14-2026	As Noted
DRAWN BY: JS	FIELD CREW:
CHECKED BY: JWS	
PROJECT No.: 24-237 (22-0301)	
SHEET No.: Sheet L-3 of 8	REV.

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635



Know what's below. Call before you dig. www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

Sunrise Boulevard

Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE

Landscape Plan

DATE	SCALE
7-14-2026	As Noted

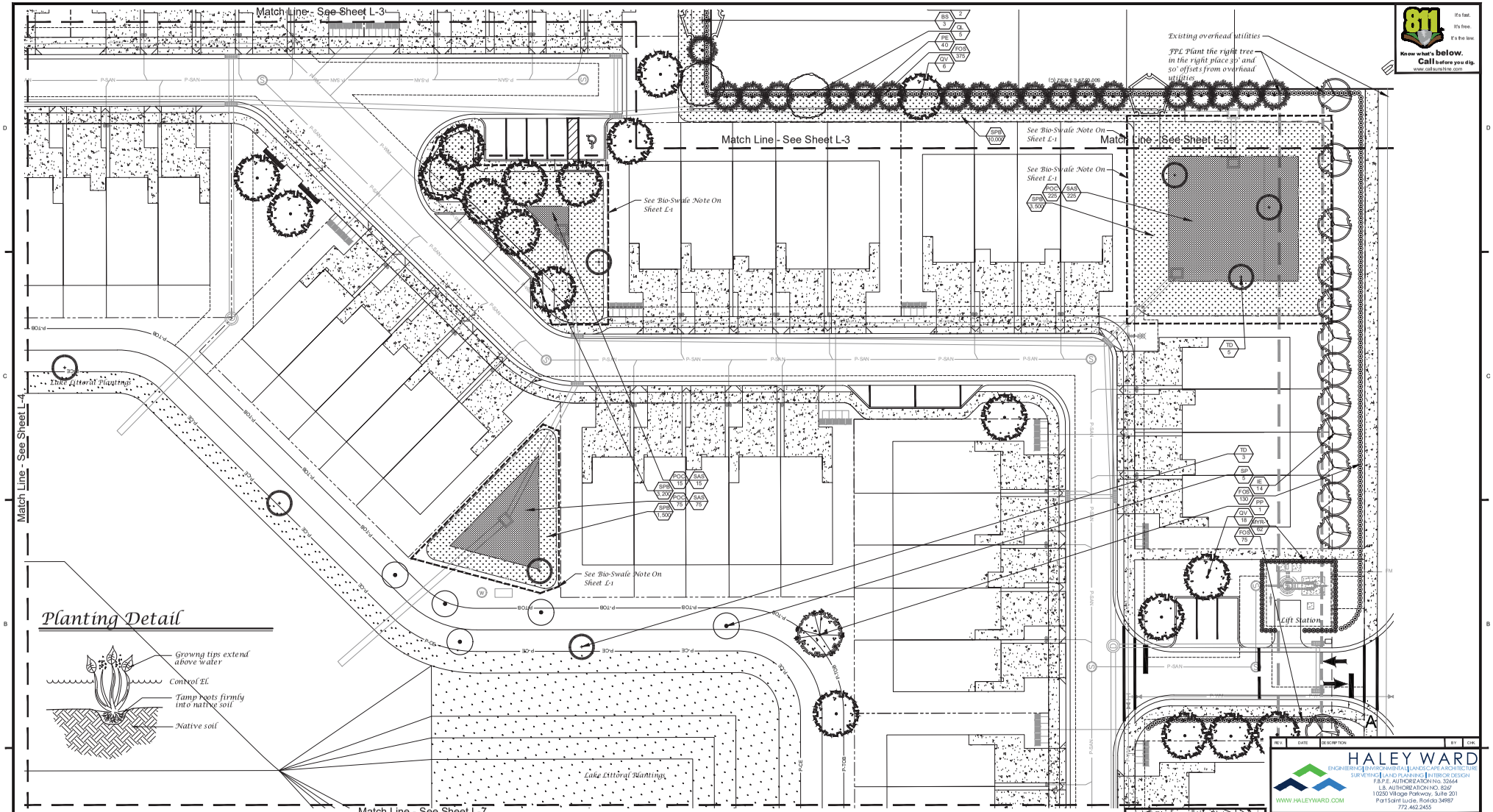
DRAWN BY	FIELD CREW	CHECKED BY
JS		JWS

PROJECT No.: 24-237 (22-0301)

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635

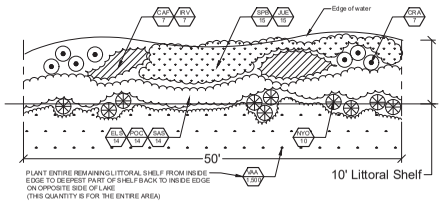
SHEET No.: Sheet L-4 of 8

REV.



Typical 50' Section - Lake Littoral Plan

Not to scale



Littoral Zone Plant List

Shore Line Length of Planting = 1,000' = 20 Sections

TOTAL QTY	QTY/SECTION	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS
140	7	CAF*	CANNA FLACCIDA	GOLDEN CANNA	BARE ROOT	3' O.C.	SHORELINE - 3" DEPTH
140	7	CRA*	CRINUM AMERICANUM	SWAMP LILY	BARE ROOT	3' O.C.	SHORELINE - 3" DEPTH
280	14	ELS*	ELEOCARIS INTERSTINCTA	SPIKERUSH	BARE ROOT	3' O.C.	6-18" DEPTH, CLEAN, WEED FREE
140	7	IRV*	IRIS VIRGINICA	SOUTHERN BLUE FLAGIRIS	BARE ROOT	3' O.C.	SHORELINE - 3" DEPTH
300	15	JUE*	JUNCUS EFFUSUS	SOFTRUSH	BARE ROOT	3' O.C.	SHORELINE - 3" DEPTH
200	10	NYO*	NYMPHAEA ODORATA	FRAGRANT WATERLILY	BARE ROOT	7' O.C.	24" ROOT, 2-3' DEPTH, CLEAN, WEED FREE
280	14	SAS*	SAGITTARIA SPP.	ARROWHEAD	BARE ROOT	3' O.C.	24" HT, 6"-2' DEPTH, CLEAN, WEED FREE
300	15	SPB*	SPARTINA BAKERI	SAND CORDGRASS	4" LINER	2' O.C.	SHORELINE - 6" DEPTH
280	14	POC*	PONTEDERIA CORDATA	PICKEREL WEED	BARE ROOT	3' O.C.	24" HT, 6"-2' DEPTH, CLEAN, WEED FREE
1,500		VAA*	VALLISNERIA AMERICANA	TAPE GRASS	BARE ROOT	4' O.C.	PLANT ENTIRE REMAINING LITTORAL SHELF FROM INSIDE EDGE TO DEEPEST PART OF SHELF BACK TO INSIDE EDGE ON OPPOSITE SIDE OF LAKE (THIS QUANTITY IS FOR THE ENTIRE AREA)

*** = FLORIDA NATIVE**
100% Native Plantings

Lake Shoreline Notes

1. *All plant materials shall be planted and maintained in a natural arrangement.*
2. *The littoral zone shall consist of native vegetation only and shall be maintained permanently as part of the surface water management system.*
3. *Lake management plans shall comply with South Florida Water Management District rules and shall be subject to approval by the City of Fort Pierce.*

North
Scale: 1" = 20'
0 10' 20' 40'

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

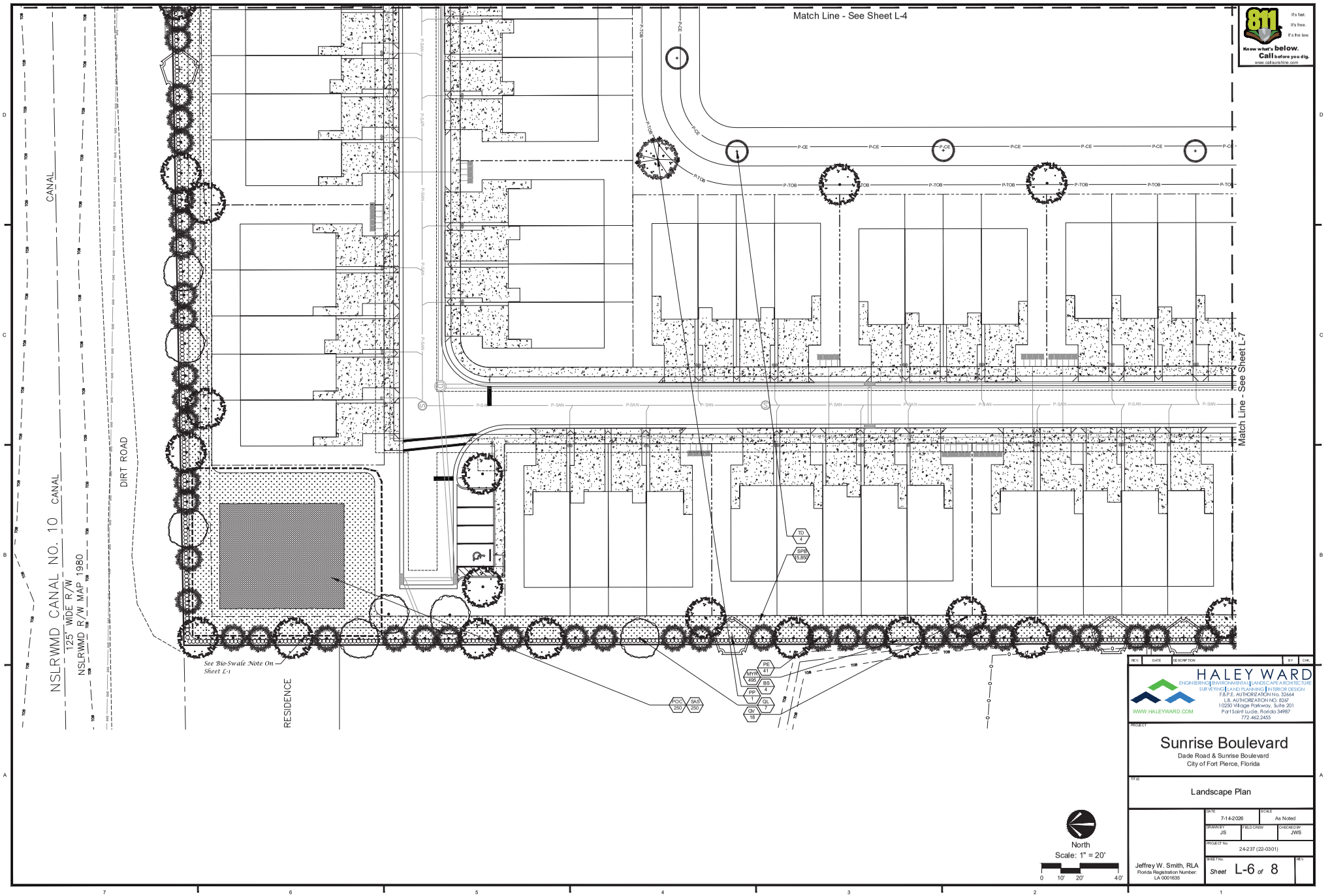
PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE
Landscape Plan

DATE	SCALE
7-14-2026	As Noted
DRAWN BY: JS	FIELD CREW:
CHECKED BY: JWS	
PROJECT No.: 24-237 (22-0301)	

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635

SHEET No. Sheet L-5 of 8
REV.



Know what's below. Call before you dig. 811 It's fast. It's free. It's the law. www.callsunshine.com

North
Scale: 1" = 20'
0 10' 20' 40'

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32644
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE
Landscape Plan

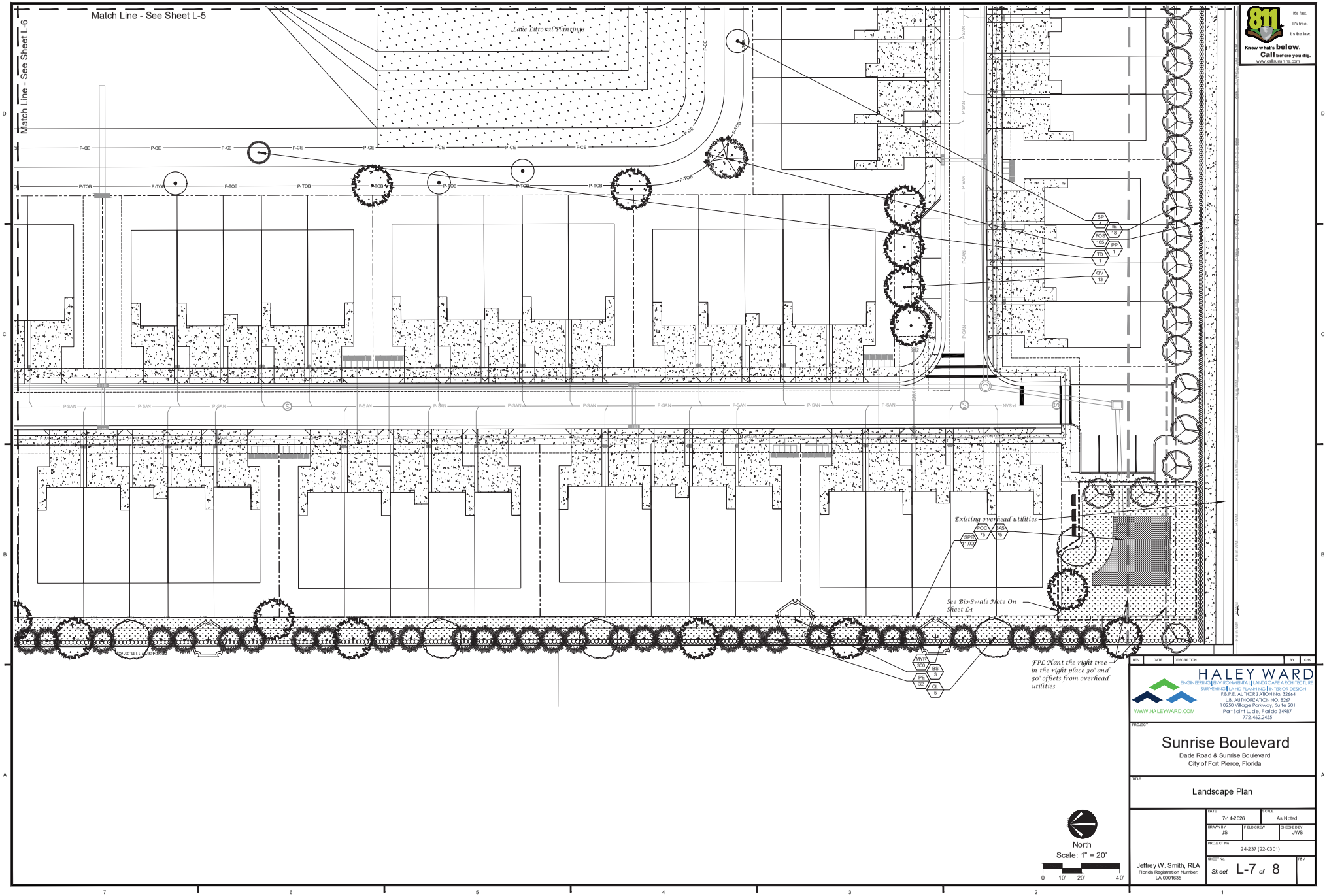
DATE	SCALE
7-14-2026	As Noted

DRAWN BY	FIELD CREW	CHECKED BY
JS		JWS

PROJECT No.
24-237 (22-0301)

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635

SHEET No. REV.
Sheet L-6 of 8



Know what's below. Call before you dig. www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

Sunrise Boulevard

Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE

Landscape Plan

DATE	SCALE
7-14-2026	As Noted

DRAWN BY	FIELD CREW	CHECKED BY
JS		JWS

PROJECT No.: 24-237 (22-0301)

SHEET No.: Sheet L-7 of 8

REV.

Jeffrey W. Smith, RLA
Florida Registration Number: LA 0001635

Landscape Specifications

1. All tree and plant material to be Florida No. 1 or better, as classified in "Grades and Standards for Nursery Plants", Part I and Part II, State of Florida, Dept. of Agriculture, Tallahassee. All plants not listed in "Grades and Standards for Nursery Plants" shall conform to a Florida No. 1 as to: (1) health and vitality, (2) condition of foliage, (3) root system, (4) freedom from pest or mechanical damage, (5) heavily branched and densely foliated according to the accepted normal shape of the species.
2. Undersizing or substitution of one species or cultivar for another species is a breach of contract and will be "Rejected" at the time of final landscape inspection unless approved by Landscape Architect.
3. Project Warranty: All plant material shall be warranted for a period of one (1) year after date of substantial completion against defects, including death and unsatisfactory growth, except for defects resulting from abuse or damage by others or unusual phenomena or incidents which are beyond the contractor's control.
4. Any and all conditions which the contractor feels will be detrimental to the success of the planting shall be brought to the owner or representative's attention.
5. The contractor shall verify the location of underground utilities prior to commencing work on any project area.
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Enviromulch. Cypress Mulch is NOT ACCEPTABLE. Planting beds to receive mulch throughout entire bed area.
7. All plants to be set to ultimate grade. No filling will be permitted around trunks or stems. Mulch to be kept a minimum of 2" away from trunks and stems.
8. Planting trees and shrubs: Excavate hole per planting detail. When plant is set, place additional backfill consisting of a 50% mixture of Peat humus and natural soil around the base and sides of ball, and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Water again after placing final layer of backfill and before installing mulch.
9. Guy and stake trees in 3 directions with galvanized wire, through flexible hose chafing guards, with wooden stake anchors immediately after planting. (See Detail)
10. Trees and shrubs shall be fertilized with a complete natural organic fertilizer with a ratio of approximately 3:0:2 or 3:0:3 (e.g. one labeled 12-0-8). Similar analysis such as 16-0-8 (4:0:2) can also be used. Fertilizers that are slow release, controlled release, sulphur coated or with nitrogen as IBDU or ureaformaldehyde have extended release period. Thirty to fifty percent of the nitrogen should be water insoluble or slow release.

Palms should receive a complete granular fertilizer formulated for palms ("Palm Special") at a rate of 5 to 8 lbs. per palm.

Agriform 20-0-5 twenty-one gram planting tablets may be substituted for granular fertilizer. If utilized, the following rates shall be utilized: Position plant in hole. Backfill halfway up the rootball. Place table(s) beside rootball about 1" from root tips. Do not place table(s) in bottom of hole.

1 Gallon 1 Tablet
3 Gallon 2 Tablets
25 Gallon & B&B Trees 2 per 1" caliper

11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers and mulch. Tighten and repair stake and guying and reset trees and shrubs to proper grade or vertical position as required. Spray as necessary to keep trees and shrubs free of insects and disease. The contractor shall begin maintenance immediately after planting and shall continue maintenance through final acceptance when Certificate of Occupancy is issued to the General Contractor by City and project is released by the General Contractor to Client.
13. Prune trees and shrubs only to remove damaged branches as directed by the Landscape Architect.
14. Planting Lawns: Provide clean, strongly rooted, uniformly sized strips of Stenotaphrom secundatus Floritam (unless otherwise noted), machine stripped not more than 24 hours prior to laying. Grade and roll prepared lawn surface. Water thoroughly but not to create muddy soil conditions. Lay sod strips with tight joints, roll or tamp lightly, and water thoroughly.
15. Maintain positive drainage, no planting is to block drainage.
16. Drainage Testing
    Prior to planting of trees, palms, and specimen material, each planting pit shall be tested in the following manner to verify adequate drainage.
    A) Dig each planting pit to the minimum specified size.
    B) Fill the planting pit with (12") twelve inches of water. If the water level in the planting pit drops (4") four or more inches within (4) four hours, the drainage is sufficient and a drainage channel is not required. If the water level drops less than (4") four inches within the (4) four hour period, then a drainage channel is required.
    C) When a drainage channel is required, the drainage channel must extend down through the non porous soil and into porous soil. (See Drainage Testing Detail)
    D) Discard all material removed from the drainage channel.
    E) When backfilling the planting pit, add coarse gravel to the drainage channel. Also, care must be taken to keep the consistency of the soil mix the same throughout the planting pit.

NOTES:
1. Contractor to include drainage testing for all trees and palms in bid. If drainage is inadequate, the soil specification in item #8 above shall be revised for site conditions. Contractor shall notify the Owner and Landscape Architect of poor drainage conditions in writing and written direction will be provided to the contractor of appropriate soil mixture specification to be used.
2. All fertilizers shall meet the City of Port St Lucie's fertilizer ordinance.

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	DROUGHT TOLERANCE
CANOPY / ORNAMENTAL TREES							
12	BS*	BURSERA SIMARUBA	GUMBO LIMBO	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
46	IE*	ILEX x ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
9	LI	LAGERSTROEMIA INDICA 'TUSKEGEE'	CREPE MYRTLE 'RED'	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 2.5' C.T. MIN.	HIGH
184	PE*	PINUS ELLIOTTI	SLASH PINE	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
4	PP	PELTOPHORUM DUBIUM	YELLOW POINCIANA	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
23	QL*	QUERCUS LAURIFOLIA	LAUREL OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
88	QV*	QUERCUS VIRGINIANA	LIVE OAK	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
15	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 5', 2.5" D.B.H.	A.S.	FULL CANOPY, 5' C.T. MIN.	HIGH
PALMS							
9	SP*	SABAL PALMETTO	SABAL PALM	12' C.T.	A.S.	RELOCATED - SLICK TRUNKS	HIGH
SHRUBS / GROUNDCOVERS							
98	MYR-1*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#7, 4' x 2'	2' O.C.	FULL & THICK	HIGH
1,195	MYR*	MYRICANTHES FRAGRANS	SIMPSON STOPPER	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
1,145	FO3*	FORESTIERA SEGREGATA	FLORIDA PRIVET	#3, 2' x 2'	2' O.C.	FULL & THICK	HIGH
765	POC*	PONTEDERIA CORDATA	PICKEREL WEED	BARE ROOT	3' O.C.	FULL & THICK	HIGH
765	SAS*	SAGITTARIA SPP.	ARROWHEAD	BARE ROOT	3' O.C.	FULL & THICK	HIGH
56,850	SPB*	SPARTINA BAKERI	SAND CORD GRASS	LINER	12" O.C.	SEE DRY RETENTION NOTES	HIGH
	SOD-1	PASPALUM NOTATUM	BAHIA SOD			SEE SPECS	

* = Florida Native

NOTES:
1. D.B.H. IS MEASURED 4.5' ABOVE GRADE
2. ALL AREAS NOT MULCHED FOR INDIVIDUAL PLANT MATERIALS AND PLANTING BEDS SHALL BE SODDED. NO EXPOSED SOIL AREAS SHALL REMAIN ON SITE. THIS INCLUDES ALL OPEN AREAS, LAKE BANKS, DRY RETENTION AREAS, DRY DETENTION AREAS, AND ANY OTHER AREAS NOT COVERED BY IMPERVIOUS MATERIALS OR PLANTING MATERIALS.

Landscape Data

Vehicular Use Area Landscaping Adjacent to R.O.W. (South Buffer) 664'
Sec. 123-374(b)
Trees Required = 15' Wide Landscape Strip with 1 Tree/300 s.f.
664 l.f. x 15' = 9,960 s.f. / 300 = 33 Trees
Provided = 33 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
664 l.f. / 2' o.c. = 332 Shrubs
Provided = 332 Shrubs

Vehicular Use Area Landscaping Adjacent to R.O.W. (North-East Buffer) 196'
Sec. 123-374(b)
Trees Required = 15' Wide Landscape Strip with 1 Tree/300 s.f.
196 l.f. x 15' = 2,940 s.f. / 300 = 10 Trees
Provided = 10 Trees

Shrubs Required = Continuous Hedge @ 2' o.c.
196 l.f. / 2' o.c. = 98 Shrubs
Provided = 98 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (East Buffer) 1,349'
Sec. 123-376)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,349 l.f. x 15' = 20,235 s.f. / 200 = 102 Trees
Provided = 102

Shrubs Required = Continuous Hedge @ 2' o.c.
1,349 l.f. / 2' o.c. = 675 Shrubs
Provided = 675 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (West Buffer) 1,182'
Sec. 123-376)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,182 l.f. x 15' = 17,730 s.f. / 200 = 87 Trees
Provided = 87

Shrubs Required = Continuous Hedge @ 2' o.c.
1,182 l.f. / 2' o.c. = 591 Shrubs
Provided = 591 Shrubs

Vehicular Use Area Landscaping to Adjacent Property (North Buffer) 1,060'
Sec. 123-376)
Trees Required = 15' Wide Landscape Strip with 1 Tree/200 s.f.
1,060 l.f. x 15' = 15,900 s.f. / 200 = 80 Trees
Provided = 80

Shrubs Required = Continuous Hedge @ 2' o.c.
1,060 l.f. / 2' o.c. = 530 Shrubs
Provided = 530 Shrubs

Interior Vehicular Use Area
Sec. 123-377(a & b)
Required = 1 s.f. of interior landscaping per 15 s.f. of vehicular use area (92,711 s.f./15 = 6,180 s.f.)
Landscape Area Provided = 6,185 s.f.
Trees Required = 1 Tree/100 s.f. of interior landscape area
92,711 s.f./15 = 6,180 s.f. / 100 = 62 Trees
Trees Provided = 62

Maximum Use of Palm Trees
Sec. 123-371(a)(3)
Required = Fifty (50) percent of the required trees shall be species other than palm trees
Total Trees Required = 381 Trees
Maximum Palms Allowed = 191 (381 / 2 = 191)
Total Palms Provided = 0 (0%)

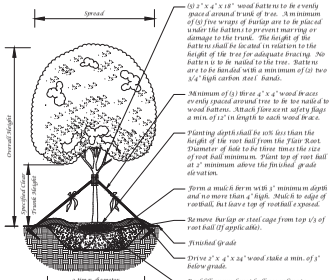
Total Trees Required = 381 Trees
Total Trees Provided = 381 Trees
381 Trees + 0 Palms @ 3:1 = 0 Trees = 381 Trees

Total Trees Required = 381 Trees
Total Native Trees Provided = 381 (100%)

Total Palms Required = 0
Total Native Palms Provided = 0 Relocated (0%)

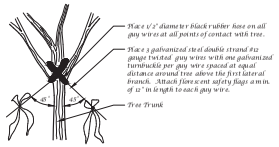
Total Shrubs Required = 2,226
Total Native Shrubs Provided = 2,226 (100%)

Landscape Details



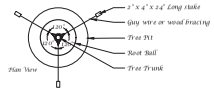
Large Tree Planting Detail (6" Caliper or Greater)

Not to Scale



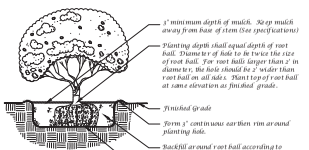
Guy Wire Attachment Detail

Not to Scale



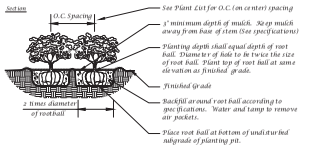
Staking Detail

Not to Scale



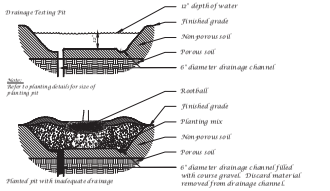
Shrub Detail

Not to Scale



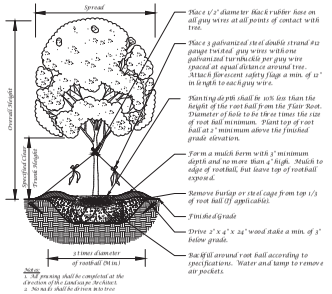
Ground Cover Detail

Not to Scale



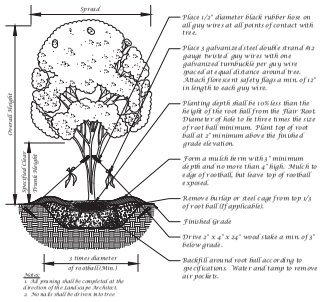
Drainage Testing Detail

Not to Scale



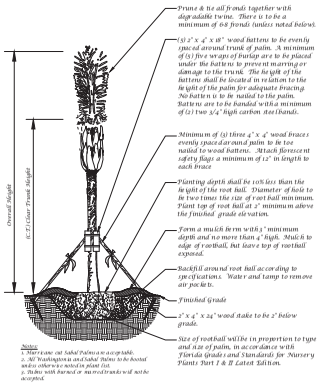
Tree Planting Detail

Not to Scale



Multi-Trunk Tree Planting Detail

Not to Scale



Palm Planting Detail

Not to Scale

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

HALEY WARD
ENGINEERING | ENVIRONMENTAL | LANDSCAPE ARCHITECTURE
SURVEYING | LAND PLANNING | INTERIOR DESIGN
F.B.P.E. AUTHORIZATION No. 32664
L.B. AUTHORIZATION NO. 8267
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
Sunrise Boulevard
Dade Road & Sunrise Boulevard
City of Fort Pierce, Florida

TITLE
Landscape Plan

DATE	SCALE
7-14-2026	As Noted
DRAWN BY: JS	FIELD CREW:
CHECKED BY: JWS	
PROJECT No. 24-237 (22-0301)	
SHEET No. Sheet L-8 of 8	REV.

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

March 13th, 2025
Joe Garofolo
Port Richey Village Investments, LLC
9010 20th Street
Vero Beach, FL 32966

VIA Email: joegprvi@gmail.com

Reference: **Tree Assessment & Inventory**
3315 Sunrise Boulevard
Ft. Pierce, FL 34982
Parcel ID # 2428-321-0001-000-3 & 2428-601-0252-000-6

Prepared by: Anthony A. Adams
International Society of Arboriculture Certified Arborist FL-9472A

Certification of Performance

I, Anthony A. Adams, certify to the best of my knowledge, and abilities:

That I have personally inspected the tree(s) and or the property referred to in this report.

That it is my professional opinion, that the following report is true, and the conclusions and results stated are correct based on the information received about the property evaluated and the evaluation methods followed.

That the reported analyses, opinions, and conclusions are only limited by the reported assumptions, methods and limiting conditions and my personal, unbiased professional analyses, opinions and conclusions.

That Haley Ward, Inc. acts as an independent tree, and environmental consultant.

That this Report, or parts of this Report, have not been revealed to any party other than the Client named and will not be revealed to any other party unless authorized to do so by Client named or by due process of law or by legally required public testimony by this firm of these results.

This report is written in good faith, and all rights are reserved by Haley Ward, Inc. It is for use by the client named only.

Signature: _____ Date: 03/13/2025

I. Introduction

This Report is written for Port Richey Village Investments, LLC. It is based on information obtained from the site visit(s), to provide and assign values to the trees located on the subject property.

II. Property Involved

The subject property evaluated as part of this Tree Inventory consists of two tax parcels (Parcel ID #s: 2428-321-0001-000-3 & 2428-601-0252-000-6) comprised of 21.72 acres. The subject property is located at 3315 Sunrise Boulevard, Ft. Pierce, FL. The subject property has a Future Land Use designation of RM. The subject property has a zoning designation of R-4. The subject property is further located within Section 28, Township 35 South and Range 40 East.

III. Data Collection

The property/trees were evaluated by site visits to determine environmental conditions. This appraisal is based on value of subject as per ISA "Rule 14-40.030, Florida Administrative Code". See Appendix A for full tree data.

IV. Limiting Conditions

This "Arboriculture Report" includes only the listed trees, landscape conditions in the immediate area where the tree is located, and conditions caused by or attributable to the trees on this property.

Limits of the Assignment

1. This report is not intended as and does not represent legal advice and should not be relied upon to take the place of such advice.

2. This report is limited to documenting the condition of the tree on the dates given. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

3. Loss or alteration of any part of this report invalidates the entire report.

4. Sketches and photographs used in this report are intended as visual aids only and are not necessarily to scale.

V. Discussion

There is a total of forty six (46) native trees on the subject property that meet City of Fort Pierce requirements for mitigation or preservation.
The breakdown by species is as follows:

Cabbage Palms:	13	Pines:	4
Oak *spp*:	29		

VI. Conclusions and Recommendations

Values are calculated for 14" D.B.H. native trees and greater as per City of Fort Pierce code.

Formula(s) used:

Trees

(Total D.B.H. Inches) x ($250) = Mitigation Costs for Trees

Palms

(Total # of Palms) x ($200) = Mitigation Costs for Palms

Trees =	(594.6in.)	x	$250	=	$148,650.00
Palms =	(13)	x	$250	=	$3,250.00

Maximum Mitigation Cost = $151,900.00 fee

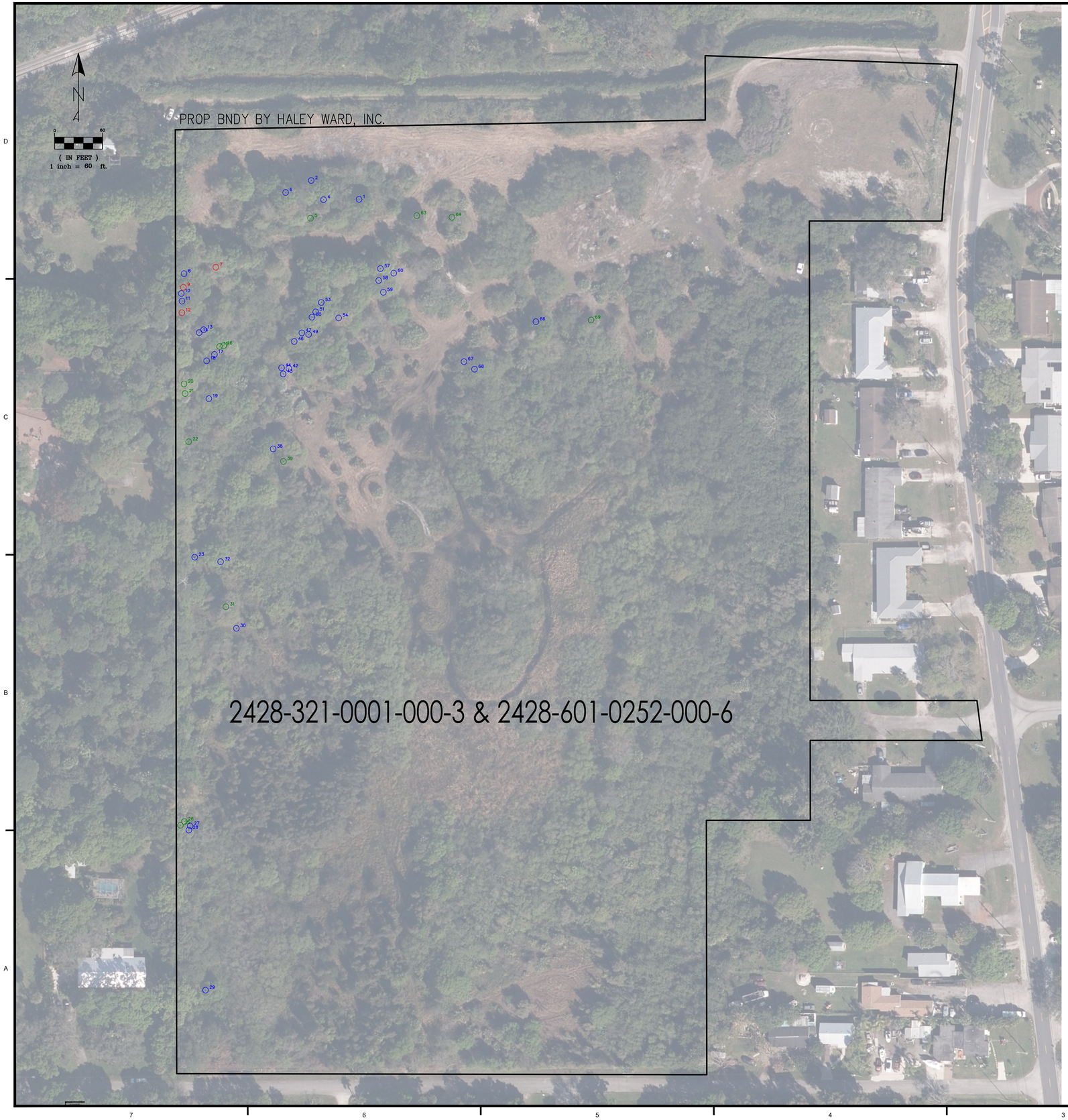
City of Fort Pierce counts native trees planted on-site at a ratio of 1:1 credit towards mitigation. However, trees must be at least 12' tall, and 2.5" DBH.
Palm trees must be replaced at 1:1 ratio.

A site planner or landscape architect can further use the results of this Tree Survey to plan and save specific trees to reduce costs, if desired.

Please see attached Tree Table and Tree Location Map.

This Report, or parts of this Report, have not been revealed to any party other than the Client named and will not be revealed to any other party unless authorized to do so by Client named or by due process of law or by legally required public testimony by this firm of these results.

This report is written in good faith and all rights are reserved by Haley Ward. It is for use by the client named only.



#	TYPE	DBH
1	LAOAK	14.9
2	LAOAK	15.2
4	LAOAK	24.1
5	PALM	
7	PINE	17.5
8	LAOAK	23.3
9	PINE	15.1
11	LAOAK	18.5
12	PINE	17.3
15	PALM	
16	PALM	
19	LAOAK	16.2
20	PALM	
21	PALM	
22	PALM	
24	PINE	13.6
25	PALM	
26	PALM	
27	LIOAK	27.5
28	LIOAK	37.6
29	LAOAK	15
30	LAOAK	15.9
31	PALM	
32	LAOAK	15.8
38	LAOAK	14.8
39	PALM	
42	LAOAK	14.4
43	LAOAK	20.9
44	LAOAK	23.5
46	LAOAK	15.1
47	LAOAK	23.2
49	LAOAK	14.8
50	LAOAK	17
51	LAOAK	15.2
53	LAOAK	19.8
54	LAOAK	17
57	LAOAK	19.4
58	LAOAK	15.1
59	LAOAK	21.4
60	LAOAK	18
63	PALM	
64	PALM	
66	LAOAK	18
67	LIOAK	14
68	LAOAK	19.1
69	PALM	

LEGEND

PALMS – GREEN

PINES – RED

OAKS – BLUE

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

A DIVISION OF HALEY WARD, INC.
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

PORT RICHEY VILLAGE INVESTMENTS, LLC
9010 20TH STREET, VERO BEACH, FL 32966
PRIVILEGE NORTH
SUNRISE BOULEVARD

TITLE

TREE LOCATION MAP

DATE	SCALE
03/11/2025	AS NOTED

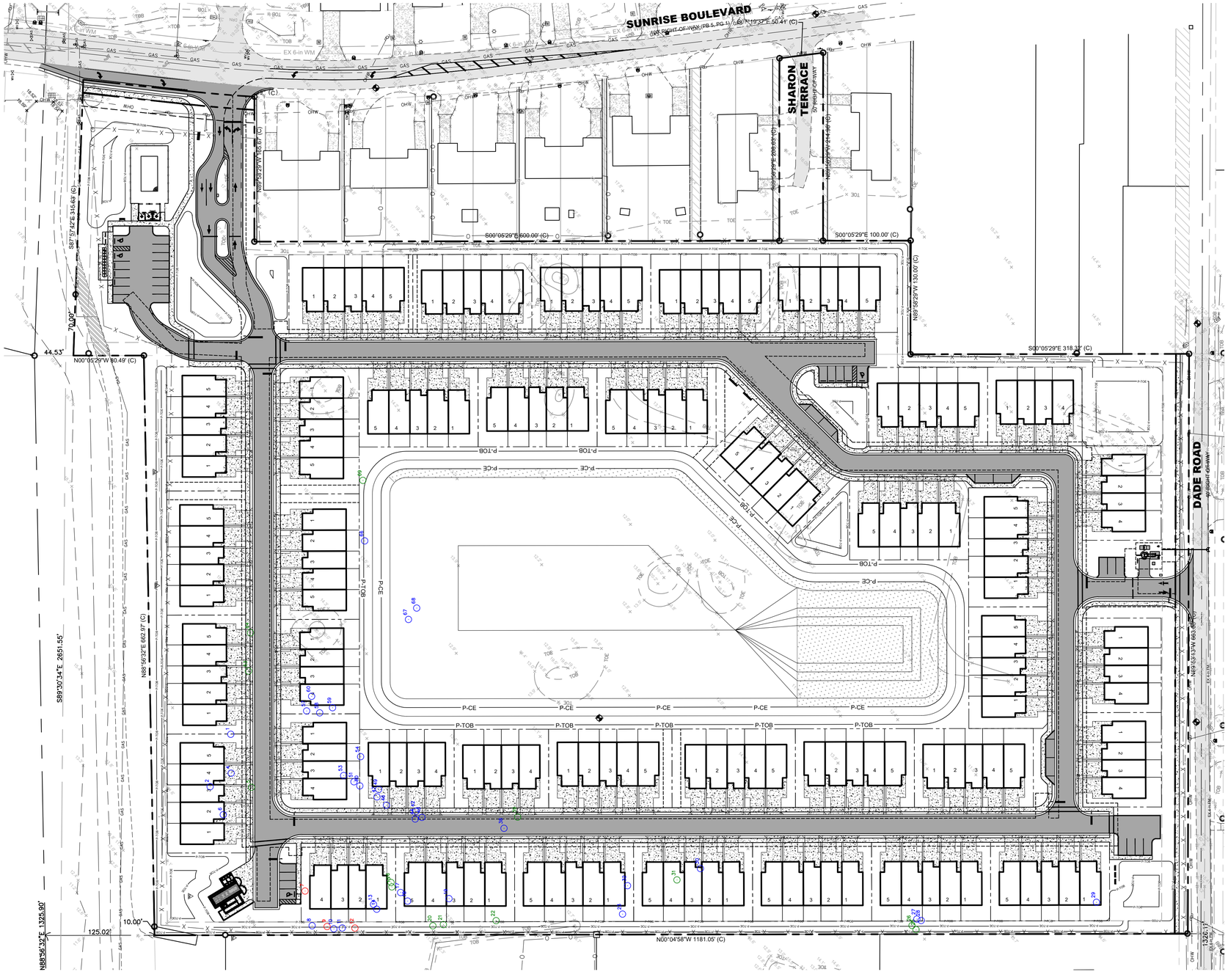
DRAWN BY	DESIGNED BY	CHECKED BY
AAA	---	---

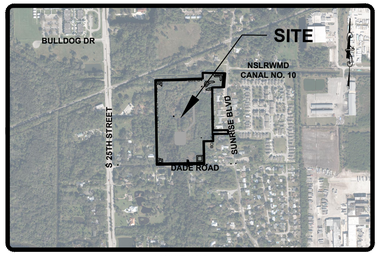
PROJECT No.: 24-237

DRAWING No.: 1

REV.:

FILE LOCATION: Z:\EDC-2024\24-237 - GARGFALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENVIRONMENTAL\TREES\GAO24-237 - TREES.DWG, 2025.03.11, 4:24 PM





VICINITY MAP
SCALE: 1:1,000

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

SITE TREE SUMMARY				
TYPE OF TREE	TOTAL # TREES	TOTAL SIZE (INCHES)	PRESERVATION CREDIT	REQUIRED MITIGATION
OAK TREES PRESERVED	5	119.8	119.8	
OAK TREES TO BE REMOVED	24	470		419.8
PALM TREES TO BE PRESERVED	5	0		
PALM TREES TO BE RELOCATED	9	0		
PINE TREES TO BE PRESERVED	2	32.4	32.4	
PINE TREES TO BE REMOVED	1	17.5	17.5	17.5
TOTAL # OF TREES FOR THIS PROJECT	46	639.7	169.7	437.3

TREE COUNT (MITIGATION)
12 (TO BE PRESERVED)
24 (OAKS TO BE REMOVED)
1 (PINES TO BE REMOVED)
-267.6 MITIGATION (CREDITS)

NOTE: TREES THAT DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION ARE NOT INCLUDED IN THE SITE TREE SUMMARY TABLE AND TREE COUNT TABLE

PINE TREES REMOVED				
#	TREE #	SIZE (INCHES)	MITIGATION CREDIT(S)	NOTES & REMARKS
1	7	17.5	17.5	
TOTAL		17.5	17.5	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

PINE TREES PRESERVED				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	9	15.1	15.1	
2	12	17.3	17.3	
TOTAL		32.4	32.4	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

OAK TREES REMOVED				
#	TREE #	SIZE (INCHES)	MITIGATION CREDIT(S)	NOTES & REMARKS
1	1	14.9	14.9	LAUREL OAK
2	2	15.2	15.2	LAUREL OAK
3	4	24.1	24.1	LAUREL OAK
4	6*	12.7	0	LAUREL OAK
5	13*	12.5	0	LAUREL OAK
6	18*	12.9	0	LAUREL OAK
7	19	16.2	16.2	LAUREL OAK
8	23*	12.1	0	LAUREL OAK
9	29	15	15	LAUREL OAK
10	30	15.9	15.9	LAUREL OAK
11	32	15.8	15.8	LAUREL OAK
12	38	14.8	14.8	LAUREL OAK
13	42	14.4	14.4	LAUREL OAK
14	43	20.9	20.9	LAUREL OAK
15	44	23.5	23.5	LAUREL OAK
16	46	15.1	15.1	LAUREL OAK
17	47	23.2	23.2	LAUREL OAK
18	49	14.8	14.8	LAUREL OAK
19	50	17	17	LAUREL OAK
20	51	15.2	15.2	LAUREL OAK
21	53	19.8	19.8	LAUREL OAK
22	54	17	17	LAUREL OAK
23	57	19.4	19.4	LAUREL OAK
24	58	15.1	15.1	LAUREL OAK
25	59	21.4	21.4	LAUREL OAK
26	60	18	18	LAUREL OAK
27	67	14	14	LAUREL OAK
28	68	19.1	19.1	LAUREL OAK
TOTAL		470	419.8	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

OAK TREES PRESERVED				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	8	23.3	23.3	LAUREL OAK
2	10*	12.9	12.9	LAUREL OAK
3	11	18.5	18.5	LAUREL OAK
4	27	27.5	27.5	LIVE OAK
5	28	37.6	37.6	LIVE OAK
6	66	18	18	LAUREL OAK
TOTAL		137.8	119.8	

*NOTE: TREES DO NOT MEET THE MINIMUM DBH OF 14" TO REQUIRE MITIGATION

PALM TREES				
#	TREE #	SIZE (INCHES)	PRESERVATION CREDIT(S)	NOTES & REMARKS
1	5	---		RELOCATE
2	15	---		RELOCATE
3	16	---		RELOCATE
4	17	---		RELOCATE
5	20	---		PRESERVED
6	21	---		PRESERVED
7	22	---		PRESERVED
8	25	---		PRESERVED
9	26	---		PRESERVED
10	31	---		RELOCATE
11	39	---		RELOCATE
12	63	---		RELOCATE
13	64	---		RELOCATE
14	69	---		RELOCATE

VERTICAL DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

NOTES:
1. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE RIGHT-OF-WAY
2. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	ADA PARKING SYMBOL		EXIST. DRAINAGE INLET
	EXISTING CONCRETE	5	EXISTING PALM TREE
	EXISTING PAVEMENT	7	EXISTING PINE TREE
	PROPOSED CONCRETE	2	EXISTING OAK TREE
	PROPOSED PAVEMENT		
	PROPOSED LITTORALS		

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS
NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

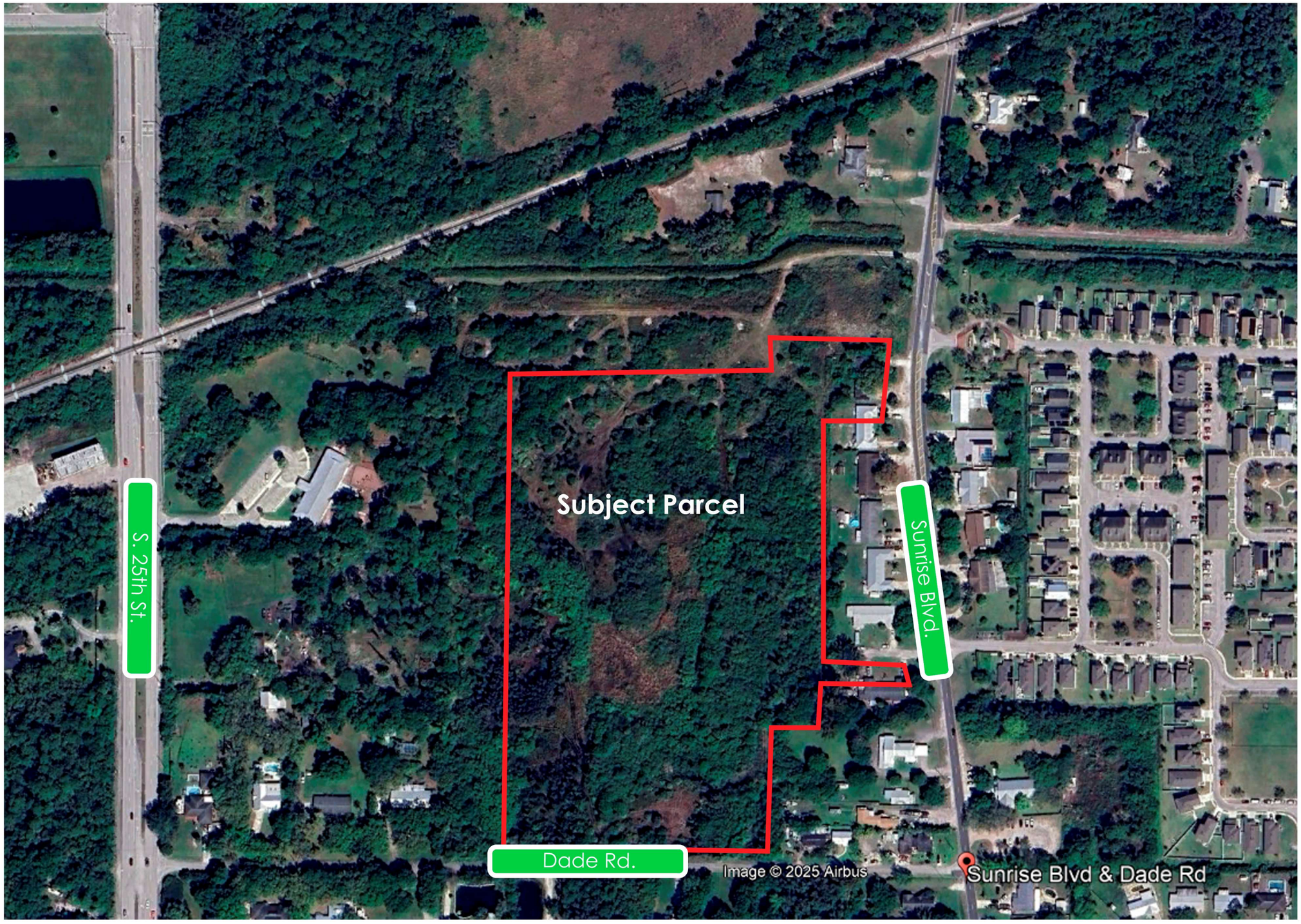
PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
TREE MITIGATION PLAN

DATE	SCALE
4/24/2026	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL
CHECKED BY: MDL	
PROJECT No.: 24-237 SITE PLAN R6.DWG	
(DATE)	DRAWING No.: PD-301
REV:	

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - SUNRISE BLVD, PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\R24-237 SITE PLAN R6.DWG, 2026.04.24, 5:18 AM



Sunrise Blvd- Aerial Map

Fort Pierce, FL

HALEY WARD
WE DO WHAT'S NEXT

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5346992 OR BOOK 5160 PAGE 1944, Recorded 06/06/2024 08:09:46 AM Doc Tax: $25200.00

This Instrument Prepared By:
Logan Wellmeier, Esq.
Dean, Mead, Minton & Moore
1903 South 25th Street, Suite 200
Fort Pierce, Florida 34947
(772) 464-7700

For Official Use Only
Tax Parcel Identification Numbers 2428-321-0001-000-3 and 2428-601-0252-000-6

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made as of the 31st day of May, 2024, by PRIVILEGE DEVELOPMENT LLC, a Florida limited liability company, Document Number L05000084809, whose address is 704 East Hallandale Beach Boulevard, Hallandale, Florida 33008 ("**Grantor**"), to GPS DEVELOPMENTS LLC, a Florida limited liability company, Document Number L23000356524, whose address is 10465 NW 29th Terrace, Miami, FL 33172 ("**Grantee**").

(Whenever used herein, the terms "Grantor" and "Grantee" include all the parties to this instrument and the heirs, personal representatives and assigns of individuals and the successors and assigns of corporations, limited liability companies, partnerships, governmental and quasi-governmental entities.)

WITNESSETH:

THAT GRANTOR, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto Grantee, all that certain parcel of real property (the "**Land**") situate in St. Lucie County, Florida and more particularly described in **Exhibit "A"**, attached hereto and made a part hereof.

TOGETHER WITH all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

AND GRANTOR hereby covenants with Grantee that Grantor is lawfully seized of the Land in fee simple; that Grantor has good right and lawful authority to sell and convey Grantor's interest in and to the Land and hereby warrants the title to the Land and will defend the same against the lawful claims of all persons claiming by, through or under Grantor, but not otherwise. This conveyance is subject to taxes accruing subsequent to December 31, 2023, and to easements, restrictions, agreements, conditions, limitations, reservations and other matters of record, if any, but this reference to the foregoing shall not operate to reimpose the same.

IN WITNESS WHEREOF, the party referred to above as Grantor has caused this instrument to be executed and delivered in its name and has intended the same to be and become effective as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

Witness 1:

Signature: _____
Print Name: LOGAN WELLMEIER
Address: 1903 S. 25th Street Ste. 200
Fort Pierce, FL 34947

Witness 2:

Signature: _____
Print Name: Linda M. Briglia
Address: 1903 S. 25th St. Ste. 200
Fort Pierce, FL 34947

GRANTOR

PRIVILEGE DEVELOPMENT LLC, a Florida limited liability company

By: _____
Simon Cohen, its Authorized Member

STATE OF Florida
COUNTY OF St. Lucie

The foregoing instrument was acknowledged before me by means of (check one) [✓] physical presence or [ ] online notarization this 3rd day of June, 2024, by Simon Cohen, as the Authorized Member of PRIVILEGE DEVELOPMENT LLC, a Florida limited liability company, on behalf of said company. Said person (check one) [ ] is personally known to me, [ ] produced a driver's license issued by a state of the United States within the last five (5) years as identification, or [✓] produced other identification, to wit: Passport.

[Affix Notary Seal]

LINDA M. BRIGLIA NOTARY PUBLIC MY COMMISSION EXPIRES 9-1-2027 STATE OF FLORIDA COMMISSION NUMBER HH 415835

_____
Print Name: Linda M. Briglia
Notary Public, State of Florida
Commission No.: HH 415835
My Commission Expires: 9/1/27

Exhibit "A"

Legal Description

PARCEL 1:

The East 1/2 of the Northwest 1/4 of the Southwest 1/4 of Section 28, Township 35 South, Range 40 East, St. Lucie County, Florida, LESS AND EXCEPTING THEREFROM all rights-of-way for public roads and drainage canals.

PARCEL 2:

Lots 1 through 4; the West 130 feet of Lots 5 through 16; all of Lot 17; the West 130 feet of Lots 18 and 19, Block F, MARAVILLA HEIGHTS, according to the Plat thereof recorded in Plat Book 5, Page 1, of the Public Records of St. Lucie County, Florida.

GPS Developments, LLC
10465 NW 29th Terrace
Miami, FL 33172

AGENT CONSENT FORM

Project Name: Sunrise Boulevard
Parcel ID: 2428-321-0001-000-3 and 2428-601-0252-000-6

BEFORE ME THIS DAY PERSONALLY APPEARED Ajit Singh Chhabra, WHO BEING DULY SWORN, DEPOSES AND SAYS THE FOLLOWING:

I hereby give CONSENT to Haley Ward, Inc. to act on my behalf, to submit or have submitted applications and all required material and documents, and to attend and represent me at all meetings and public hearings pertaining all City, County and State permits for completion of the project indicated above. Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application for the proposed use of a residential development.

FURTHER AFFIANT SAYETH NOT.

The foregoing instrument was acknowledged before me this 17 day of June, 2025, by Ajit Singh Chhabra (Name of Person Acknowledging) who is personally known to me or who has produced Florida Driver License (type of identification) as identification and who did (did not) take an oath.

Notary Signature

Carmen Maria Jimenez
Printed Name of Notary

NOTARY PUBLIC STATE OF FLORIDA
CARMEN MARIA JIMENEZ
Notary Public - State of Florida
Commission # HH 599956
My Comm. Expires Oct 3, 2028

October 3, 2028
My commission expires

Owner's Signature

AJIT CHHABRA
Owner's Name

6336 S.W 161 PLACE
Street Address

MIAMI FL 33193
City, State, Zip

(305) 322-4562 / AJITCHHABRA@HOTMAIL.COM
Telephone / Email

IRREVOCABLE LICENSE

THIS IRREVOCABLE LICENSE (this "**License**") is granted this ____ day of _____, 2025 (the "**Effective Date**") by GPS DEVELOPMENTS LLC, a Florida limited liability company whose address is 10465 NW 29th Terrace, Miami, FL 33172, ("**Licensor**"), in favor of MARY RAYNER and BEVERLY ANN BOYETTE BUSTIN of 703 Sharon Terrace, Fort Pierce, FL 34982, and RODIN LOUIS of 702 Sharon Terrace, Fort Pierce, FL 34982 (collectively, Rayner, Bustin and Louis are referred to herein as "**Licensee**").

1. OCCUPANCY. Licensee currently occupies the Premises (as defined below) without benefit of title.

2. GRANT OF LICENSE. Licensor hereby grants to Licensee a license to occupy and use, subject to all of the terms and conditions hereof, the real property more specifically described in **Exhibit "A"** attached hereto and made a part hereof (the "**Premises**").

3. LIMITATION TO DESCRIBED PURPOSE. The Premises may be occupied and used by Licensee solely for ingress and egress between Sunrise Boulevard and the residential structures currently designated as 702 and 703 Sharon Terrace in Fort Pierce, Florida, as generally described in **Exhibit "B"** attached hereto and made a part hereof (each a "**Property**," collectively the "**Properties**"). This License shall be in effect for a limited duration, until it is terminated as hereinafter provided.

4. TERMINATION. This License is irrevocable with respect to Licensor. This License will automatically expire for each Property upon the earlier to occur of 1) the Rebuilding (as defined below) of the structure on such Property, or 2) ten (10) years after the Effective Date. Upon the earlier occurrence of either of the foregoing, this License and the rights contemplated herein shall expire with respect to that Property, and all future access to Sunrise Boulevard shall be directly from each Property, itself, without use of the Premises. For the purposes of this paragraph, "**Rebuilding**" means restoring or modifying 70% (or more) of the structural and architectural elements of each structure, in relation to how that structure exists on the Effective Date.

6. CONDITION OF PREMISES NOT WARRANTED. Licensor does not warrant or represent that the Premises is safe, healthful, or suitable for the purposes for which it is permitted to be used under the terms of this License or for any purpose, whatsoever. Licensor shall have no obligation to maintain a road or driveway on the Premises. Licensee assumes all risks associated with or related to occupancy and/or use of the Premises by Licensee as well as all of Licensees' guests, invitees, agents, heirs, assigns, and licensees.

8. NOT A GRANT OF AN INTEREST OR ESTATE. By this License, Licensor does not intend to grant to Licensee any interest or estate in the Premises and specifically denies any such interest or estate in Licensee. This License is given at the request of the City of Fort Pierce, Florida as a condition to entitlement of Licensor's neighboring property.

9. NO ASSIGNMENT. This License shall run with the land but cannot be separated from the Properties.

IN WITNESS WHEREOF, Licensor has subscribed its name and has caused this Irrevocable License Agreement to be executed as of the day and year first above written.

Signed, sealed and delivered in the presence of the following two witnesses:

GRANTOR:

GPS DEVELOPMENTS LLC, a Florida limited liability company

_____
Print Name: _____

By: _____
Mandeep Singh, its President and Manager

_____
Print Name: _____

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this ___ day of ____, 2025 by GPS Developments LLC, by Mandeep Singh, its President and Manager, on behalf of said company. He is [ ] personally known to me OR [ ] has produced _____ as identification.

_____
(Signature of Notary Public)
Print Name: _____
Notary Public, State of _____
Commission No.: _____
My Commission Expires: _____

EXHIBIT "A"
The Premises

(attachment)

EXHIBIT "B"
The Properties

702 Sharon Terrace (PID # 2428-601-0266-000-7)

From the Northwest corner of LOT 1, BLOCK F of MARAVILLA HEIGHTS, as recorded in Plat Book 5, Page 1, of the Public Records of St. Lucie County; run south 87°54'40" East along the North line of said Lot 1, 130 feet; thence run South 0°17'43" West parallel with the West Line of said Block F a distance of 700 feet; to the point of beginning; thence continue South 0°17'43" West 95 feet; thence run South 89°43'17" East to the West right-of-way of Sunrise Boulevard; thence run Northerly along said right-of-way to a point that is 95 feet due North of the South line of this parcel; thence run North 89°43'17" West to the Point of beginning.

703 Sharon Terrace (PID# 2428-601-0269-000-8)

MARAVILLA HTS BLK F FROM NW COR LOT 1 RUN S 87 DEG 54 MIN 40 SECE ALG N LI OF LOT 1 130 FT, TH S 0 DEG 17 MIN 43 SEC W // WITH W LI OF BLK 855 FT FOR POB, TH CONT S 0 DEG 17 MIN 43 SEC W 95 FT TO S LI BLK, TH ELY ALG S LI OF BLK TO W R/W SUNRISE BV, TH NLY ALG R/W 95 FT, TH W // WITH S LI BLK TO POB (0.50 AC) (OR 1175-2966)

Legal Description

Sunrise Blvd.

Parcel ID: 2428-321-0001-000-3

2428-601-0252-000-6

PARCEL 1:

THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

PARCEL 2:

LOTS 1 THROUGH 4; THE WEST 130 FEET OF LOTS 5 THROUGH 16; ALL OF LOT 17; THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

CONTAINING 21.97 ACRES, MORE OR LESS.

Patricia Sesta

From: Brad Currie
Sent: Monday, June 3, 2024 6:44 PM
To: Logan Wellmeier; Patricia Sesta
Subject: RE: SOE Letter for Privilege North Site Plan extension

Awesome!

Brad Currie, AICP
Vice President | Planning Division

10250 SW Village Parkway - Suite 201
Port Saint Lucie, Florida 34987

O: 772.462.2455 | C: 772.812.8264
BradCurrie@EDC-Inc.com | www.EDC-Inc.com

From: Logan Wellmeier <lwellmeier@deanmead.com>
Sent: Monday, June 3, 2024 6:28 PM
To: Brad Currie <bradcurrie@edc-inc.com>; Patricia Sesta <patriciasesta@edc-inc.com>
Subject: Fwd: SOE Letter for Privilege North Site Plan extension

FYI.

Get Outlook for iOS

DEAN MEAD
www.deanmead.com

Logan Wellmeier
Attorney at Law
lwellmeier@deanmead.com
O: 772-464-7700 D: 772-462-6714
Dean, Mead, Minton & Moore
1903 S. 25th Street, Suite 200, Fort Pierce, Florida 34947
Fort Pierce | Naples | Orlando | Vero Beach | Viera/Melbourne

PRIVILEGED INFORMATION DISCLAIMER: This email is intended solely for the use of the individual to whom it is addressed and may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law. If the reader of this email is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please delete this email, destroy any hard copies thereof, and notify us immediately by telephone. Thank you.

From: Vennis Gilmore <vgilmore@cityoffortpierce.com>
Sent: Wednesday, December 27, 2023 12:13 PM
To: Logan Wellmeier <lwellmeier@deanmead.com>; Planning Department <planning@cityoffortpierce.com>
Subject: RE: SOE Letter for Privilege North Site Plan extension

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

The City of Fort Pierce Planning Department acknowledges and accepts the new extension timeframe of 48 months per Florida State Executive Orders 22-255 and 22-256, which will make the new expiration date March 6th, 2028 for the Privilege Development North Site Plan located at or near 3315 Sunrise Boulevard **(Parcel ID(s): 2428-601-0252-000-6, 2428-321-0001-000-3)**

Best Regards,

Vennis Gilmore | Assistant Planning Director | City of Fort Pierce
Planning Department
Phone: 772.467.3741 100 North U.S. 1 Fort Pierce, FL 34950

Website | Facebook | Survey



From: Logan Wellmeier <lwellmeier@deanmead.com>
Sent: Monday, December 18, 2023 1:44 PM
To: Planning Department <planning@cityoffortpierce.com>
Subject: RE: SOE Letter for Privilege North Site Plan extension

SECURITY WARNING: This email originated outside of the City of Fort Pierce systems. Please use caution when clicking links or opening attachments. For questions or concerns please contact IT immediately. .

Good afternoon, all, and happy Monday!

I'm just checking in with respect to the below email… would someone please send me an update?

Thanks!

Respectfully,
Logan

DEAN MEAD
www.deanmead.com

Logan Wellmeier
Attorney at Law
lwellmeier@deanmead.com
O: 772-464-7700 D: 772-462-6714
Dean, Mead, Minton & Moore
1903 S. 25th Street, Suite 200, Fort Pierce, Florida 34947
Fort Pierce | Naples | Orlando | Tallahassee | Vero Beach | Viera/Melbourne

PRIVILEGED INFORMATION DISCLAIMER: This email is intended solely for the use of the individual to whom it is addressed and may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law. If the reader of this email is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please delete this email, destroy any hard copies thereof, and notify us immediately by telephone. Thank you.

From: Logan Wellmeier
Sent: Friday, December 8, 2023 3:35 PM
To: Planning Department <planning@cityoffortpierce.com>
Subject: SOE Letter for Privilege North Site Plan extension

Happy Friday, all!

Please find attached an extension letter for the Privilege North Development, extending the expiration date of the Site Plan. Please let me know if there's anything else I need to submit to obtain this extension.

Many thanks, and I hope everyone has a great weekend!

Respectfully,
Logan

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	NSLRWCD ROW / Residential	RM (SLC)	AR -1 / RM-9 (SLC)
South	Residential	RU (SLC)	AR-1 / RS-2 (SLC)
East	Residential	RL / RM (FP) RM (SLC) INST (FP)	PD (FP), R-4(FP) R-3 (FP) RM-9 (SLC)
West	Pre-school / Residential	RM (FP) RU (SLC)	R-4 (FP) AR-1 (SLC)

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RM	R-4	10	21.97	219
****Proposed**	RM	PD	10	21.97	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 56,940 gpd
**Proposed Zoning/FLU	Total gallons per day 47,840 gpd
**Change in Demand	Total gallons per day reduction of 9,100 gpd

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 56,940 gpd
**Proposed Zoning/FLU	Total gallons per day 47,840 gpd
**Change in Demand	Total gallons per day reduction of 9,100 gpd

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people	2.239	2.235	-0.00455
Urban District	5 acres per 1,000 people	8.959	8.984	-0.0182
Community	2.5 acres per 1,000 people	17.9186	17.8822	-0.0364
Neighborhood	1.36 acres per 1,000 people	32.9385	32.8716	-0.06691

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name	Samuel Gaines Academy	Fort Pierce Central High School
City	Fort Pierce	Fort Pierce
Distance	4.4 miles	1.5 miles
Current Zoning/FLU Enrollment Demand	62	27
****Proposed Zoning/FLU Enrollment Demand**	52	22
****Change in Demand**	reduction of 10	reduction of 5

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	1,773.90
****Proposed Zoning/FLU**	1,490.40
***Change in Demand**	reduction of 283.50

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	THE STORMWATER MANAGEMENT SYSTEM FOR THE SITE WILL CONSIST OF A SERIES OF INLETS CONNECTED VIA UNDERGROUND PIPES WHICH CONVEY STORMWATER TO AN ONSITE WET DETENTION AREA. THE WET DETENTION AREA WILL TREAT AND ATTENUATE STORMWATER PRIOR TO DISCHARGING OFFSITE TO THE NSLRWCD CANAL NO. 10.

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	1,460	90 AM / 113 PM
****Proposed Zoning/FLU**	1,225	80 AM / 100 PM
***Change in Demand**	Trips reduction	Trips reduction
Impact to Capacity	decrease of 235 trips	decrease of 10 AM / 13 PM

IV. Project Description

PHASING	
Is this project (phase) part of a larger project?	☐ Yes ☑ No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.	
Total Project: Residential Units:	Single Family: 184 TH Multifamily:
Non-residential (square footage):	
Mixed-use (describe use):	
(If this is a single phase project, name it Phase I – Total)	

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached	1			12/01/2025	12/01/2027
Multi-family					
Other (specify)	2			01/01/2028	01/01/2030

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? _____

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

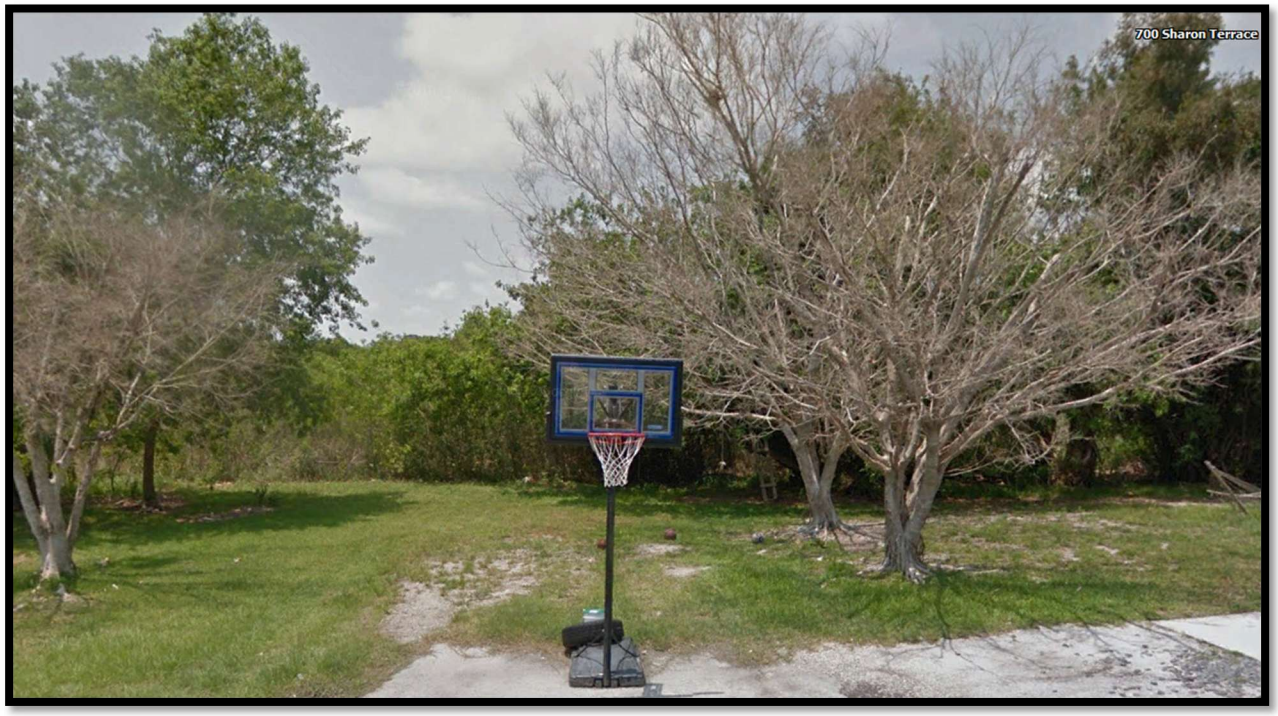
** Complete section if requesting a change in zoning, future land use, or expanding

Contextual Photos Subject Property

Northeast Corner – Facing West



Eastern Property Line – Facing West



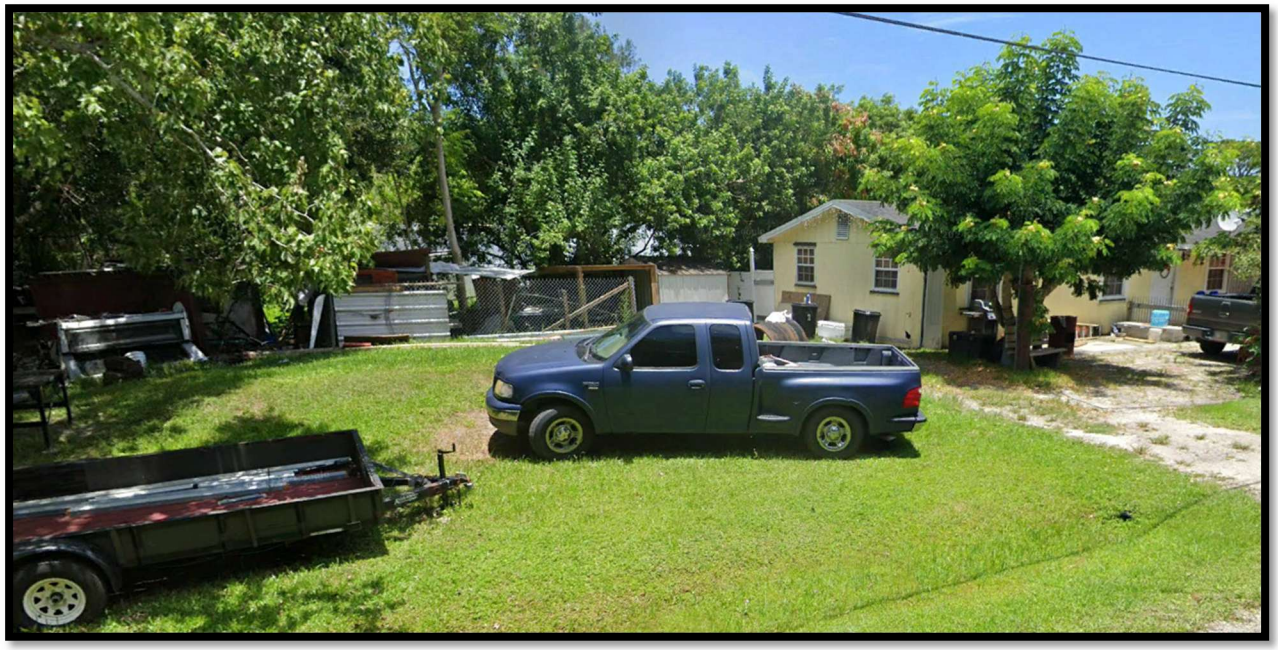
Southern Property Line – Facing North



Neighborhood – East of Subject Parcel



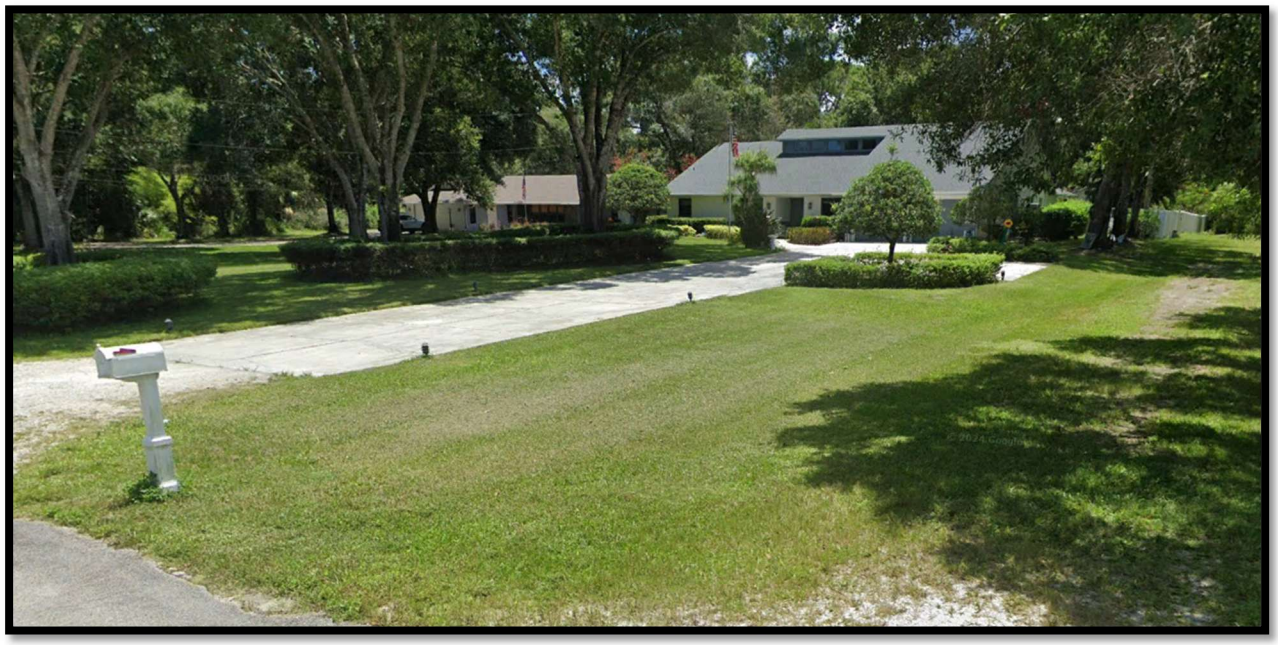
Neighborhood – South / East of Subject Parcel



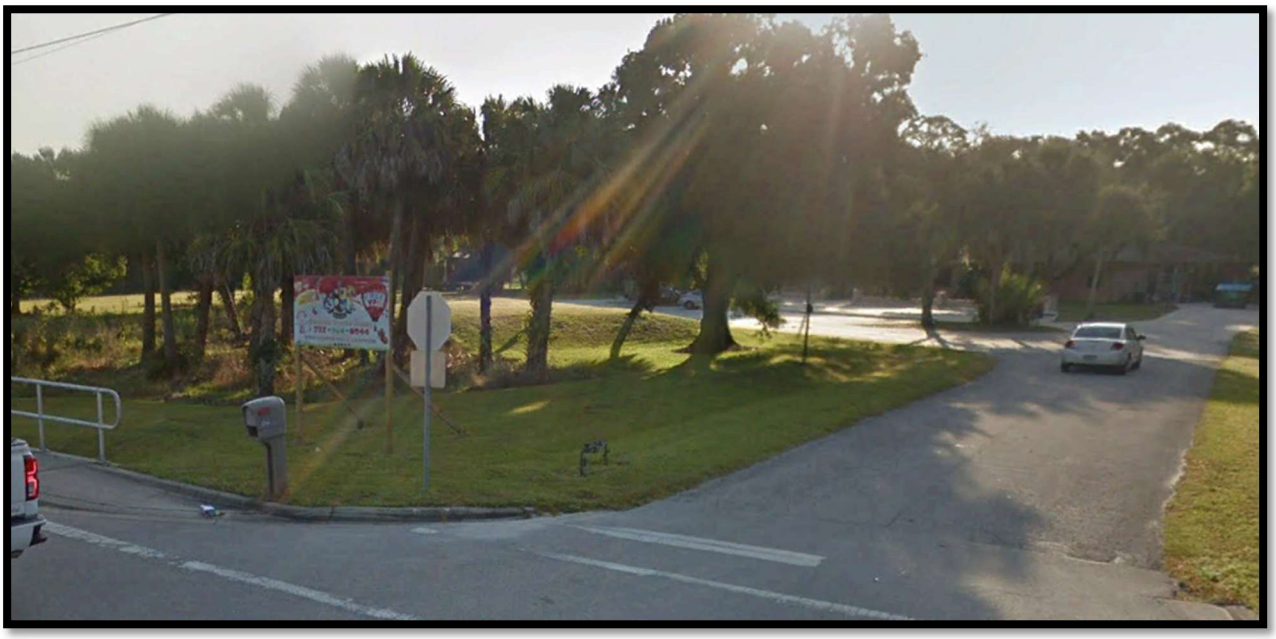
Neighborhood – South / West of Subject Parcel



Neighborhood –South of Dade Road

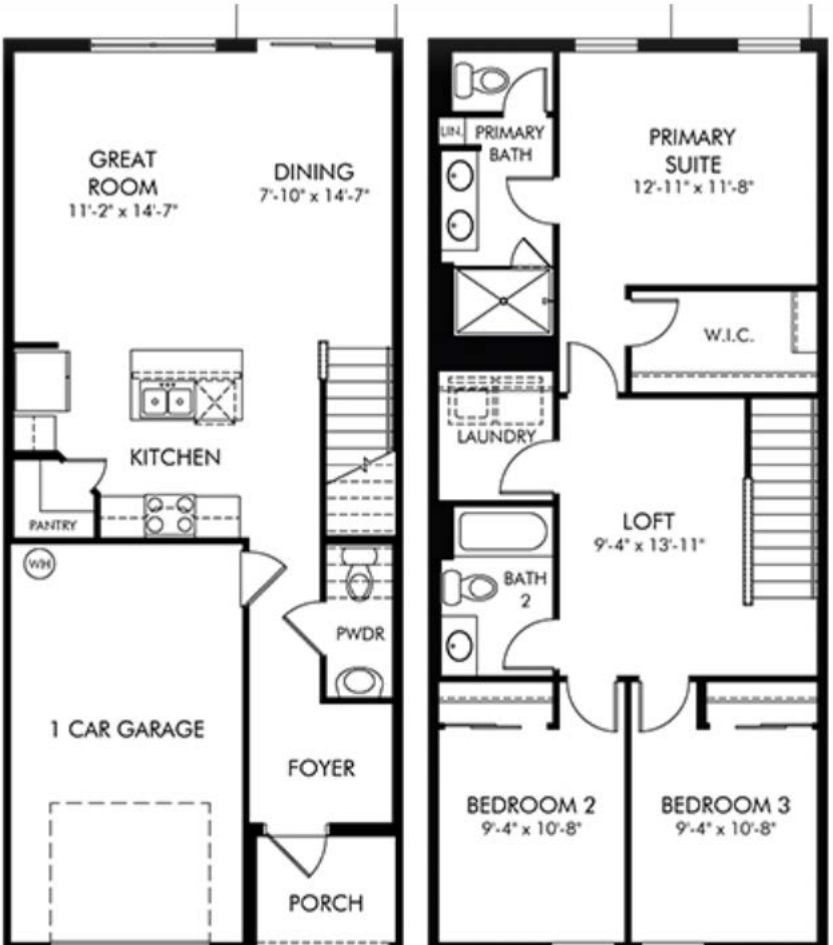


Neighborhood –West of Subject Parcel





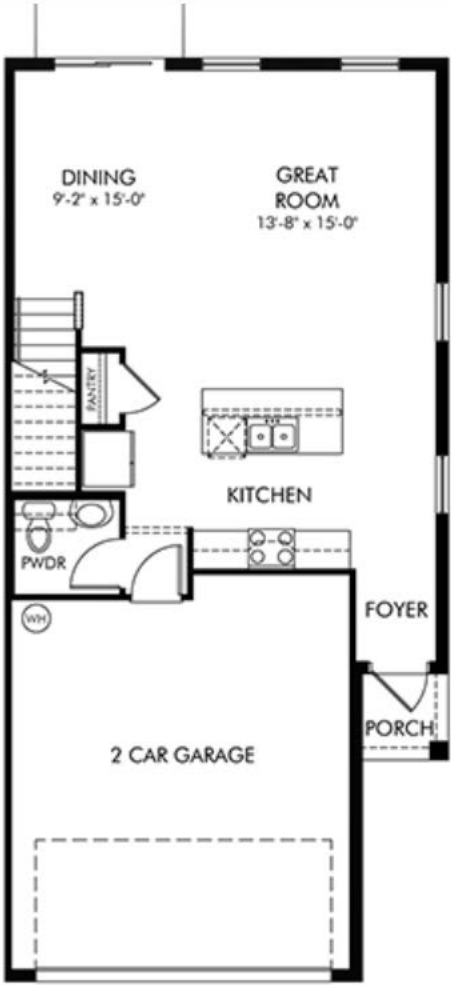

444
440
436
GUARANTEED
READY
TO CLOSE
IN 60 DAYS
MeritageHomes



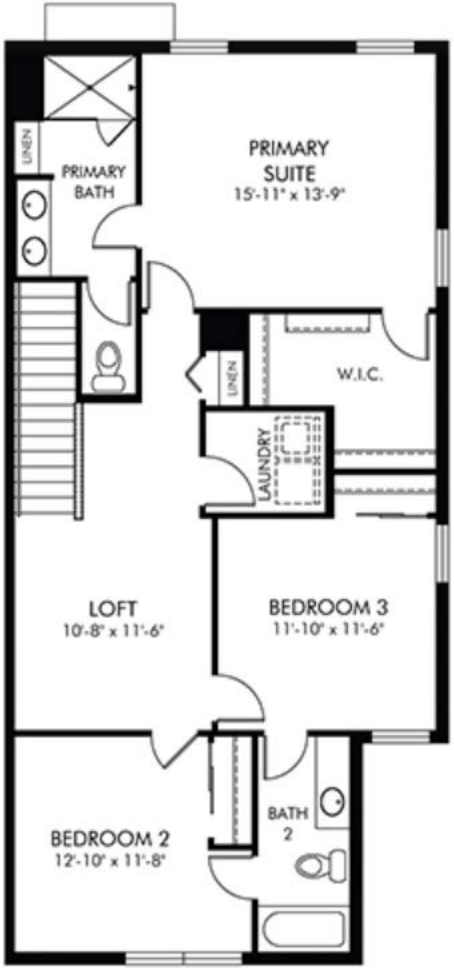
FIRST FLOOR

SECOND FLOOR


482
478



FIRST FLOOR



SECOND FLOOR

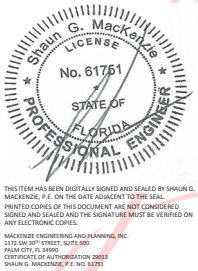
TRAFFIC IMPACT ANALYSIS

Sunrise Boulevard
Fort Pierce, FL

Prepared for:
GPS Developments, LLC
Doral, Florida 33172

Prepared by:

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030



Digitally signed by Shaun G MacKenzie
Date: 2025.06.02 18:07:11 -04'00'

Shaun G. MacKenzie P.E.
PE Number 61751

036014
May 2025
© MacKenzie Engineering and Planning, Inc.
CA 29013

EXECUTIVE SUMMARY

MacKenzie Engineering & Planning, Inc. was retained to prepare the traffic impacts report for Sunrise Boulevard located at the northeast corner of 2100 Dade Road, Fort Pierce, FL (PCN: 2428-321-0001-000-3). The applicant proposes to construct 184 townhomes. The build out year is 2028.

The proposed development is expected to generate the following net external and driveway trips:

- 1,255 daily, 80 AM peak hour (19 in/61 out), and 100 PM peak hour (63 in/37 out) trips.

Turn lanes are not warranted at the Dade Road or Sunrise Boulevard driveways.

The project satisfies Fort Pierce transportation concurrency requirements. No improvements are required.

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
TABLE OF CONTENTS ii
LIST OF FIGURES iii
LIST OF TABLES iii
INTRODUCTION 1
CURRENT DATA 2
TRIP GENERATION 2
PROPOSED USES 2
INTERNAL CAPTURE 2
PASS-BY TRIP CAPTURE 2
HISTORICAL GROWTH 3
ASSURED, PROGRAMMED AND PLANNED CONSTRUCTION 4
TRAFFIC DISTRIBUTION AND ASSIGNMENT 5
ROADWAY ANALYSIS 7
ROADWAY CAPACITY 7
STUDY AREA 7
ANALYSIS 8
INTERSECTION ANALYSIS 10
INTERSECTIONS 10
PEAK HOUR FACTOR (PHF) 10
ANALYSIS 11
ACCESS 13
DRIVEWAY 1 – SUNRISE BOULEVARD 14
DRIVEWAY 2 – DADE ROAD 15
CONCLUSION 16
APPENDICES 17

LIST OF FIGURES

Figure 1. Site Location Map 1
Figure 2. Traffic Assignment 6
Figure 3. Driveway Volumes 13
Figure 4A. Sunrise Boulevard Right-Turn Lane Warrant Analysis 14
Figure 4B. Sunrise Boulevard Left-Turn Lane Warrant Analysis 14
Figure 5A. Sunrise Boulevard Right-Turn Lane Warrant Analysis 15
Figure 4B. Sunrise Boulevard Left-Turn Lane Warrant Analysis 15

LIST OF TABLES

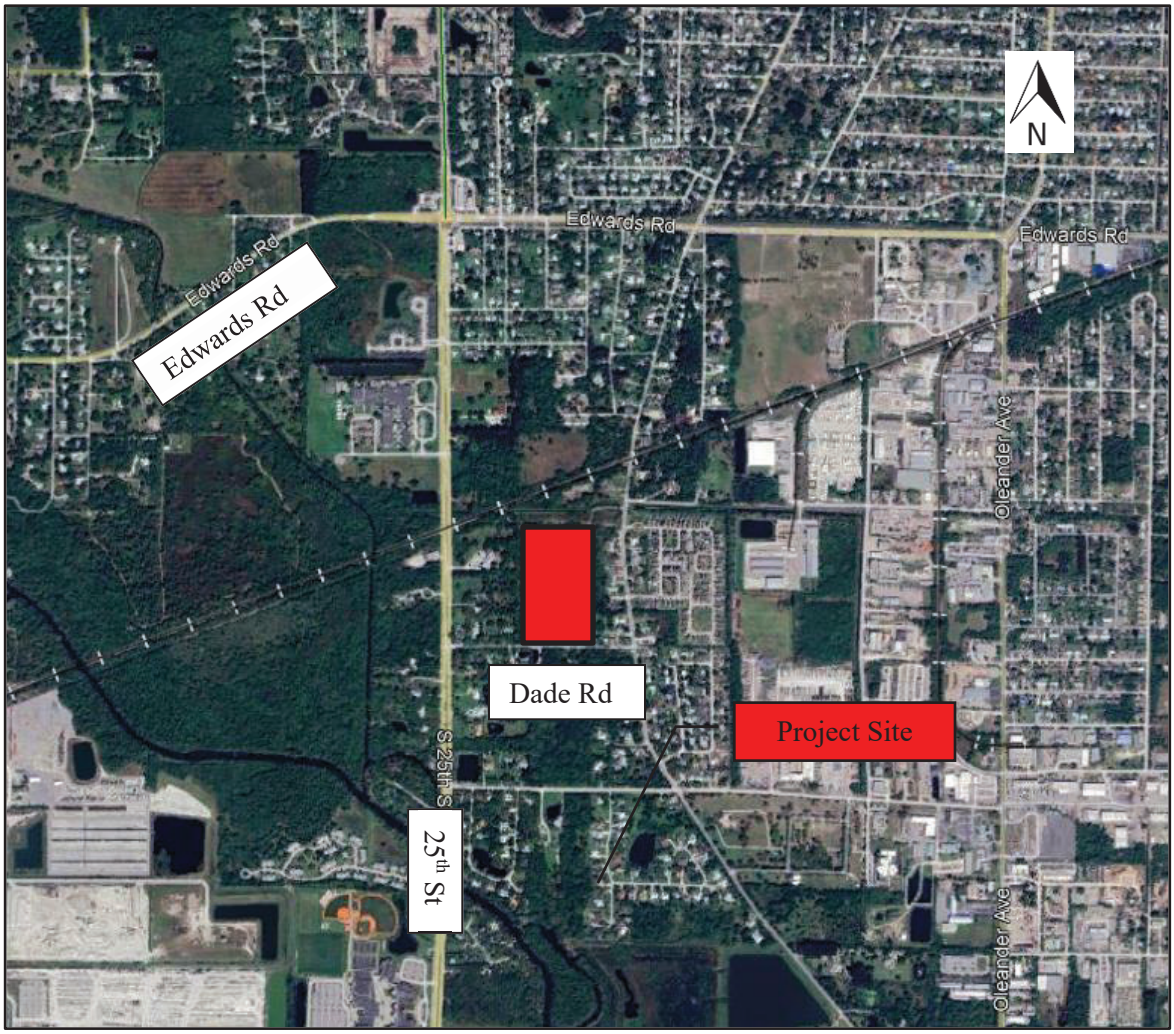
Table 1. Trip Generation 3
Table 2. Growth Rate Calculation 4
Table 3. Project Impacts (Significance) 8
Table 4A. Peak Hour One-Way Roadway Analysis (2028) – AM 9
Table 4B. Peak Hour One-Way Roadway Analysis (2028) – PM 9
Table 5A. Edwards Road & Sunrise Boulevard Intersection Results 11
Table 5B. Selvitz Road & Midway Road Storage Analysis 11
Table 6. 25th Street & Dade Road Intersection Results 12
Table 7. Sunrise Boulevard & Dade Road Intersection Results 12

INTRODUCTION

MacKenzie Engineering & Planning, Inc. was retained to prepare the traffic impacts report for Sunrise Boulevard located at the northeast corner of 2100 Dade Road, Fort Pierce, FL (PCN: 2428-321-0001-000-3). The applicant proposes to construct 184 townhomes. The build out year is 2028. Figure 1 shows the site location.

The proceeding analysis will examine the ability of the existing roadway network to accommodate the increased demand and the future roadway network to accommodate the increased demand.

Figure 1. Site Location Map



CURRENT DATA

The information contained below was used to develop the foregoing traffic analysis.

- FDOT's 2023 Quality/Level of Service Manual
- *Trip Generation, 11th Edition* (ITE report)
- St. Lucie County Transportation Improvement Program (FY 2024/25 – FY 2028/29)
- St. Lucie County Traffic Counts and Level of Service Report (2024)

Haley Ward, Inc. provided site information.

TRIP GENERATION

The study uses trip generation rates for Multifamily Housing (Low-Rise) (ITE Land Use 220) published in the Institute of Transportation Engineers' (ITE) report, *Trip Generation (11th Edition)*.

Proposed Uses

- 184 Multifamily House (Low-Rise) DUs (ITE Land Use 220)

The proposed development is expected to generate the following net external and driveway trips:

- 1,255 daily, 80 AM peak hour (19 in/61 out), and 100 PM peak hour (63 in/37 out) trips.

Internal Capture

Internal capture is 0%.

Pass-by Trip Capture

The pass-by capture is 0%.

Table 1. Trip Generation

ITE Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								
Multi-family Housing (Low-rise)	184 DU	1,255	80	19	61	100	63	37
NET PROPOSED TRIPS		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***
Total Proposed Driveway Volumes		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multi-family Housing (Low-rise)	220	DU	T = 6.41(X) + 75.31	0%	24/76	T = 0.31(X) + 22.85	63/37	T = 0.43(X) + 20.55

Copyright ©2025 , MacKenzie Engineering and Planning, Inc.

ITE 11th Edition

HISTORICAL GROWTH

Historic growth rates were determined based on St. Lucie County TPO traffic data as shown in Table 2. Growth on the roads is based on the best fit slope, which is an estimated annual growth rate in vehicles. The total average annual growth (in vehicles) was divided by the estimated total traffic to result in a weighted average growth rate. The historic annual growth on the surrounding facilities between 2021 and 2025 is 1.1%. A 2.5% annual compound growth rate will be used in the study to provide a conservative analysis.

Table 2. Growth Rate Calculation

Road Name	Segments	Count Site	2021 AADT	2022 AADT	2023 AADT	2024 AADT	2025 AADT	Annual Absolute Growth	Growth Rate
Bell Ave	W of Sunrise Blvd	94-7003	6,800	6,800	7,000	5,200	-	-460	-8.8%
	E of Sunrise Blvd	94-7002	5,500	5,500	5,700	3,800	-	-490	-12.9%
Farmer's Market Rd	W of US 1	94-7010	1,750	1,750	1,880	1,880	-	52	2.8%
Edwards Rd	E of Mcneil Rd	94-0026	12,600	12,800	13,200	13,200	-	220	1.7%
	W of Sunrise Blvd	94-7007	17,000	16,900	17,300	14,200	-	-800	-5.6%
	S 25th St to Oleander Ave	94-8543	11,000	11,000	11,300	11,300	-	120	1.1%
	W of SR 5/US 1	94-0027	8,300	8,300	8,500	8,500	-	80	0.9%
Midway Rd	W of Sunrise Blvd	130	-	18,500	21,000	25,000	22,500	1,600	7.1%
	W of 25th St	132	16,500	18,500	21,500	22,500	21,000	1,300	6.2%
25th St	N of SR 70/Virginia Ave	94-0015	24,500	24,000	23,500	24,000	-	-200	-0.8%
	S of Cortez Blvd	94-0021	22,000	23,000	23,000	25,500	-	1,050	4.1%
	N of Dade Rd	94-8549	15,700	15,700	16,100	20,500	-	1,480	7.2%
SR 70/Virginia Ave	E of SR 615	94-0033	22,500	24,500	24,500	24,500	-	600	2.4%
	W of SR 615	94-0032	30,000	23,500	23,000	25,000	-	-1,550	-6.2%
Oleander Ave	N of Midway Rd	94-0168	7,200	7,200	7,400	7,400	-	80	1.1%
	Farmer Market Rd to Kanner Dr	94-8541	10,000	10,000	10,300	9,300	-	-180	-1.9%
	Roselyn Ave to Osceola Ave	94-8542	10,500	10,500	10,800	9,400	-	-300	-3.2%
Sunrise Blvd	S of Virginia Ave	94-7097	6,500	6,700	6,700	-	-	100	1.5%
	N of Edwards Rd	94-7099	6,100	6,100	6,300	6,300	-	80	1.3%
	S of Edwards Rd	94-7041	3,700	3,700	3,800	3,800	-	40	1.1%
	N of Midway Rd W	94-7045	2,700	2,700	2,700	3,400	-	210	6.2%
					Weighted Average				**1.1%**
					Growth Rate Used				**2.5%**

ASSURED, PROGRAMMED AND PLANNED CONSTRUCTION

A review conducted of the Five-Year Plan of TPO LRTP, St. Lucie County and FDOT, as well as those improvements committed by the developers of projects in the area include:

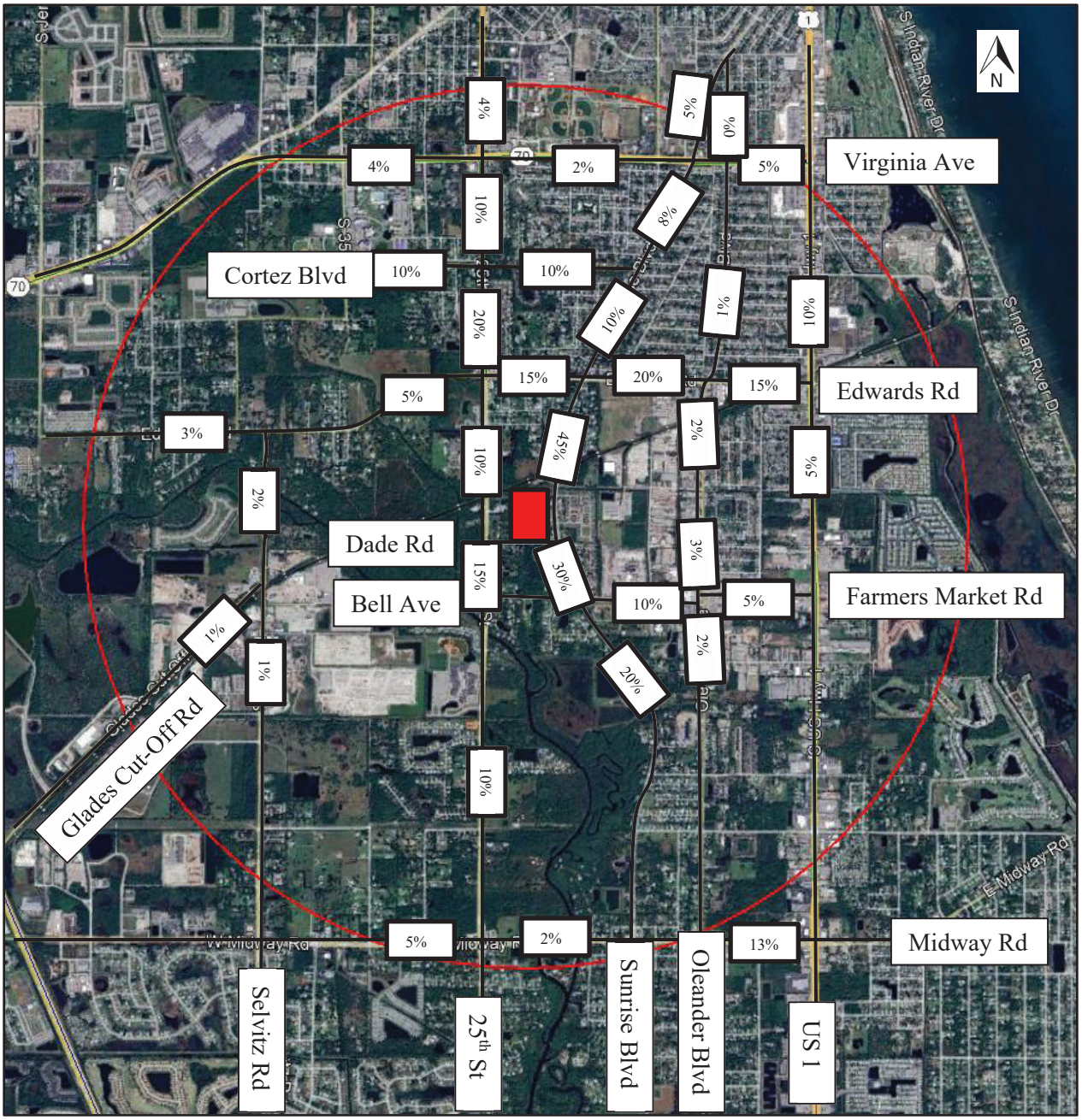
- Selvitz Road & Glades Cut-Off Road – Intersection Improvements
- Selvitz Road – Midway Road to Glades Cut-Off Road (Increase Roadway Capacity to 960 (1,070 x 0.9)) because of Glades Cut-Off Road & Selvitz Road intersection improvement
- Selvitz Road – Edwards Road to Glades Cut-Off Road – 4-Laning (Increase Roadway Capacity to 1,665 (1,850 x 0.9))

TRAFFIC DISTRIBUTION AND ASSIGNMENT

Traffic distribution and assignment were determined using existing traffic counts, based on trips in and out of the project driveway and traffic counts at adjacent intersections. The project traffic assignment is illustrated in Figure 2. The overall distribution is summarized by general directions and is depicted below:

NORTH - 55 percent
SOUTH - 45 percent

Figure 2. Traffic Assignment



ROADWAY ANALYSIS

Roadway Capacity

Roadway classification follows the local government's Comprehensive Plan outlining the roadway functional classification. The local government Transportation Element outlines the minimum Level of Service (LOS) for each roadway functional classification. Roadway Capacity is based on the St. Lucie TPO's 2024 Level of Service Report. Where road segment information is not available or improvements are committed or needed, the study uses local government's minimum LOS stands to apply FDOT's 2023 Multimodal Quality/LOS Handbook.

Study Area

The study area is 2.0 miles based on the St. Lucie TPO Standardized TIS Methodology (STISM) and Procedures manual, Appendix B. Impacts of greater than five percent (5%) are considered to have significant impact outside the study radius ("Study Area" – definition – STISM). Impacts of less than 1 percent are de minimis (STISM Section 1.0). Table 3 displays the determination of study roadway segments.

Table 3. Project Impacts (Significance)

Roadway	From	To	E+C Lanes	Roadway Capacity	FDOT Context Classification	Percent Assignment	Project Traffic	Impact	Significant Impact?
Edwards Rd	Jenkins Rd	Mcneil Rd	2	630	C3R	3%	2	0.32%	NO
	Mcneil Rd	Selvitz Rd	2	700	C3R	3%	2	0.29%	NO
	Selvitz Rd	25th St	2	880	C3R	5%	3	0.34%	NO
	25th St	Sunrise Blvd	4	1,630	C3R	15%	9	0.55%	NO
	Sunrise Blvd	Oleander Ave	4	1,630	C3R	20%	13	0.80%	NO
	Oleander Ave	US 1	4	1,630	C3C	15%	9	0.55%	NO
Farmer's Market Rd	Oleander Ave	US 1	2	750	C3C	5%	3	0.40%	NO
25th St	Midway Rd	Bell Ave	4	1,810 *	C3C	10%	6	0.33%	NO
	Bell Ave	Edwards Road	4	2,100	C3C	15%	9	0.43%	NO
	Edwards Road	Cortez Blvd	4	1,810 *	C3C	20%	13	0.72%	NO
	Cortez Blvd	Virgina Ave	4	2,000	C3C	10%	6	0.30%	NO
	Virgina Ave	Nebaraska Ave	4	1,810 *	C3C	4%	3	0.17%	NO
Oleander Ave	Midway Rd	Weatherbee Rd	2	750	C3R	2%	1	0.13%	NO
	Weatherbee Rd	Bell Ave	2	540	C3C	2%	1	0.19%	NO
	Bell Ave	Farmer's Market Rd	2	540	C3C	8%	5	0.93%	NO
	Farmer's Market Rd	Edwards Rd	2	750	C4	3%	2	0.27%	NO
	Edwards Rd	Wisteria Ave	2	750	C4	1%	1	0.13%	NO
	Wisteria Ave	Gardenia Ave	2	540	C3R	1%	1	0.19%	NO
	Gardenia Ave	Virginia Ave	2	790	C3R	1%	1	0.13%	NO
	Virginia Ave	Sunrise Blvd	2	600	C3R	0%	0	0.00%	NO
Midway Rd	Selvitz Rd	Christensen Rd	4	2,100	C3R	5%	3	0.14%	NO
	Christensen Rd	25th St	4	2,100	C3R	5%	3	0.14%	NO
	25th St	Oleander Ave	4	2,100	C3R	2%	1	0.05%	NO
	Oleander Ave	US 1	4	2,100	C3R	13%	8	0.38%	NO
Sunrise Blvd	Midway Rd	Bell Ave	2	540	C3R	20%	13	2.41%	YES
	Bell Ave	Dade Rd	2	750	C3R	30%	19	2.53%	YES
	Dade Rd	Edwards Rd	2	750	C3R	45%	28	3.73%	YES
	Edwards Rd	Cortez Blvd	2	600	C3R	10%	6	1.00%	YES
	Cortez Blvd	Virginia Ave	2	750	C3R	8%	5	0.67%	NO
	Virginia Ave	Oleander Ave	2	750	C3R	5%	3	0.40%	NO
US 1	Farmer's Market Rd	Edwards Rd	4	1,790 *	C4	5%	3	0.17%	NO
	Edwards Rd	Savannah Rd	4	1,790 *	C4	10%	6	0.34%	NO
Cortez Blvd	35th St	25th St	2	750	C4	10%	6	0.80%	NO
	25th St	Sunrise Blvd	2	750	C4	10%	6	0.80%	NO
Bell Ave	25th St	Sunrise Blvd	2	790	C3R	0%	0	0.00%	NO
	Sunrise Blvd	Oleander Ave	2	600	C3R	10%	6	1.00%	YES
Virginia Ave	Okeechobee Rd	25th St	6	2,810 *	C4	4%	3	0.11%	NO
	25th St	Sunrise Blvd	6	2,730 *	C3R	2%	1	0.04%	NO
	Sunrise Blvd	Oleander Ave	6	2,730 *	C3R	3%	2	0.07%	NO
	Oleander Ave	US 1	6	2,730 *	C3R	5%	3	0.11%	NO
Selvitz Rd	Midway Rd	Glades Cut-Off Rd	2	960 *	C3C	1%	1	0.10%	NO
	Glades Cut-Off Rd	Edwards Rd	4	1,665 *	C3C	2%	1	0.06%	NO

*Capacity Based on FDOT's 2023 Multimodal Quality/LOS Handbook

Analysis

Existing traffic volumes were obtained from St. Lucie County TPO. The 2024 peak hour traffic volumes were increased based on the annual compound growth rate to develop the projected year 2028 background traffic volumes. Total volumes were developed by adding background traffic volume plus project trips. The projected total traffic volumes were compared to the service volume on each respective roadway segment to determine if each roadway segment is projected to operate acceptably as shown in Tables 4A & 4B.

Table 4A. Peak Hour One-Way Roadway Analysis (2028) – AM

Roadway	From	To	E+C Lanes	TPO Service Capacity	AM Peak Hour Existing Traffic	Count Year	Growth Rate	2028 Traffic Growth	2028 Background Traffic	Percent Assign ment	Project Traffic	2028 Total Traffic	Meets Service Volume
Sunrise Blvd	Midway Rd	Bell Ave	2	540	219	2024	2.5%	23	242	20%	12	254	YES
	Bell Ave	Dade Rd	2	750	253	2024	2.5%	26	279	30%	18	298	YES
	Dade Rd	Edwards Rd	2	750	520	2024	2.5%	54	574	45%	27	601	YES
	Edwards Rd	Cortez Blvd	2	600	520	2024	2.5%	54	574	10%	6	580	YES
Bell Ave	Sunrise Blvd	Oleander Ave	2	600	251	2024	2.5%	26	277	10%	6	283	YES

Table 4B. Peak Hour One-Way Roadway Analysis (2028) – PM

Roadway	From	To	E+C Lanes	TPO Service Capacity	PM Peak Hour Existing Traffic	Count Year	Growth Rate	2028 Traffic Growth	2028 Background Traffic	Percent Assign ment	Project Traffic	2028 Total Traffic	Meets Service Volume
Sunrise Blvd	Midway Rd	Bell Ave	2	540	232	2024	2.5%	24	256	20%	13	269	YES
	Bell Ave	Dade Rd	2	750	256	2024	2.5%	27	283	30%	19	301	YES
	Dade Rd	Edwards Rd	2	750	454	2024	2.5%	47	501	45%	28	529	YES
	Edwards Rd	Cortez Blvd	2	600	454	2024	2.5%	47	501	10%	6	507	YES
Bell Ave	Sunrise Blvd	Oleander Ave	2	600	230	2024	2.5%	24	254	10%	6	260	YES

INTERSECTION ANALYSIS

Intersections

The intersections within the study area were evaluated in 2028 total (existing traffic plus background plus project) traffic conditions. This study analyzes the impacts to the following intersections for the AM and PM peak hours:

- Sunrise Boulevard & Edwards Road
- 25th Street & Dade Road
- Sunrise Boulevard & Dade Road

Data from the existing facilities within the study area were collected based on aerial photography and site observations. MacKenzie Engineering and Planning, Inc. collected AM and PM peak hour turning movement counts. The counts were adjusted to peak season conditions using FDOT's peak season adjustment factors.

Peak Hour Factor (PHF)

Field observed peak hour factors were utilized in the intersection analysis and were adjusted as follows:

- PHF greater than 0.95 was reduced to 0.95
- PHF less than 0.92 was increased to 0.92

The adjustment is based on FDOT's Quality/LOS Handbook that recommends using a PHF factor of 0.95 for urbanized areas and 0.92 for transitioning/urban areas and is also recommended in FDOT's Traffic Analysis handbook page 34.

Analysis

Sunrise Boulevard & Edwards Road

MEP evaluated the Sunrise Boulevard & Edwards Road using HCS 2025. The intersection is projected to operate acceptably with all movements operating under capacity (v/c ratio less than 1.0). MEP obtained 95th percentile queue lengths using HCS 2025 for turn-lane and compared it to the existing turn-lane lane length as shown in Table 5B. No improvements are needed.

Table 5A. Edwards Road & Sunrise Boulevard Intersection Results

Edwards Road & Sunrise Boulevard	AM			PM		
	V/C	Delay	LOS	V/C	Delay	LOS
EBL	0.57	19.5	B	0.62	24.2	C
EBT	0.50	21.8	C	0.68	28.1	C
EBR	0.54	21.9	C	0.68	28.2	C
EB	-	21.2	C	-	27.3	C
WBL	0.08	21.4	C	0.19	23.6	C
WBT	0.73	27.5	C	0.80	32.6	C
WBR	0.74	27.5	C	0.81	32.7	C
WB	-	27.3	C	-	32.1	C
NBL	0.31	19.7	B	0.33	23.1	C
NBT	0.56	25.1	C	0.32	25.2	C
NB	-	23.5	C	-	24.5	C
SBL	0.23	19.4	B	0.17	19.9	B
SBT	0.83	28.3	C	0.91	43.3	D
SB	-	26.5	C	-	39.8	D
Intersection	-	24.2	C	-	31.2	C

Table 5B. Edwards Road & Sunrise Boulevard Storage Analysis

	Direction	AM 95th Percentile Queue (ft)	PM 95th Percentile Queue (ft)	Existing Storage (ft)	Acceptable ?
Eastbound	Left-Turn	108	130	175	YES
Northbound	Left-Turn	47	43	150	YES

25th Street & Dade Road

MEP evaluated 25th Street & Dade Road using HCS 2025. The intersection is projected to operate acceptably with all movements operating under capacity (v/c ratio less than 1.0).

Table 6. 25th Street & Dade Road Intersection Results

25th Street & Dade Road	AM			PM		
	V/C	Delay	LOS	V/C	Delay	LOS
WBT	0.21	31.0	D	0.07	20.5	C
WB	-	31.0	D	-	20.5	C
NBL	0.00	10.5	B	0.02	22.0	C
NB	-	0.0	A	-	0.1	A
SBL	0.02	12.6	B	0.01	9.8	A
SB	-	0.1	A	-	0.1	A

Sunrise Boulevard & Dade Road

MEP evaluated the Sunrise Boulevard & Dade Road using HCS 2025. The intersection is projected to operate acceptably with all movements operating under capacity (v/c ratio less than 1.0).

Table 7. Sunrise Boulevard & Dade Road Intersection Results

Sunrise Boulevard & Dade Road	AM			PM		
	V/C	Delay	LOS	V/C	Delay	LOS
EBT	0.03	10.6	B	0.03	11.4	B
EB	-	10.6	B	-	11.4	B
NBL	0.01	7.7	A	0.01	8.1	A
NBT	-	0.1	A	-	0.1	A
NB	-	0.5	A	-	0.4	A

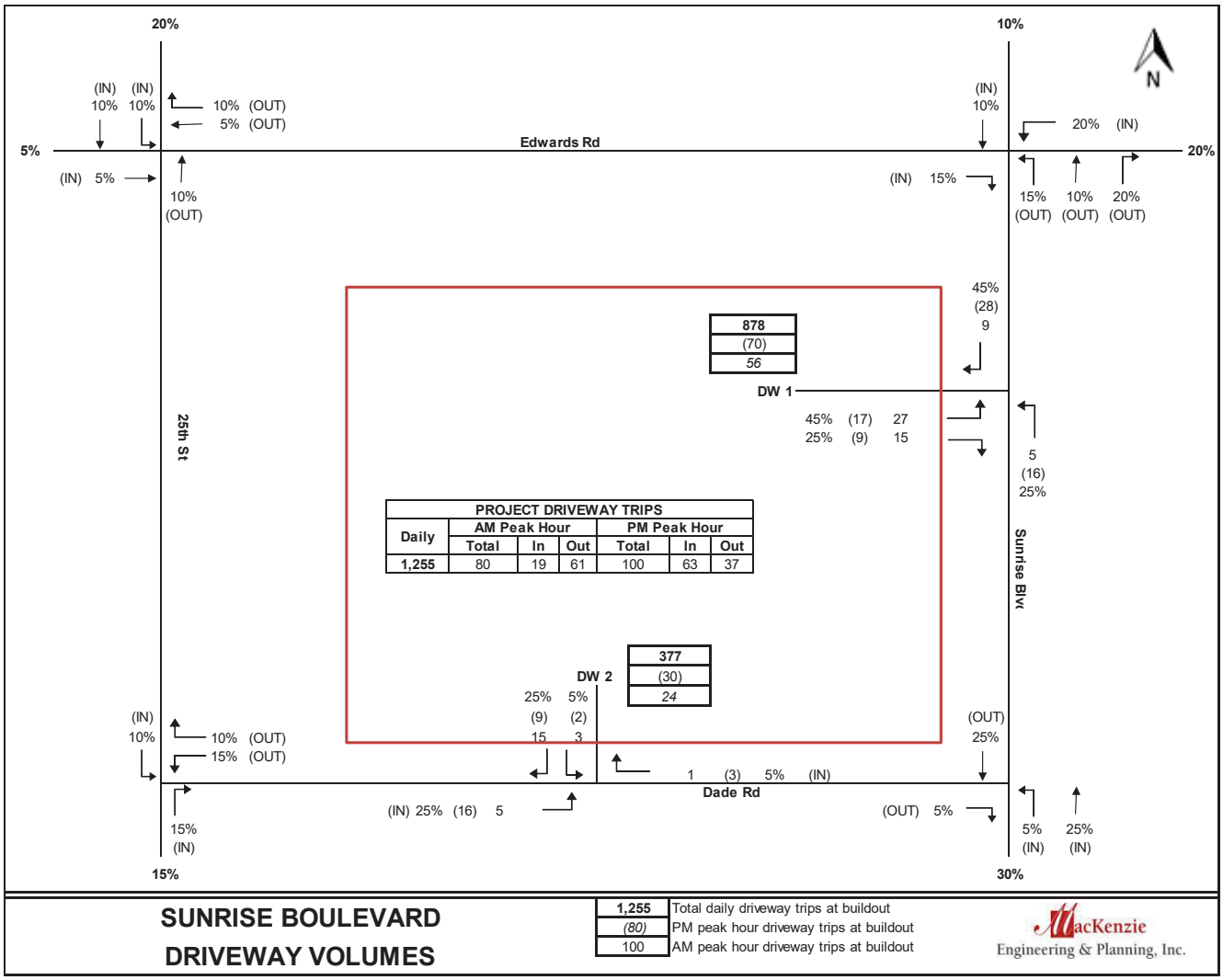
ACCESS

The project site proposes two points of access:

- Driveway 1 – Sunrise Boulevard – Full Opening
- Driveway 2 – Dade Road – Full Opening

Figure 3 shows the proposed project driveway volumes.

Figure 3. Driveway Volumes



Driveway 1 – Sunrise Boulevard

Ingress Right-Turn Lane

A right-turn warrant analysis was performed using NCHRP 457 as shown in Figure 4A. The right turn volume of 28 peak hour vehicles does not warrant a right turn lane at this location. Therefore, a right-turn lane is not required.

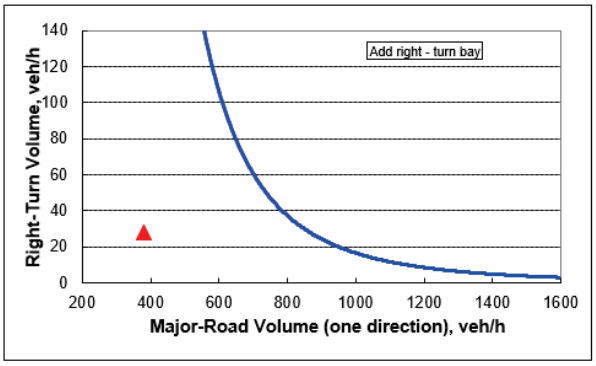
Figure 4A. Sunrise Boulevard Right-Turn Lane Warrant Analysis

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	381
Right-turn volume, veh/h:	28

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	552
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Ingress Left Turn Lane Analysis

A left-turn lane into the project is not warranted based on project 16 left-turns during the peak hour based on an analysis using NCHRP-457 as shown in Figure 4B. Therefore, a left-turn lane is not required.

Figure 4B. Sunrise Boulevard Left-Turn Lane Warrant Analysis

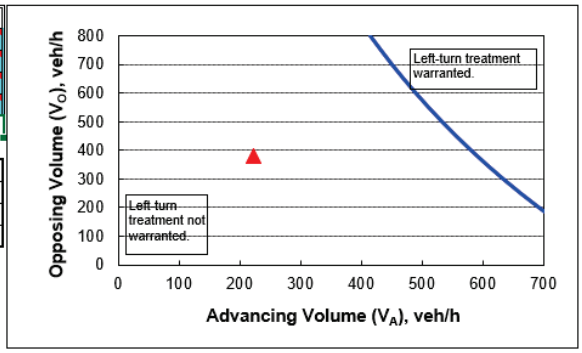
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	7%
Advancing volume (V_A), veh/h:	222
Opposing volume (V_O), veh/h:	381

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	591
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	2.2
Critical headway, s:	4.2
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Driveway 2 – Dade Road

Ingress Right-Turn Lane

A right-turn warrant analysis was performed using NCHRP 457 as shown in Figure 5A. The right turn volume of 3 peak hour vehicles does not warrant a right turn lane at this location. Therefore, a right-turn lane is not required.

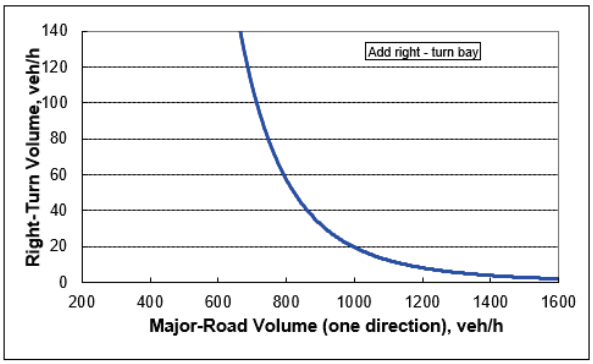
Figure 5A. Sunrise Boulevard Right-Turn Lane Warrant Analysis

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	28
Right-turn volume, veh/h:	3

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	594401241
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Ingress Left Turn Lane Analysis

A left-turn lane into the project is not warranted based on project 16 left-turns during the peak hour based on an analysis using NCHRP-457 as shown in Figure 5B. Therefore, a left-turn lane is not required.

Figure 4B. Sunrise Boulevard Left-Turn Lane Warrant Analysis

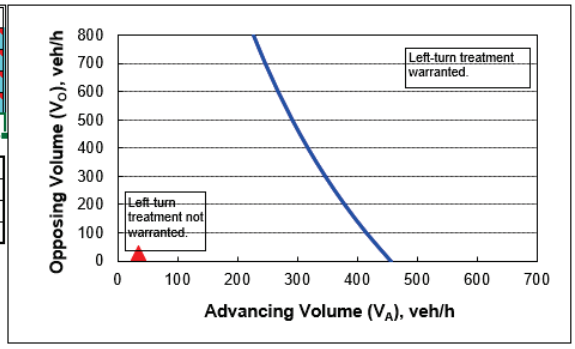
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	46%
Advancing volume (V_A), veh/h:	35
Opposing volume (V_O), veh/h:	28

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	444
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	2.2
Critical headway, s:	4.2
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

CONCLUSION

MacKenzie Engineering & Planning, Inc. was retained to prepare the traffic impacts report for Sunrise Boulevard located at the northeast corner of 2100 Dade Road, Fort Pierce, FL (PCN: 2428-321-0001-000-3). The applicant proposes to construct 184 townhomes. The build out year is 2028.

The proposed development is expected to generate the following net external and driveway trips:

- 1,255 daily, 80 AM peak hour (19 in/61 out), and 100 PM peak hour (63 in/37 out) trips.

Turn lanes are not warranted at the Dade Road or Sunrise Boulevard driveways.

The project satisfies Fort Pierce transportation concurrency requirements. No improvements are required.

APPENDICES

Exhibit 1. Trip Generation

Exhibit 2. Intersection Analysis

A. St. Lucie County TPO Traffic Counts
B. Site Plan
C. FDOT 5-Year Work Program
D. FDOT Q/LOS Handbook 2023
E. Institute of Traffic Engineers' (ITE) Report, Trip Generation (11th Edition)
F. Property ID Cards
G. St. Lucie TPO Traffic Counts and Level of Service Report 2024
H. St. Lucie County Peak Season Factor Category Report (2024)
I. St. Lucie County Capital Improvement Plan
J. Signal Timing Information – Edwards Road & Sunrise Boulevard

EXHIBIT 1
Sunrise Boulevard
Trip Generation

ITE Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								
Multi-family Housing (Low-rise)	184 DU	1,255	80	19	61	100	63	37
NET PROPOSED TRIPS		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***
Total Proposed Driveway Volumes		***1,255***	***80***	***19***	***61***	***100***	***63***	***37***

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multi-family Housing (Low-rise)	220	DU	T = 6.41(X) + 75.31	0%	24/76	T = 0.31(X) + 22.85	63/37	T = 0.43(X) + 20.55

Copyright ©2025 , MacKenzie Engineering and Planning, Inc.

ITE 11th Edition

Sunrise Boulevard

AM PEAKPEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

Edwards Road & Sunrise Boulevard

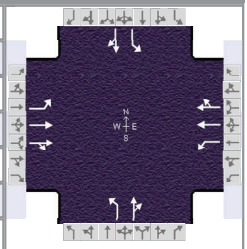
		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	20	62	9	0	4	104	5	0	17	22	2	0	9	15	29	298
7:15 AM	7:30 AM	0	37	87	14	0	5	114	11	0	20	38	5	0	11	17	43	402
7:30 AM	7:45 AM	0	54	105	8	0	6	107	7	0	26	47	8	0	12	23	28	431
7:45 AM	8:00 AM	0	44	103	14	0	3	110	8	0	17	30	7	0	17	36	30	419
8:00 AM	8:15 AM	0	33	98	14	0	4	88	12	0	12	35	0	0	18	35	29	378
8:15 AM	8:30 AM	0	43	120	14	0	0	91	9	0	14	32	4	0	18	28	31	404
8:30 AM	8:45 AM	0	26	95	15	0	1	100	9	0	19	25	4	0	15	22	23	354
8:45 AM	9:00 AM	0	25	85	14	0	3	93	12	0	11	22	4	0	10	18	24	321
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	174	426	50	0	13	396	36	0	69	144	19	0	65	122	118	1632

Count Taken: 5/1/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.95 Adjusted PHF 0.95

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
5/1/2025	0	174	426	50	0	13	396	36	0	69	144	19	0	65	122	118
Peak Season Factor	0	9	21	3	0	1	20	2	0	3	7	1	0	3	6	6
Adjusted Volumes	0	183	447	53	0	14	416	38	0	72	151	20	0	68	128	124
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	14	34	4	0	1	32	3	0	6	12	2	0	5	10	10
2028 Volumes	**0**	**197**	**481**	**57**	**0**	**15**	**448**	**41**	**0**	**78**	**163**	**22**	**0**	**73**	**138**	**134**
2028 Pre Dev	0	197	481	57	0	15	448	41	0	78	163	22	0	73	138	134
Project Traffic	0	0	0	3	0	4	0	0		9	6	12		0	2	0
2028 Post Dev	**0**	**197**	**481**	**60**	**0**	**19**	**448**	**41**	**0**	**87**	**169**	**34**	**0**	**73**	**140**	**134**
				In		In				Out	Out	Out			In	
Project Traffic Assignment	0%	0%	0%	15%	0%	20%	0%	0%	0%	15%	10%	20%	0%	0%	10%	0%

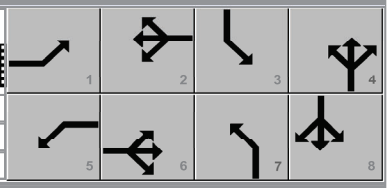
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.95
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post AM.xus		
Project Description	2028 Post AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	197	481	60	19	448	41	87	169	34	73	140	134

Signal Information												
Cycle, s	69.2	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	2.2	5.9	13.2	5.4	0.4	14.1		
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0		
				Red	3.0	0.0	3.0	3.0	0.0	3.0		



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	197	481	60	19	448	41	87	169	34	73	140	134
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2		2	2		2	2		2	2	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	175	0		175	0		150	0		110	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

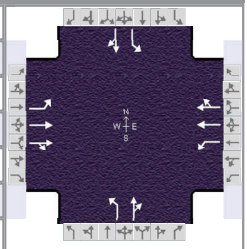
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	12.0	35.0	12.0	35.0	12.0	30.0	12.0	30.0
Yellow Change Interval (*Y*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance Interval (R_c), s	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Green (G_{min}), s	7	7	7	7	7	7	7	7
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		7.0		7.0		7.0		7.0
Pedestrian Clearance Time (*PC*), s		16.0		16.0		16.0		16.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2025 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

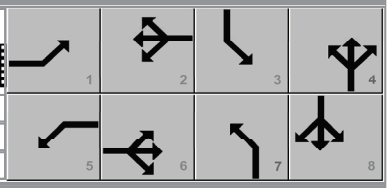
General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.95
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post AM.xus		
Project Description	2028 Post AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	197	481	60	19	448	41	87	169	34	73	140	134

Signal Information			
Cycle, s	69.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.2	5.9	13.2	5.4	0.4	14.1						
Yellow	4.0	0.0	4.0	4.0	0.0	4.0						
Red	3.0	0.0	3.0	3.0	0.0	3.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	15.2	26.1	9.2	20.2	12.8	21.5	12.4	21.1
Change Period, ($Y+R_c$), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	8.2	11.3	2.6	11.1	4.7	9.3	4.2	13.1
Green Extension Time (g_e), s	0.1	2.0	0.0	2.0	0.1	0.9	0.1	0.9
Phase Call Probability	0.98	1.00	0.32	1.00	0.83	1.00	0.77	1.00
Max Out Probability	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

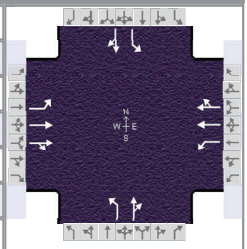
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	207	289	280	20	260	254	92	214		77	288	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1870	1797	1781	1870	1815	1781	1816		1781	1719	
Queue Service Time (g_s), s	6.2	9.2	9.3	0.6	9.1	9.1	2.7	7.3		2.2	11.1	
Cycle Queue Clearance Time (g_c), s	6.2	9.2	9.3	0.6	9.1	9.1	2.7	7.3		2.2	11.1	
Green Ratio (*g/C*)	0.32	0.28	0.28	0.22	0.19	0.19	0.29	0.21		0.28	0.20	
Capacity (*c*), veh/h	367	517	497	258	356	346	300	379		331	349	
Volume-to-Capacity Ratio (*X*)	0.566	0.560	0.564	0.078	0.731	0.736	0.305	0.563		0.232	0.826	
Back of Queue (*Q*), ft/ln (95 th percentile)	108	172	164	11	177	171	47	136		40	200	
Back of Queue (*Q*), veh/ln (95 th percentile)	4.3	6.8	6.5	0.4	7.0	6.8	1.9	5.4		1.6	7.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.62	0.00	0.00	0.06	0.00	0.00	0.32	0.00		0.36	0.00	
Uniform Delay (d_1), s/veh	19.0	21.5	21.5	21.4	26.4	26.4	19.5	24.6		19.3	26.4	
Incremental Delay (d_2), s/veh	0.5	0.4	0.4	0.0	1.1	1.2	0.2	0.5		0.1	1.9	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	19.5	21.8	21.9	21.4	27.5	27.5	19.7	25.1		19.4	28.3	
Level of Service (LOS)	B	C	C	C	C	C	B	C		B	C	
Approach Delay, s/veh / LOS	21.2	C		27.3	C		23.5	C		26.5	C	
Intersection Delay, s/veh / LOS	24.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	1.92	B	2.28	B	2.28	B
Bicycle LOS Score / LOS	1.13	A	0.93	A	0.99	A	1.09	A

Copyright © 2025 University of Florida, All Rights Reserved.

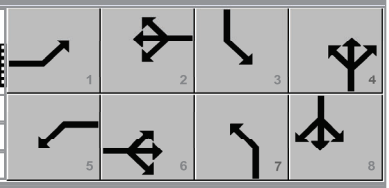
HCS Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.95
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post AM.xus		
Project Description	2028 Post AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	197	481	60	19	448	41	87	169	34	73	140	134

Signal Information												
Cycle, s	69.2	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	2.2	5.9	13.2	5.4	0.4	14.1		
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0		
				Red	3.0	0.0	3.0	3.0	0.0	3.0		



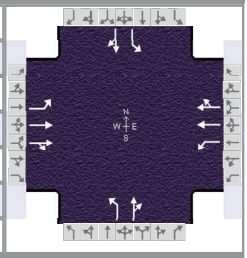
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.961	0.961		0.970	0.970		0.971	0.971		0.919	0.919
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00			1.00			1.00		
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)												
Movement Saturation Flow Rate (s), veh/h	1781	3262	405	1781	3377	308	1781	1512	304	1781	878	841
Proportion of Vehicles Arriving on Green (P)	0.12	0.28	0.28	0.03	0.19	0.19	0.08	0.21	0.21	0.08	0.20	0.20
Incremental Delay Factor (k)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04		0.04	0.04	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Green Ratio (g/C)	0.32	0.28	0.22	0.19	0.29	0.21	0.28	0.20
Permitted Saturation Flow Rate (s_p), veh/h/ln	886	0	842	0	1091	0	1168	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	14.1	0.0	13.2	0.0	14.1	0.0	14.1	0.0
Permitted Service Time (g_u), s	4.1	0.0	7.9	0.0	3.0	0.0	5.2	0.0
Permitted Queue Service Time (g_{ps}), s	3.1		0.1		1.0		0.6	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.116	0.000	0.125	0.000	0.123	0.000	0.124
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	552.28	18.13	380.77	22.68	417.60	21.66	406.23	21.98
Bicycle F_w / F_v	-3.64	0.64	-3.64	0.44	-3.64	0.50	-3.64	0.60

HCS Signalized Intersection Results Graphical Summary

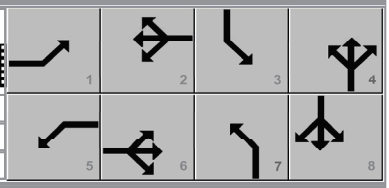
General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.95
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post AM.xus		
Project Description	2028 Post AM				



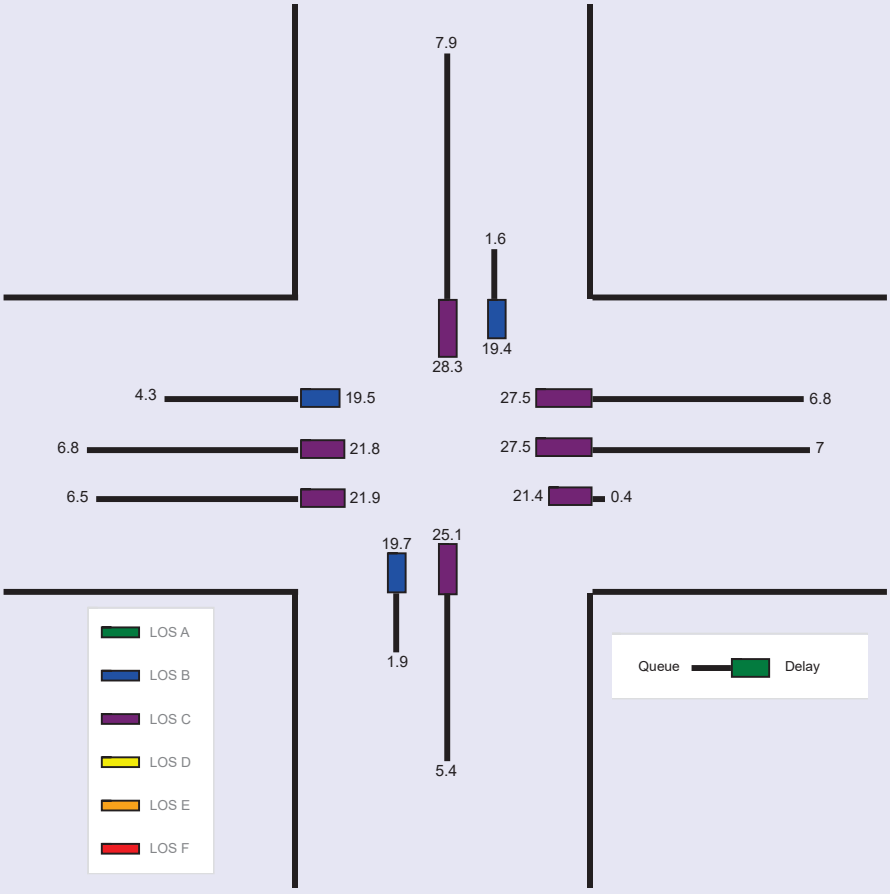
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	197	481	60	19	448	41	87	169	34	73	140	134

Signal Information			
Cycle, s	69.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.2	5.9	13.2	5.4	0.4	14.1	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	3.0	0.0	3.0	3.0	0.0	3.0	



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	108	172	164	11	177	171	47	136		40	200	
Back of Queue (*Q*), veh/ln (95 th percentile)	4.3	6.8	6.5	0.4	7.0	6.8	1.9	5.4		1.6	7.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.62	0.00	0.00	0.06	0.00	0.00	0.32	0.00		0.36	0.00	
Control Delay (*d*), s/veh	19.5	21.8	21.9	21.4	27.5	27.5	19.7	25.1		19.4	28.3	
Level of Service (LOS)	B	C	C	C	C	C	B	C		B	C	
Approach Delay, s/veh / LOS	21.2	C		27.3	C		23.5	C		26.5	C	
Intersection Delay, s/veh / LOS	24.2						C					



Sunrise Boulevard

PM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

Edwards Road & Sunrise Boulevard

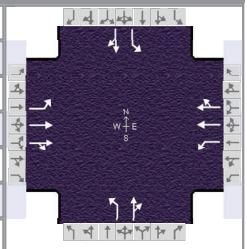
		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	30	121	25	0	5	130	11	0	14	19	2	0	16	30	32	435
4:15 PM	4:30 PM	0	51	136	17	0	2	99	11	0	13	31	1	0	7	41	30	439
4:30 PM	4:45 PM	0	30	127	18	0	7	93	10	0	15	39	3	0	17	55	35	449
4:45 PM	5:00 PM	0	42	106	20	0	6	109	10	0	14	24	2	0	15	49	27	424
5:00 PM	5:15 PM	0	30	126	12	0	6	143	21	0	10	36	2	0	19	58	23	486
5:15 PM	5:30 PM	0	42	112	30	0	7	126	19	0	21	25	4	0	17	57	51	511
5:30 PM	5:45 PM	0	45	134	19	0	9	120	11	0	7	23	5	0	13	41	44	471
5:45 PM	6:00 PM	0	43	93	14	0	9	86	16	0	9	31	2	0	9	23	26	361
Peak Hour Traffic Volume																		
4:45 PM	5:45 PM	0	159	478	81	0	28	498	61	0	52	108	13	0	64	205	145	1892

Count Taken: 5/1/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.93 Adjusted PHF 0.93

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
5/1/2025	0	159	478	81	0	28	498	61	0	52	108	13	0	64	205	145
Peak Season Factor	0	8	24	4	0	1	25	3	0	3	5	1	0	3	10	7
Adjusted Volumes	0	167	502	85	0	29	523	64	0	55	113	14	0	67	215	152
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	13	39	7	0	2	40	5	0	4	9	1	0	5	17	12
2028 Volumes	**0**	**180**	**541**	**92**	**0**	**31**	**563**	**69**	**0**	**59**	**122**	**15**	**0**	**72**	**232**	**164**
2028 Pre Dev	0	180	541	92	0	31	563	69	0	59	122	15	0	72	232	164
Project Traffic	0	0	0	9	0	13	0	0		6	4	7		0	6	0
2028 Post Dev	**0**	**180**	**541**	**101**	**0**	**44**	**563**	**69**	**0**	**65**	**126**	**22**	**0**	**72**	**238**	**164**
				In		In				Out	Out	Out			In	
Project Traffic Assignment	0%	0%	0%	15%	0%	20%	0%	0%	0%	15%	10%	20%	0%	0%	10%	0%

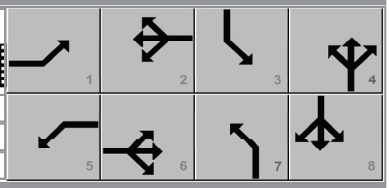
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.93
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post PM.xus		
Project Description	2028 Post PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	541	101	44	563	69	65	126	22	72	238	164

Signal Information					EB			WB			NB			SB		
Cycle, s	85.9	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	4.7	4.3		19.8	5.7	0.2	23.3					
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	0.0		4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0		3.0	3.0	0.0	3.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	541	101	44	563	69	65	126	22	72	238	164
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2		2	2		2	2		2	2	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	175	0		175	0		150	0		110	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

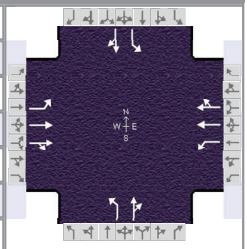
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	12.0	35.0	12.0	35.0	12.0	30.0	12.0	30.0
Yellow Change Interval (*Y*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance Interval (R_c), s	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Green (G_{min}), s	7	7	7	7	7	7	7	7
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		7.0		7.0		7.0		7.0
Pedestrian Clearance Time (*PC*), s		16.0		16.0		16.0		16.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

Copyright © 2025 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

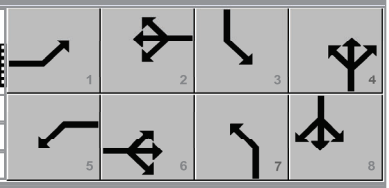
General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.93
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post PM.xus		
Project Description	2028 Post PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	541	101	44	563	69	65	126	22	72	238	164

Signal Information			
Cycle, s	85.9	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	4.3	19.8	5.7	0.2	23.3	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	3.0	0.0	3.0	3.0	0.0	3.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	16.0	31.0	11.7	26.8	12.7	30.3	12.9	30.5
Change Period, ($Y+R_c$), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	9.0	16.6	3.7	17.1	4.3	8.0	4.6	22.6
Green Extension Time (g_e), s	0.1	2.6	0.0	2.6	0.0	1.2	0.1	0.9
Phase Call Probability	0.99	1.00	0.68	1.00	0.81	1.00	0.84	1.00
Max Out Probability	1.00	0.02	0.00	0.02	0.00	0.00	0.00	0.11

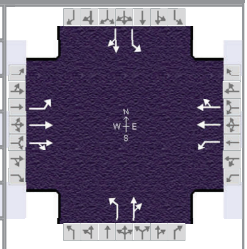
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	194	354	336	47	346	334	70	159		77	432	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1870	1768	1781	1870	1798	1781	1822		1781	1742	
Queue Service Time (g_s), s	7.0	14.5	14.6	1.7	15.0	15.1	2.3	6.0		2.6	20.6	
Cycle Queue Clearance Time (g_c), s	7.0	14.5	14.6	1.7	15.0	15.1	2.3	6.0		2.6	20.6	
Green Ratio (*g/C*)	0.33	0.28	0.28	0.29	0.23	0.23	0.34	0.27		0.34	0.27	
Capacity (*c*), veh/h	312	523	494	248	430	414	212	494		454	477	
Volume-to-Capacity Ratio (*X*)	0.621	0.677	0.681	0.191	0.804	0.807	0.330	0.322		0.171	0.907	
Back of Queue (*Q*), ft/ln (95 th percentile)	130	263	248	31	277	265	43	115		47	383	
Back of Queue (*Q*), veh/ln (95 th percentile)	5.1	10.3	9.9	1.2	10.9	10.6	1.7	4.5		1.8	15.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.75	0.00	0.00	0.18	0.00	0.00	0.29	0.00		0.43	0.00	
Uniform Delay (d_1), s/veh	23.1	27.5	27.6	23.5	31.3	31.3	22.8	25.0		19.8	30.2	
Incremental Delay (d_2), s/veh	1.1	0.6	0.6	0.1	1.4	1.4	0.3	0.1		0.1	13.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	24.2	28.1	28.2	23.6	32.6	32.7	23.1	25.2		19.9	43.3	
Level of Service (LOS)	C	C	C	C	C	C	C	C		B	D	
Approach Delay, s/veh / LOS	27.3	C		32.1	C		24.5	C		39.8	D	
Intersection Delay, s/veh / LOS	31.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.92	B	1.93	B	2.28	B	2.28	B
Bicycle LOS Score / LOS	1.22	A	1.09	A	0.87	A	1.33	A

Copyright © 2025 University of Florida, All Rights Reserved.

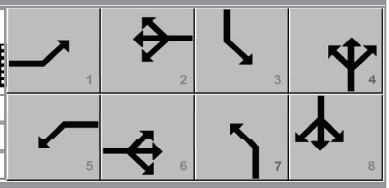
HCS Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.93
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post PM.xus		
Project Description	2028 Post PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	541	101	44	563	69	65	126	22	72	238	164

Signal Information													
Cycle, s	85.9	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Green	4.7	4.3	19.8	5.7	0.2	23.3			
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0			
				Red	3.0	0.0	3.0	3.0	0.0	3.0			



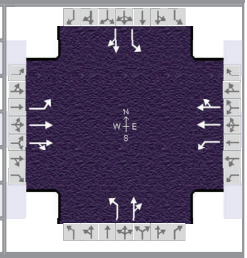
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.945	0.945		0.962	0.962		0.974	0.974		0.932	0.932
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00			1.00			1.00		
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)												
Movement Saturation Flow Rate (s), veh/h	1781	3067	571	1781	3269	400	1781	1551	271	1781	1032	711
Proportion of Vehicles Arriving on Green (P)	0.10	0.28	0.28	0.06	0.23	0.23	0.07	0.27	0.27	0.07	0.27	0.27
Incremental Delay Factor (k)	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04		0.04	0.23	

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Green Ratio (g/C)	0.33	0.28	0.29	0.23	0.34	0.27	0.34	0.27
Permitted Saturation Flow Rate (s_p), veh/h/ln	760	0	753	0	956	0	1227	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	19.8	0.0	19.8	0.0	23.3	0.0	23.3	0.0
Permitted Service Time (g_u), s	4.7	0.0	7.5	0.0	0.9	0.0	17.4	0.0
Permitted Queue Service Time (g_{ps}), s	4.7		0.8		0.9		0.4	
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.125	0.000	0.130	0.000	0.125	0.000	0.125
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	558.70	22.31	459.71	25.48	541.76	22.84	546.81	22.68
Bicycle F_w / F_v	-3.64	0.73	-3.64	0.60	-3.64	0.38	-3.64	0.84

HCS Signalized Intersection Results Graphical Summary

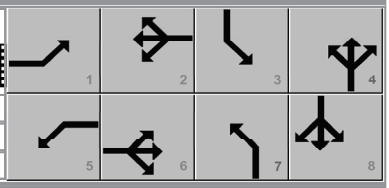
General Information				Intersection Information	
Agency	MEP			Duration, h	0.250
Analyst	MEP	Analysis Date	May 29, 2025	Area Type	Other
Jurisdiction	Fort Pierce	Time Period		PHF	0.93
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	Edwards Rd & Sunrise…	File Name	Edwards & Sunrise 2028 Post PM.xus		
Project Description	2028 Post PM				



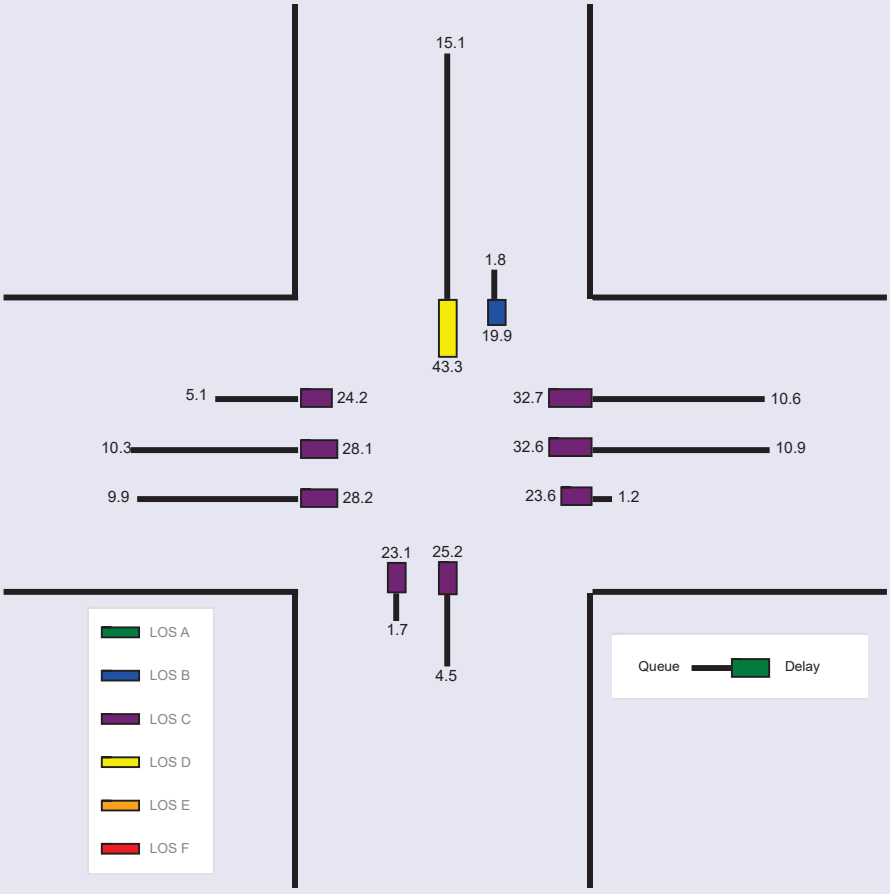
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	180	541	101	44	563	69	65	126	22	72	238	164

Signal Information			
Cycle, s	85.9	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.7	4.3	19.8	5.7	0.2	23.3	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	3.0	0.0	3.0	3.0	0.0	3.0	



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	130	263	248	31	277	265	43	115		47	383	
Back of Queue (*Q*), veh/ln (95 th percentile)	5.1	10.3	9.9	1.2	10.9	10.6	1.7	4.5		1.8	15.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.75	0.00	0.00	0.18	0.00	0.00	0.29	0.00		0.43	0.00	
Control Delay (*d*), s/veh	24.2	28.1	28.2	23.6	32.6	32.7	23.1	25.2		19.9	43.3	
Level of Service (LOS)	C	C	C	C	C	C	C	C		B	D	
Approach Delay, s/veh / LOS	27.3	C		32.1	C		24.5	C		39.8	D	
Intersection Delay, s/veh / LOS	31.2						C					



Sunrise Boulevard

AM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

25th Street & Dade Road

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	0	0	0	0	2	0	0	0	0	195	3	0	0	214	0	414
7:15 AM	7:30 AM	0	0	0	0	0	1	0	2	0	0	271	2	0	3	288	0	567
7:30 AM	7:45 AM	0	0	0	0	0	4	0	4	0	0	349	0	0	1	184	0	542
7:45 AM	8:00 AM	0	0	0	0	0	1	0	0	0	0	253	1	0	3	196	0	454
8:00 AM	8:15 AM	0	0	0	0	0	1	0	3	0	0	259	2	0	1	196	0	462
8:15 AM	8:30 AM	0	0	0	0	0	1	0	1	0	0	203	2	0	0	184	0	391
8:30 AM	8:45 AM	0	0	0	0	0	0	0	1	1	0	175	2	0	1	154	0	334
8:45 AM	9:00 AM	0	0	0	0	0	0	0	1	1	0	179	1	0	2	133	0	317
Peak Hour Traffic Volume																		
7:15 AM	8:15 AM	0	0	0	0	0	7	0	9	0	0	1132	5	0	8	864	0	2025

Count Taken: 5/1/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.89 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
5/1/2025	0	0	0	0	0	7	0	9	0	0	1132	5	0	8	864	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	57	0	0	0	43	0
Adjusted Volumes	0	0	0	0	0	7	0	9	0	0	1189	5	0	8	907	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	0	0	0	1	0	1	0	0	91	0	0	1	70	0
2028 Volumes	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**10**	**0**	**0**	**1280**	**5**	**0**	**9**	**977**	**0**
2028 Pre Dev	0	0	0	0	0	8	0	10	0	0	1280	5	0	9	977	0
Project Traffic	0	0	0	0	0	9	0	6		0	0	3		2	0	0
2028 Post Dev	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**16**	**0**	**0**	**1280**	**8**	**0**	**11**	**977**	**0**
						Out		Out				In		In		
Project Traffic Assignment	0%	0%	0%	0%	0%	15%	0%	10%	0%	0%	0%	15%	0%	10%	0%	0%

HCS Two-Way Stop-Control Report

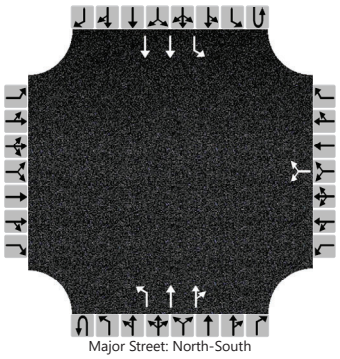
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	5/29/2025
Analysis Year	2028
Time Analyzed	
Intersection Orientation	North-South
Project Description	2028 Post AM

Site Information

Intersection	S 25th St & Dade Rd
Jurisdiction	Fort Pierce
East/West Street	Dade Rd
North/South Street	S 25th St
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	1	2	0	0	1	2	0
Configuration							LR			L	T	TR		L	T	
Volume (veh/h)						17		16	0	0	1280	8	0	11	977	
Percent Heavy Vehicles (%)						2		2	2	2			2	2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Left Only								1		

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9		4.1				4.1		
Critical Headway (sec)						7.54		6.94		4.14				4.14		
Base Follow-Up Headway (sec)						3.5		3.3		2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							36			0				12		
Capacity, c (veh/h)							174			652				484		
v/c Ratio							0.21			0.00				0.02		
95% Queue Length, Q_{95} (veh)							0.7			0.0				0.1		
95% Queue Length, Q_{95} (ft)							17.8			0.0				2.5		
Control Delay (s/veh)							31.0			10.5				12.6		
Level of Service (LOS)							D			B				B		
Approach Delay (s/veh)						31.0				0.0				0.1		
Approach LOS						D				A				A		

Copyright © 2025 University of Florida. All Rights Reserved.

Sunrise Boulevard

PM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

25th Street & Dade Road

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	0	0	0	1	0	2	0	0	159	0	1	2	237	0	402
4:15 PM	4:30 PM	0	0	0	0	0	3	0	2	1	0	179	2	0	4	219	0	410
4:30 PM	4:45 PM	0	0	0	0	0	2	0	1	0	0	185	2	0	1	192	0	383
4:45 PM	5:00 PM	0	0	0	0	0	1	0	1	1	0	150	2	0	1	257	0	413
5:00 PM	5:15 PM	0	0	0	0	0	1	0	0	2	0	189	2	0	1	269	0	464
5:15 PM	5:30 PM	0	0	0	0	0	1	0	0	0	0	179	1	0	0	298	0	479
5:30 PM	5:45 PM	0	0	0	0	0	1	0	0	0	0	179	2	0	1	227	0	410
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	174	3	0	2	194	0	373
Peak Hour Traffic Volume																		
4:45 PM	5:45 PM	0	0	0	0	0	4	0	1	3	0	697	7	0	3	1051	0	1766

Count Taken: 5/1/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.92 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
5/1/2025	0	0	0	0	0	4	0	1	3	0	697	7	0	3	1051	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	35	0	0	0	53	0
Adjusted Volumes	0	0	0	0	0	4	0	1	3	0	732	7	0	3	1104	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	0	0	0	0	0	0	0	0	56	1	0	0	85	0
2028 Volumes	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**3**	**0**	**788**	**8**	**0**	**3**	**1189**	**0**
2028 Pre Dev	0	0	0	0	0	4	0	1	3	0	788	8	0	3	1189	0
Project Traffic	0	0	0	0	0	6	0	4		0	0	9		6	0	0
2028 Post Dev	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**5**	**3**	**0**	**788**	**17**	**0**	**9**	**1189**	**0**
						Out		Out				In		In		
Project Traffic Assignment	0%	0%	0%	0%	0%	15%	0%	10%	0%	0%	0%	15%	0%	10%	0%	0%

HCS Two-Way Stop-Control Report

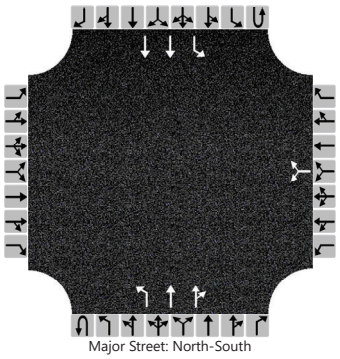
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	5/29/2025
Analysis Year	2028
Time Analyzed	
Intersection Orientation	North-South
Project Description	2028 Post PM

Site Information

Intersection	S 25th St & Dade Rd
Jurisdiction	Fort Pierce
East/West Street	Dade Rd
North/South Street	S 25th St
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	1	2	0	0	1	2	0
Configuration							LR			L	T	TR		L	T	
Volume (veh/h)						10		5	3	0	788	17	0	9	1189	
Percent Heavy Vehicles (%)						2		2	2	2			2	2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9	6.4	4.1				4.1		
Critical Headway (sec)						7.54		6.94	6.44	4.14				4.14		
Base Follow-Up Headway (sec)						3.5		3.3	2.5	2.2				2.2		
Follow-Up Headway (sec)						3.52		3.32	2.52	2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							16			3				10		
Capacity, c (veh/h)							248			215				767		
v/c Ratio							0.07			0.02				0.01		
95% Queue Length, Q_{95} (veh)							0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)							5.1			0.0				0.0		
Control Delay (s/veh)							20.5			22.0				9.8		
Level of Service (LOS)							C			C				A		
Approach Delay (s/veh)					20.5				0.1				0.1			
Approach LOS					C				A				A			

Copyright © 2025 University of Florida. All Rights Reserved.

Sunrise Boulevard

AM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

Sunrise Boulevard & Dade Road

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	1	0	1	0	0	0	0	0	0	26	0	0	0	27	1	56
7:15 AM	7:30 AM	0	2	0	0	0	0	0	0	0	4	40	0	0	0	47	1	94
7:30 AM	7:45 AM	0	6	0	1	0	0	0	0	0	1	49	0	0	0	43	2	102
7:45 AM	8:00 AM	0	3	0	2	0	0	0	0	0	1	40	0	0	0	43	2	91
8:00 AM	8:15 AM	0	1	0	1	0	0	0	0	0	2	35	0	0	0	43	1	83
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	1	28	0	0	0	44	0	73
8:30 AM	8:45 AM	0	6	0	0	0	0	0	0	0	0	36	0	0	0	37	1	80
8:45 AM	9:00 AM	0	1	0	0	0	0	0	0	0	2	25	0	0	0	41	0	69
Peak Hour Traffic Volume																		
7:15 AM	8:15 AM	0	12	0	4	0	0	0	0	0	8	164	0	0	0	176	6	370

Count Taken: 4/30/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.91 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
4/30/2025	0	12	0	4	0	0	0	0	0	8	164	0	0	0	176	6
Peak Season Factor	0	1	0	0	0	0	0	0	0	0	8	0	0	0	9	0
Adjusted Volumes	0	13	0	4	0	0	0	0	0	8	172	0	0	0	185	6
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	1	0	0	0	0	0	0	0	1	13	0	0	0	14	0
2028 Volumes	**0**	**14**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**9**	**185**	**0**	**0**	**0**	**199**	**6**
2028 Pre Dev	0	14	0	4	0	0	0	0	0	9	185	0	0	0	199	6
Project Traffic	0	0	0	3	0	0	0	0		1	5	0		0	15	0
2028 Post Dev	**0**	**14**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**10**	**190**	**0**	**0**	**0**	**214**	**6**
				Out						In	In				Out	
Project Traffic Assignment	0%	0%	0%	5%	0%	0%	0%	0%	0%	5%	25%	0%	0%	0%	25%	0%

HCS Two-Way Stop-Control Report

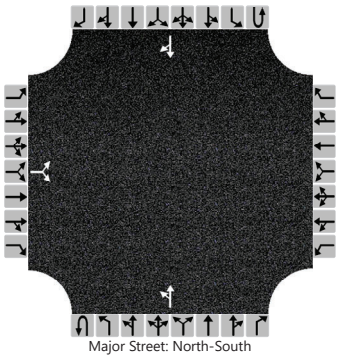
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	5/29/2025
Analysis Year	2028
Time Analyzed	
Intersection Orientation	North-South
Project Description	2028 Post AM

Site Information

Intersection	Sunrise Blvd & Dade Rd
Jurisdiction	Fort Pierce
East/West Street	Dade Rd
North/South Street	Sunrise Blvd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		14		7						10	190				214	6
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			23							11						
Capacity, c (veh/h)			669							1328						
v/c Ratio			0.03							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			10.6							7.7	0.1					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.6								0.5						
Approach LOS		B								A						

Copyright © 2025 University of Florida. All Rights Reserved.

Sunrise Boulevard

PM PEAKPEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

Sunrise Boulevard & Dade Road

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	4	0	1	0	0	0	0	0	1	18	0	0	0	54	9	87
4:15 PM	4:30 PM	0	3	0	0	0	0	0	0	0	2	43	0	0	0	97	3	148
4:30 PM	4:45 PM	0	3	0	3	0	0	0	0	0	1	40	0	0	0	86	4	137
4:45 PM	5:00 PM	0	2	0	0	0	0	0	0	0	2	40	0	0	0	48	0	92
5:00 PM	5:15 PM	0	1	0	2	0	0	0	0	0	1	46	0	0	0	65	2	117
5:15 PM	5:30 PM	0	0	0	1	0	0	0	0	0	2	65	0	0	0	69	0	137
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	2	37	0	0	0	43	1	83
5:45 PM	6:00 PM	0	1	0	2	0	0	0	0	0	0	39	0	0	0	43	1	86
Peak Hour Traffic Volume																		
4:15 PM	5:15 PM	0	9	0	5	0	0	0	0	0	6	169	0	0	0	296	9	494

Count Taken: 4/30/2025
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.83 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
4/30/2025	0	9	0	5	0	0	0	0	0	6	169	0	0	0	296	9
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	8	0	0	0	15	0
Adjusted Volumes	0	9	0	5	0	0	0	0	0	6	177	0	0	0	311	9
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	1	0	0	0	0	0	0	0	0	14	0	0	0	24	1
2028 Volumes	**0**	**10**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**6**	**191**	**0**	**0**	**0**	**335**	**10**
2028 Pre Dev	0	10	0	5	0	0	0	0	0	6	191	0	0	0	335	10
Project Traffic	0	0	0	2	0	0	0	0		3	16	0		0	9	0
2028 Post Dev	**0**	**10**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**9**	**207**	**0**	**0**	**0**	**344**	**10**
				Out						In	In				Out	
Project Traffic Assignment	0%	0%	0%	5%	0%	0%	0%	0%	0%	5%	25%	0%	0%	0%	25%	0%

HCS Two-Way Stop-Control Report

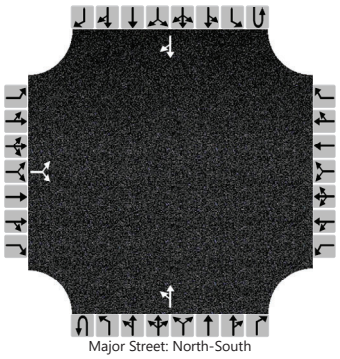
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	5/29/2025
Analysis Year	2028
Time Analyzed	
Intersection Orientation	North-South
Project Description	2028 Post PM

Site Information

Intersection	Sunrise Blvd & Dade Rd
Jurisdiction	Fort Pierce
East/West Street	Dade Rd
North/South Street	Sunrise Blvd
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		10		7						9	207				344	10
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			18							10						
Capacity, c (veh/h)			584							1174						
v/c Ratio			0.03							0.01						
95% Queue Length, Q_{95} (veh)			0.1							0.0						
95% Queue Length, Q_{95} (ft)			2.5							0.0						
Control Delay (s/veh)			11.4							8.1	0.1					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.4								0.4						
Approach LOS		B								A						

Copyright © 2025 University of Florida. All Rights Reserved.

Sunrise Boulevard

AM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

DW 1 & Sunrise Blvd

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	27	0	0	0	28	0	55
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	42	0	0	0	48	0	90
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	55	0	0	0	45	0	100
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	43	0	0	0	45	0	88
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	36	0	0	0	44	0	80
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	28	0	0	0	44	0	72
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	42	0	0	0	38	0	80
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	26	0	0	0	41	0	67
Peak Hour Traffic Volume																		
7:15 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	176	0	0	0	182	0	358

Count Taken: 10/16/2024
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.90 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
10/16/2024	0	0	0	0	0	0	0	0	0	0	176	0	0	0	182	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	0
Adjusted Volumes	0	0	0	0	0	0	0	0	0	0	185	0	0	0	191	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	0	0	0	0	0	0	0	0	19	0	0	0	20	0
2028 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**204**	**0**	**0**	**0**	**211**	**0**
2028 Pre Dev	0	0	0	0	0	0	0	0	0	0	204	0	0	0	211	0
Project Traffic	0	27	0	15	0	0	0	0		5	0	0		0	0	9
2028 Post Dev	**0**	**27**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**5**	**204**	**0**	**0**	**0**	**211**	**9**
		Out		Out						In						In
Project Traffic Assignment	0%	45%	0%	25%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	45%

Sunrise Boulevard

PM PEAKPEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

DW 1 & Sunrise Blvd

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	63	0	85
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	46	0	0	0	100	0	146
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	43	0	0	0	90	0	133
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	42	0	0	0	48	0	90
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	47	0	0	0	67	0	114
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	65	0	0	0	69	0	134
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	37	0	0	0	44	0	81
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	40	0	0	0	44	0	84
Peak Hour Traffic Volume																		
4:15 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	178	0	0	0	305	0	483

Count Taken: 10/16/2024
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.83 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
10/16/2024	0	0	0	0	0	0	0	0	0	0	178	0	0	0	305	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	9	0	0	0	15	0
Adjusted Volumes	0	0	0	0	0	0	0	0	0	0	187	0	0	0	320	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	0	0	0	0	0	0	0	0	19	0	0	0	33	0
2028 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**206**	**0**	**0**	**0**	**353**	**0**
2028 Pre Dev	0	0	0	0	0	0	0	0	0	0	206	0	0	0	353	0
Project Traffic	0	17	0	9	0	0	0	0		16	0	0		0	0	28
2028 Post Dev	**0**	**17**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**16**	**206**	**0**	**0**	**0**	**353**	**28**
		Out		Out						In						In
Project Traffic Assignment	0%	45%	0%	25%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	45%

Sunrise Boulevard

AM PEAK PEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

DW 2 & Dade Rd

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
7:15 AM	7:30 AM	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
7:30 AM	7:45 AM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10
7:45 AM	8:00 AM	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
8:00 AM	8:15 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
8:15 AM	8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	8:45 AM	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7
8:45 AM	9:00 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Peak Hour Traffic Volume																		
7:15 AM	8:15 AM	0	0	16	0	0	0	14	0	0	0	0	0	0	0	0	0	30

Count Taken: 10/16/2024
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.75 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
10/16/2024	0	0	16	0	0	0	14	0	0	0	0	0	0	0	0	0
Peak Season Factor	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Adjusted Volumes	0	0	17	0	0	0	15	0	0	0	0	0	0	0	0	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
2028 Volumes	**0**	**0**	**19**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2028 Pre Dev	0	0	19	0	0	0	17	0	0	0	0	0	0	0	0	0
Project Traffic	0	5	0	0	0	0	0	1		0	0	0		3	0	15
2028 Post Dev	**0**	**5**	**19**	**0**	**0**	**0**	**17**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**15**
		In						In						Out		Out
Project Traffic Assignment	0%	25%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	5%	0%	25%

Sunrise Boulevard

PM PEAKPEAK HOUR TURNING MOVEMENTS

EXHIBIT 2

DW 2 & Dade Rd

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	15
4:15 PM	4:30 PM	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
4:30 PM	4:45 PM	0	0	6	0	0	0	5	0	0	0	0	0	0	0	0	0	11
4:45 PM	5:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
5:00 PM	5:15 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
5:15 PM	5:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
5:30 PM	5:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
5:45 PM	6:00 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Peak Hour Traffic Volume																		
4:00 PM	5:00 PM	0	0	16	0	0	0	22	0	0	0	0	0	0	0	0	0	38

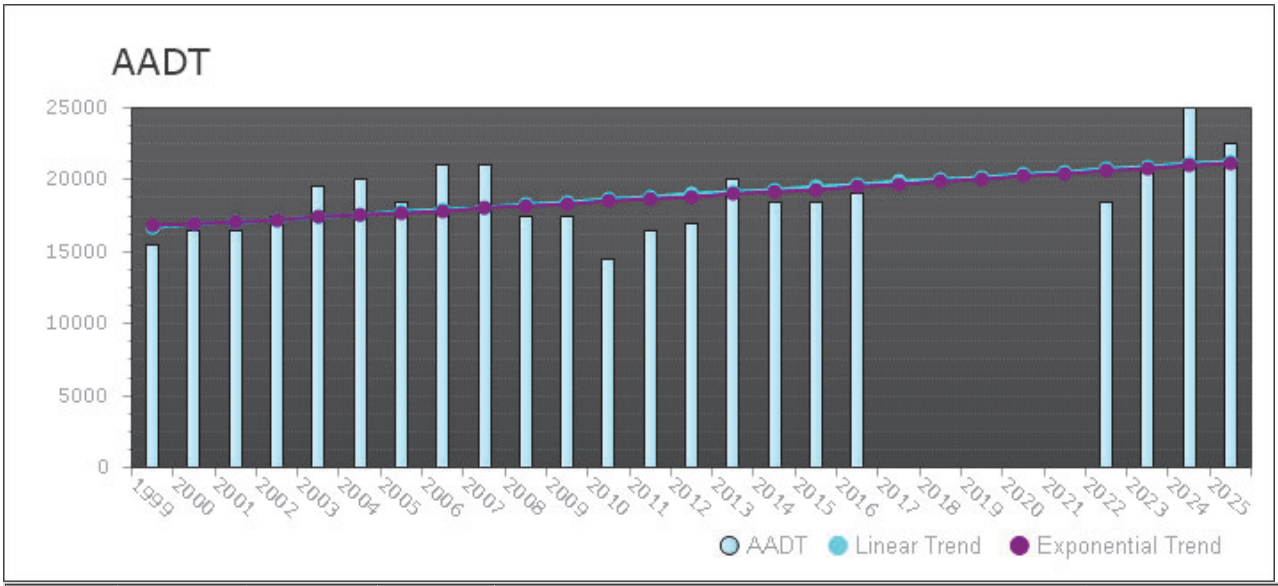
Count Taken: 10/16/2024
Buildout year: 2028
Growth Rate: 2.50%
PSCF 1.05
PHF 0.63 Adjusted PHF 0.92

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
10/16/2024	0	0	16	0	0	0	22	0	0	0	0	0	0	0	0	0
Peak Season Factor	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Adjusted Volumes	0	0	17	0	0	0	23	0	0	0	0	0	0	0	0	0
	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2028 Growth 2.5%	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
2028 Volumes	**0**	**0**	**19**	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2028 Pre Dev	0	0	19	0	0	0	25	0	0	0	0	0	0	0	0	0
Project Traffic	0	16	0	0	0	0	0	3		0	0	0		2	0	9
2028 Post Dev	**0**	**16**	**19**	**0**	**0**	**0**	**25**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**9**
		In						In						Out		Out
Project Traffic Assignment	0%	25%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	5%	0%	25%

Station 130

MIDWAY RD 750 FEET WEST OF SUNRISE BLVD

Linear Growth = 0.82%
Exponential Growth = 0.89%

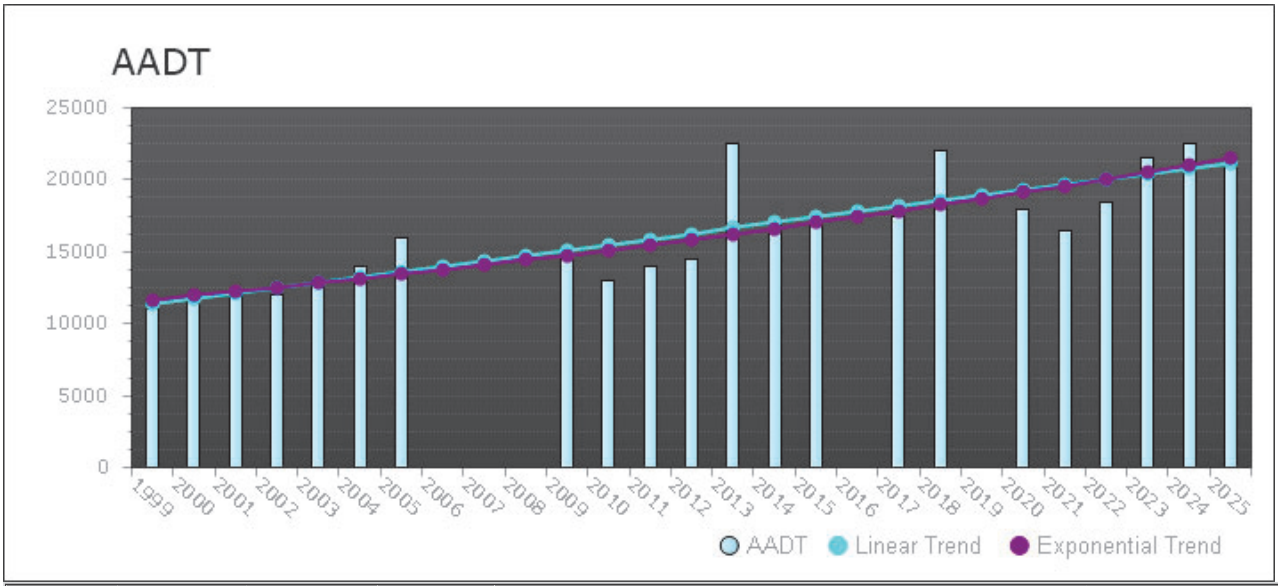


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2025	130	22500	0.099	0.5075	0		
2024	130	25000	0.115	0.546	0	2651	2139
2023	130	21000	0.098	0.509	0	1820	1915
2022	130	18500	0.098	0.536	0	1435	1650
2016	130	19000	0.099	0.5065	0	1549	1755
2015	130	18500	0.098	0.532	0	1499	1683
2014	130	18500	0.099	0.5515	0	1564	1709
2013	130	20000			0	1649	1761
2012	130	17000	0.095	0.5275	7.01	1350	1482
2011	130	16500	0.097	0.507	8.84	1324	1442
2010	130	14500	0.098	0.541	15.77	1207	1310
2009	130	17500	0.102	0.529		1481	1606
2008	130	17500	0.097	0.527		1554	1586
2007	130	21000	0.099	0.516		1909	1878
2006	130	21000	0.101	0.538		1954	1859
2005	130	18500	0.089	0.523		1486	1531
2004	130	20000	0.105	0.503		1902	1687
2003	130	19500	0.101	0.509		1784	1677
2002	130	17500	0.096	0.51		1481	1521
2001	130	16500	0.098	0.549		1368	1425
2000	130	16500	0.098	0.617		1409	1431
1999	130	15500	0.102	0.523		1301	1311

Station 132

MIDWAY RD 685 FEET WEST OF 25TH ST

Linear Growth = 1.78%
Exponential Growth = 2.33%

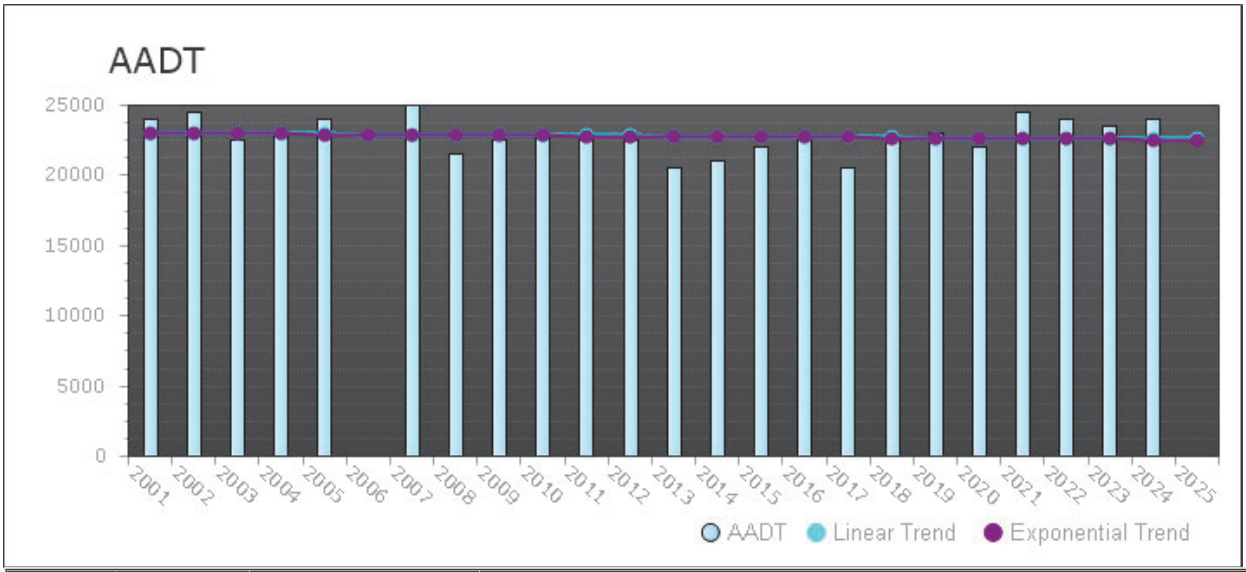


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2025	132	21000	0.094	0.5175	0		
2024	132	22500	0.097	0.56	0	2011	1977
2023	132	21500	0.098	0.5175	0	1950	1921
2022	132	18500	0.099	0.5215	0	1674	1689
2021	132	16500	0.091	0.5035	0	1411	1299
2020	132	18000	0.1	0.5085	0	1657	1665
2018	132	22000	0.097	0.5085	0	1981	1803
2017	132	17500	0.101	0.507	0	1601	1549
2015	132	17000	0.096	0.517	0	1458	1516
2014	132	17000	0.101	0.519	0	1484	1615
2013	132	22500			0	2026	1875
2012	132	14500	0.098	0.5395	7.38	1222	1301
2011	132	14000	0.097	0.512	8.15	1154	1224
2010	132	13000	0.098	0.534	9.79	1071	1147
2009	132	14500	0.097	0.517		1164	1275
2005	132	16000	0.093	0.541		1294	1405
2004	132	14000	0.095	0.551		1186	1189
2003	132	13000	0.095	0.542		1122	1123
2002	132	12000	0.094	0.562		968	1023
2001	132	12000	0.096	0.537		972	1016
2000	132	11500	0.093	0.536		897	971
1999	132	11000	0.097	0.577		841	898

Station 940015

SR 615/25 ST - N OF SR 70/VIRGINIA AVE (COUNTY 15)

Linear Growth = -0.08%
Exponential Growth = -0.08%

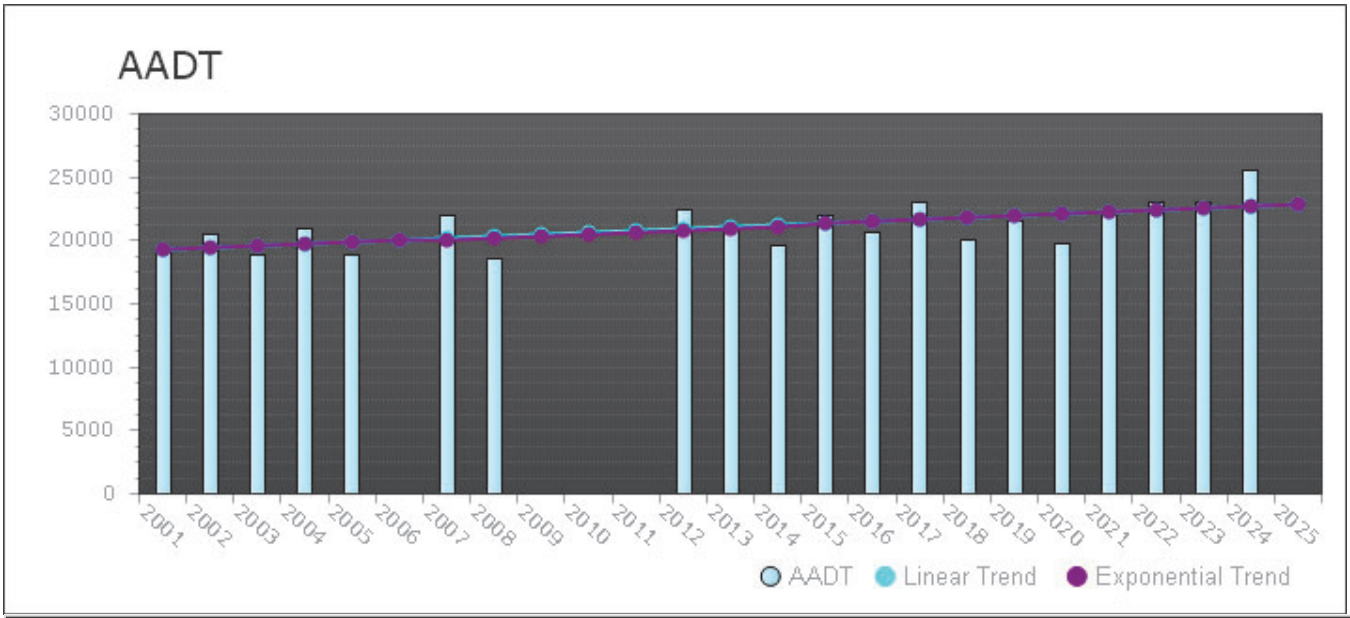


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940015	24000	0.09	0.511		2321	2321
2023	940015	23500	0.09	0.516		2273	2273
2022	940015	24000	0.09	0.514	0	2321	2321
2021	940015	24500	0.09	0.514	0	2369	2369
2020	940015	22000		0.514	-1		
2019	940015	23000		0.514			
2018	940015	22500		0.514			
2017	940015	20500		0.514			
2016	940015	22500		0.514			
2015	940015	22000		0.514	0.77		
2014	940015	21000		0.514			
2013	940015	20500		0.514			
2012	940015	22500		0.514	0.62		
2011	940015	22500		0.514	0		
2010	940015	23000		0.514	0	2018	2044
2009	940015	22500		0.514	0	3167	3833
2008	940015	21500		0.514	0	1704	1997
2007	940015	25000		0.514	0	1999	1897
2005	940015	24000		0.514	0	2177	2201
2004	940015	23000		0.514	0	1754	2067
2003	940015	22500		0.514	0	1937	2084
2002	940015	24500		0.514	0	2017	1923
2001	940015	24000		0.514	0	1931	2074

Station 940021

SR 615 / 25 ST - S OF CORTEZ BLVD-N OF EDWARDS RD

Linear Growth = 0.67%
Exponential Growth = 0.72%

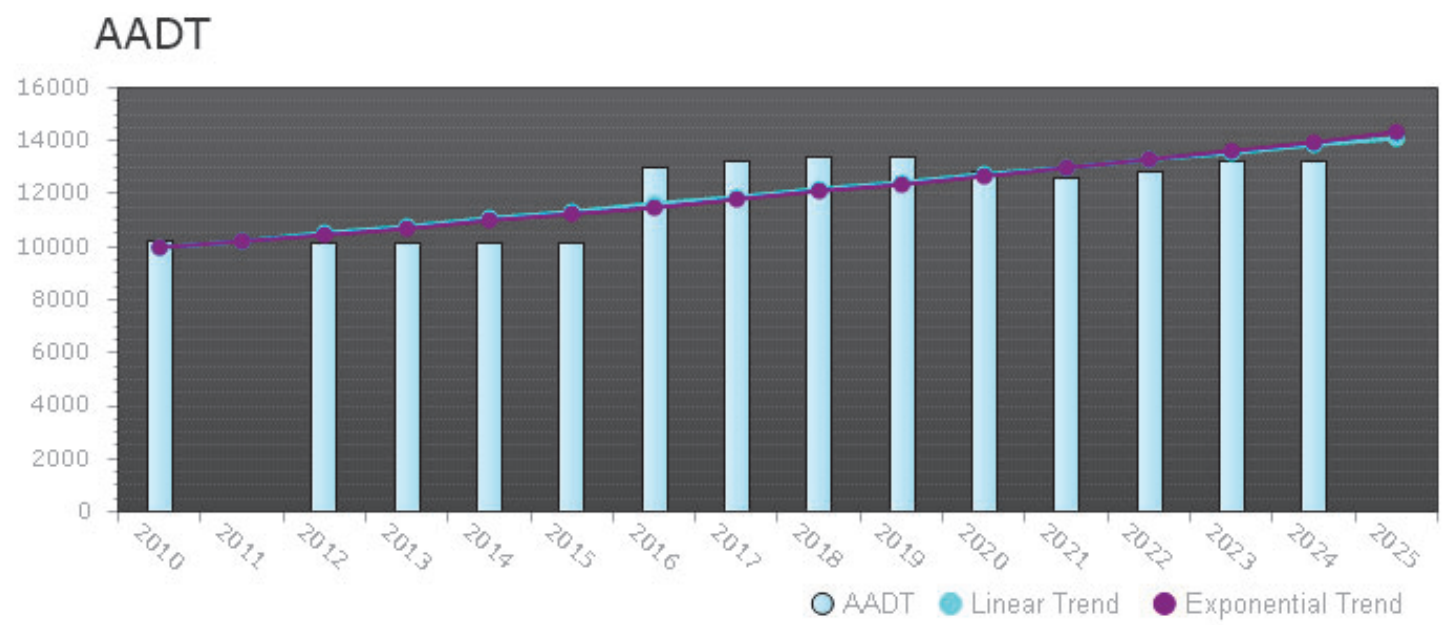


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940021	25500	0.09	0.511		2466	2466
2023	940021	23000	0.09	0.516		2224	2224
2022	940021	23000	0.09	0.514	0	2224	2224
2021	940021	22000	0.09	0.514	0	2127	2127
2020	940021	19700		0.514	-1		
2019	940021	21500		0.514			
2018	940021	20100		0.514			
2017	940021	23000		0.514			
2016	940021	20600		0.514			
2015	940021	22000		0.514			
2014	940021	19600		0.514	3.34		
2013	940021	21000		0.514			
2012	940021	22500		0.514	1.57		
2008	940021	18500		0.514	0	1601	1805
2007	940021	22000		0.514	0	2079	2021
2005	940021	18900		0.514	0	1389	1690
2004	940021	21000		0.514	0	1365	1595
2003	940021	18800		0.514	0	1698	1788
2002	940021	20500		0.514	0	1627	1941
2001	940021	19000		0.514	0	2080	1563

Station 940026

CR 611/EDWARDS RD - E OF MCNEIL RD (COUNTY 110)

Linear Growth = 1.96%
Exponential Growth = 2.37%

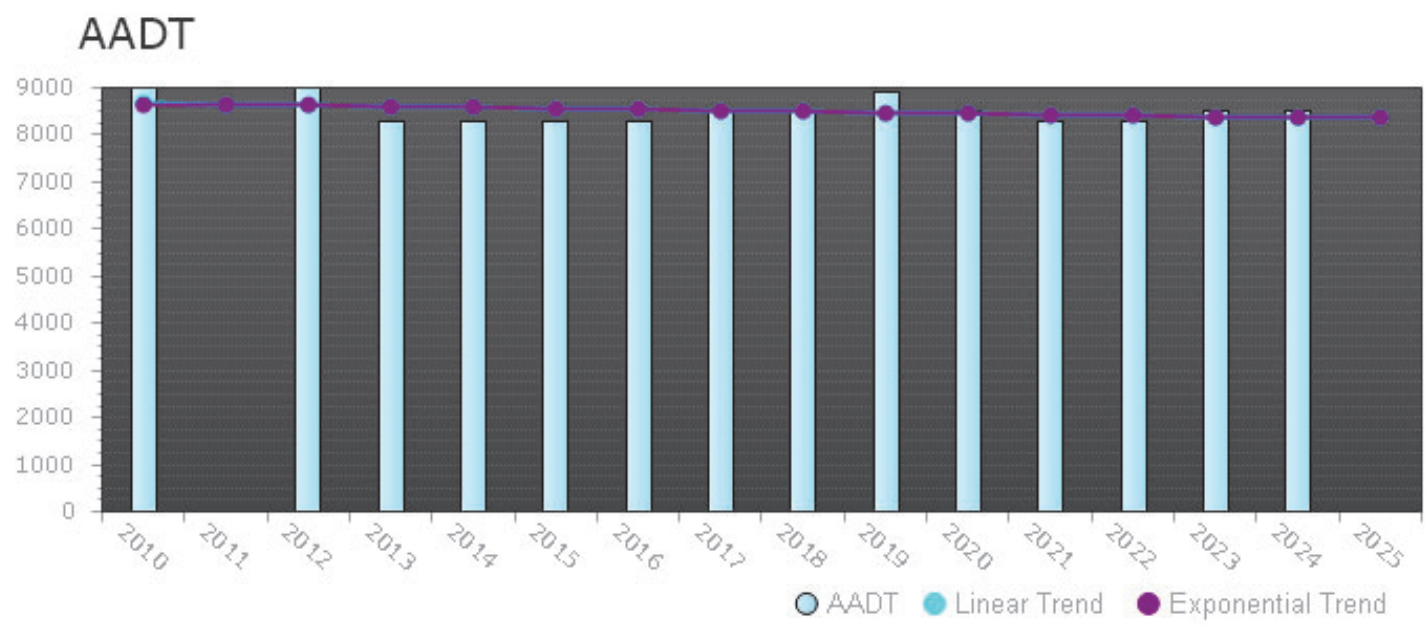


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940026	13200	0.09	0.511		1176	1176
2023	940026	13200	0.09	0.516		1176	1176
2022	940026	12800	0.09	0.514	0	1140	1140
2021	940026	12600	0.09	0.509	0	1122	1122
2020	940026	12800		0.51	-1		
2019	940026	13400		51			
2018	940026	13400		51.3			
2017	940026	13200		50.9			
2016	940026	13000		50.9			
2015	940026	10100		51			
2014	940026	10100		50.8			
2013	940026	10100		50.8			
2012	940026	10100		56.8	5.18		
2010	940026	10200			0	917	966

Station 940027

CR 611-B/EDWARDS RD - W OF SR 5/US1 (COUNTY 173)

Linear Growth = -0.26%
Exponential Growth = -0.24%

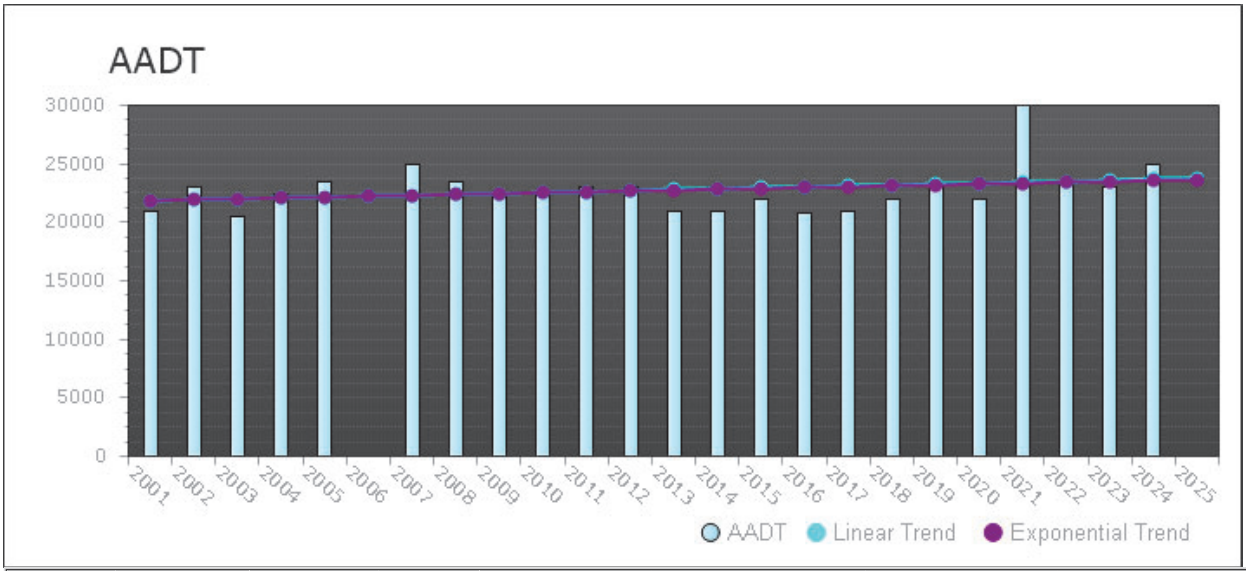


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940027	8500	0.09	0.511		757	757
2023	940027	8500	0.09	0.516		757	757
2022	940027	8300	0.09	0.514	0	739	739
2021	940027	8300	0.09	0.509	0	739	739
2020	940027	8500		0.51	-1		
2019	940027	8900		51			
2018	940027	8500		51.3			
2017	940027	8500		50.9			
2016	940027	8300		50.9			
2015	940027	8300		51			
2014	940027	8300		50.8			
2013	940027	8300		50.8			
2012	940027	9000		56.8			
2010	940027	9000			0	748	790

Station 940032

SR 70 / VIRGINIA AVE - W OF SR 615/25 ST

Linear Growth = 0.34%
Exponential Growth = 0.32%

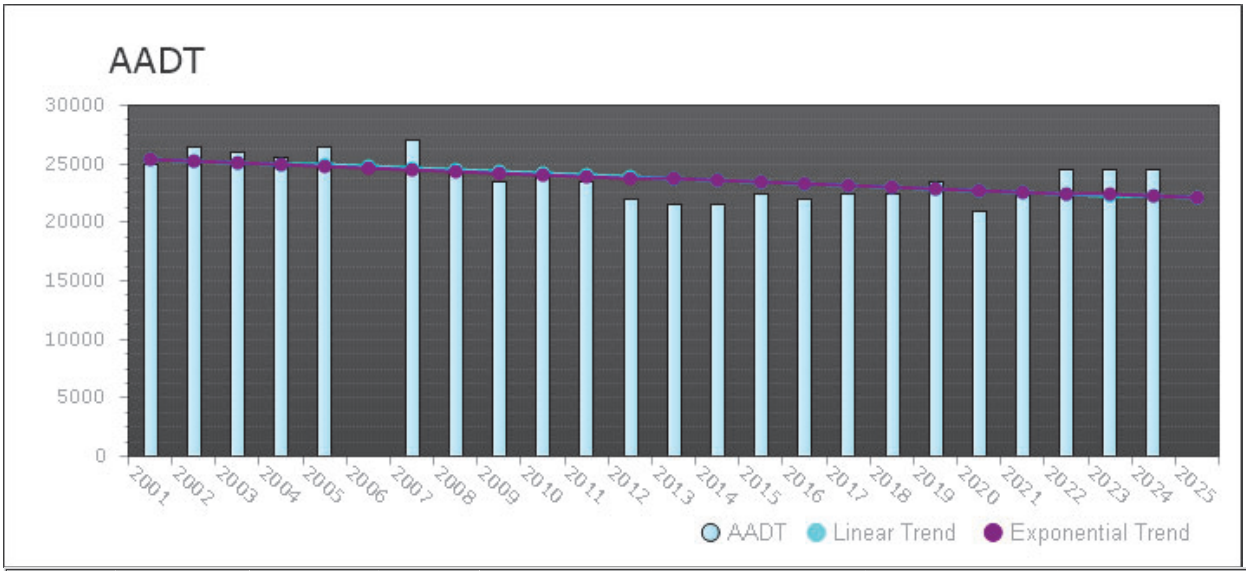


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940032	25000	0.09	0.511		2418	2418
2023	940032	23000	0.09	0.516		2224	2224
2022	940032	23500	0.09	0.514	0	2273	2273
2021	940032	30000	0.09	0.514	0	2901	2901
2020	940032	22000		0.514	-1		
2019	940032	23000		0.514			
2018	940032	22000		0.514			
2017	940032	20900		0.514			
2016	940032	20800		0.514			
2015	940032	22000		0.514	1.25		
2014	940032	21000		0.514	1.21		
2013	940032	21000		0.514	1.18		
2012	940032	23000		0.514			
2011	940032	23000		0.514	0		
2010	940032	22500		0.514	0	1900	2026
2009	940032	22500		0.514	0	3726	3941
2008	940032	23500		0.514	0	1830	2069
2007	940032	25000		0.514	0	2232	2579
2005	940032	23500		0.514	0	1780	2197
2004	940032	22500		0.514	0	1840	1938
2003	940032	20500		0.514	0	1712	2088
2002	940032	23000		0.514	0	1849	2071
2001	940032	21000		0.514	0	1722	1956

Station 940033

SR 70 / VIRGINIA AVE - E OF SR 615/25 ST (COUNTY 33)

Linear Growth = -0.64%
Exponential Growth = -0.58%

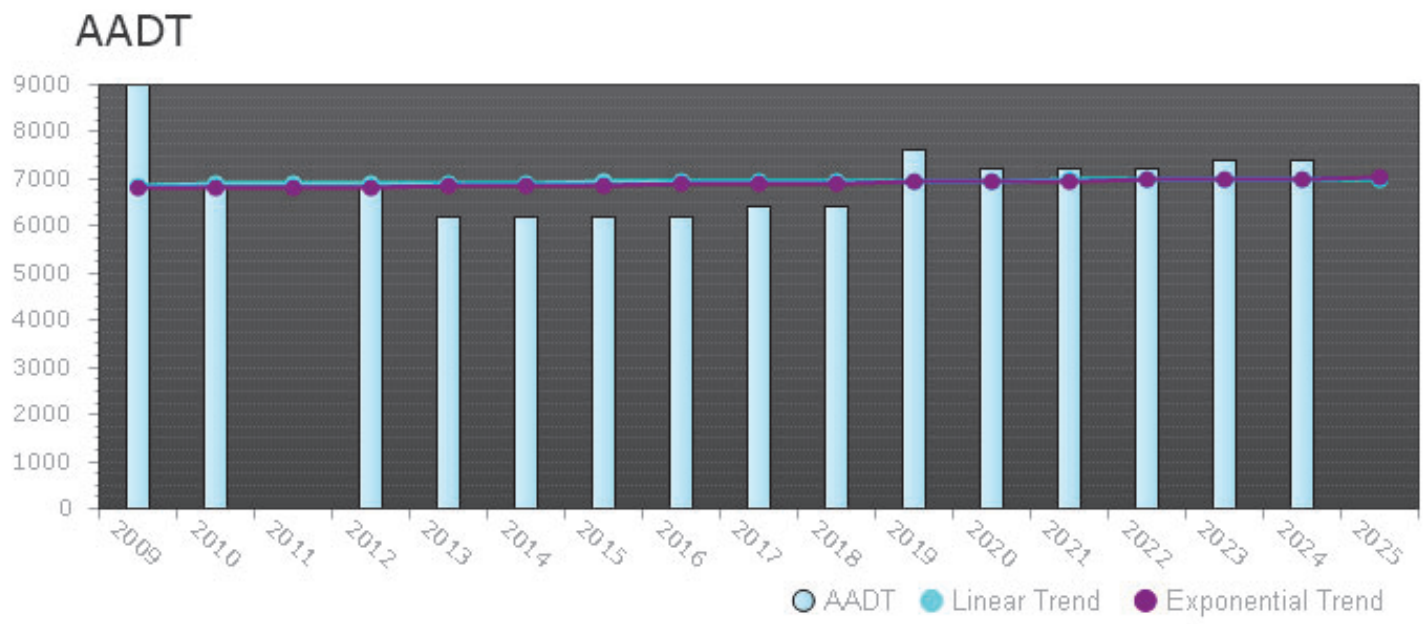


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940033	24500	0.09	0.511		2369	2369
2023	940033	24500	0.09	0.516		2369	2369
2022	940033	24500	0.09	0.514	0	2369	2369
2021	940033	22500	0.09	0.514	0	2176	2176
2020	940033	21000		0.514	-1		
2019	940033	23500		0.514			
2018	940033	22500		0.514			
2017	940033	22500		0.514			
2016	940033	22000		0.514			
2015	940033	22500		0.514	2.7		
2014	940033	21500		0.514	0.99		
2013	940033	21600		0.514			
2012	940033	22000		0.514			
2011	940033	23500		0.514	0		
2010	940033	24000		0.514	0	1958	2239
2009	940033	23500		0.514	0	1998	2083
2008	940033	24500		0.514	0	1980	2223
2007	940033	27000		0.514	0	2227	2650
2005	940033	26500		0.514	0	2171	2454
2004	940033	25500		0.514	0	2185	2120
2003	940033	26000		0.514	0	2139	2318
2002	940033	26500		0.514	0	2002	2223
2001	940033	25000		0.514	0	1963	2383

Station 940168

CR 605/OLEANDER AVE - N OF CR 712/MIDWAY RD (COUNTY 139)

Linear Growth = 0.13%
Exponential Growth = 0.21%

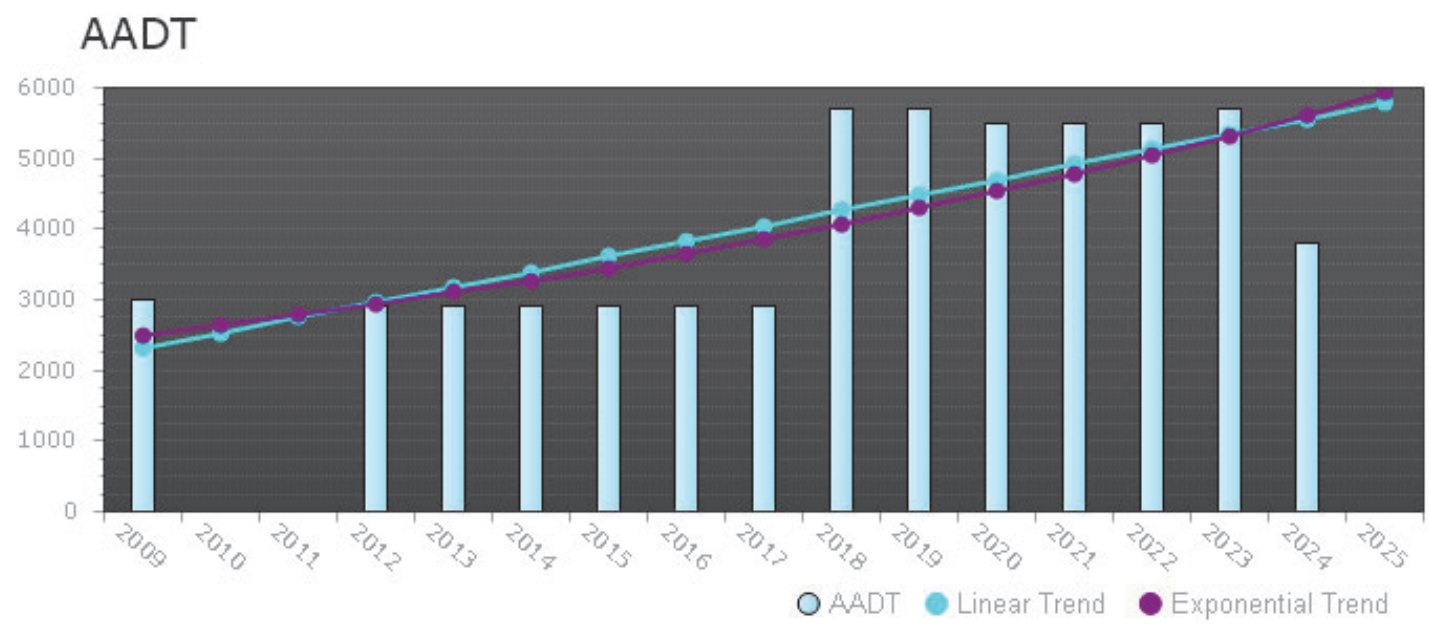


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	940168	7400	0.09	0.511		659	659
2023	940168	7400	0.09	0.516		659	659
2022	940168	7200	0.09	0.514	0	641	641
2021	940168	7200	0.09	0.509	0	641	641
2020	940168	7200		0.51	-1		
2019	940168	7600		51			
2018	940168	6400		51.3			
2017	940168	6400		50.9			
2016	940168	6200		50.9			
2015	940168	6200		51			
2014	940168	6200		50.8			
2013	940168	6200		50.8			
2012	940168	6800		56.8			
2010	940168	6800			0	631	739
2009	940168	9000			0	817	850

Station 947002

ON BELL AVE - E. OF SUNRISE BLVD (COUNTY 102)

Linear Growth = 3.75%
Exponential Growth = 5.24%

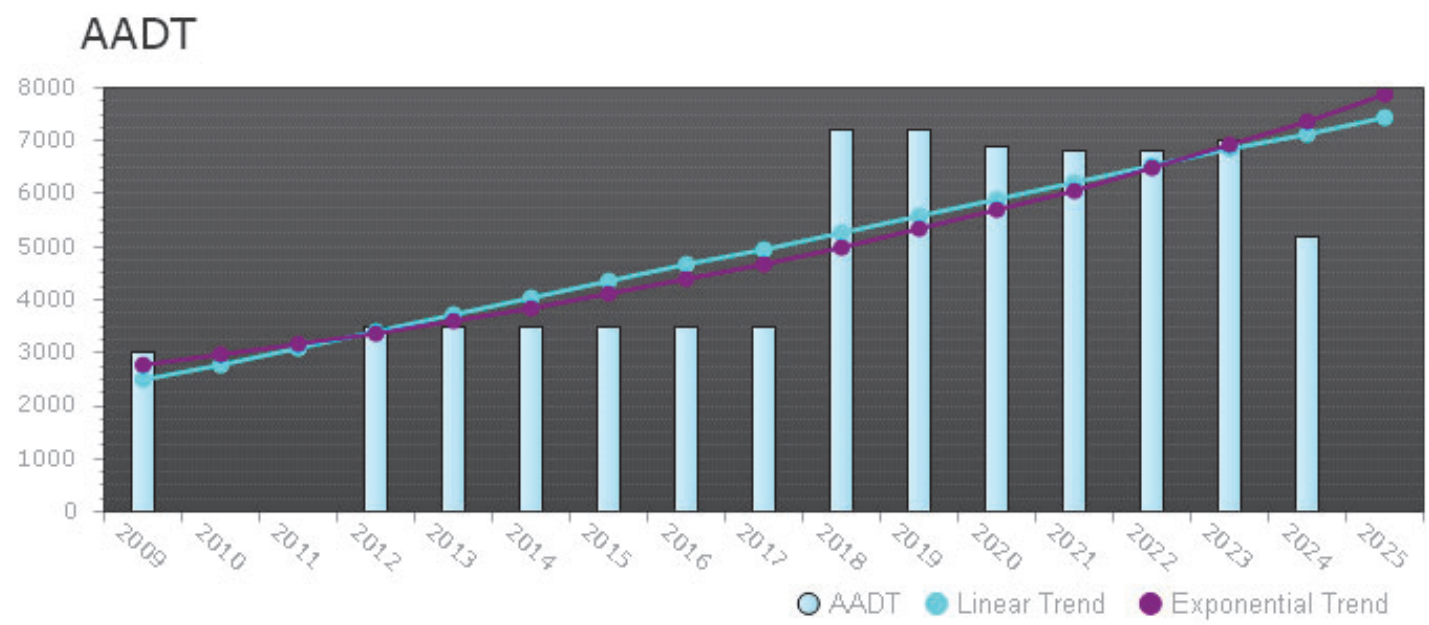


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947002	3800	0.09	0.511		338	338
2023	947002	5700	0.09	0.516		508	508
2022	947002	5500	0.09	0.514	0	490	490
2021	947002	5500	0.09	0.509	0	490	490
2020	947002	5500		0.51	-1		
2019	947002	5700		51			
2018	947002	5700		51.3			
2017	947002	2900		50.9			
2016	947002	2900		50.9			
2015	947002	2900		51			
2014	947002	2900		50.8			
2013	947002	2900		50.8			
2012	947002	2900		56.8			
2009	947002	3000			0	309	306

Station 947003

ON BELL AVE - W. OF SUNRISE BLVD (COUNTY 104)

Linear Growth = 4.17%
Exponential Growth = 6.31%

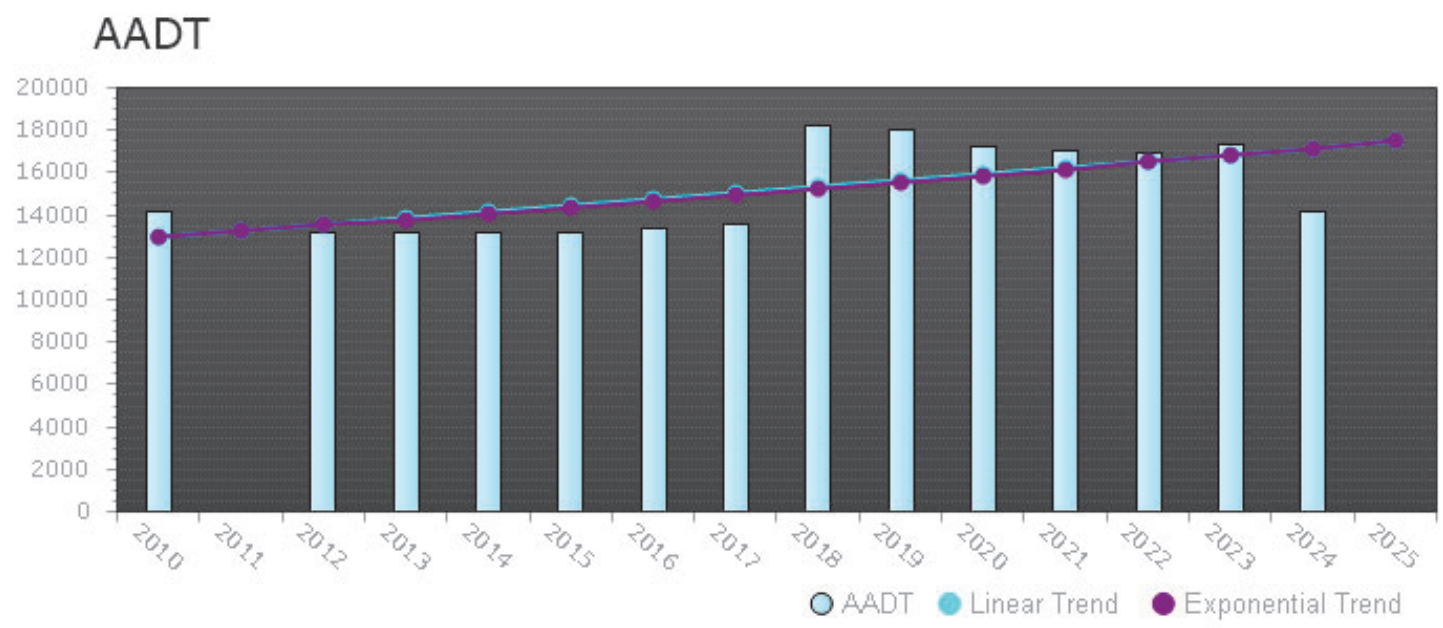


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947003	5200	0.09	0.511		463	463
2023	947003	7000	0.09	0.516		624	624
2022	947003	6800	0.09	0.514	0	606	606
2021	947003	6800	0.09	0.509	0	606	606
2020	947003	6900		0.51	-1		
2019	947003	7200		51			
2018	947003	7200		51.3			
2017	947003	3500		50.9			
2016	947003	3500		50.9			
2015	947003	3500		51			
2014	947003	3500		50.8			
2013	947003	3500		50.8			
2012	947003	3500		56.8			
2009	947003	3000			0	291	311

Station 947007

ON EDWARDS RD - W. OF SUNRISE BLVD (COUNTY 108)

Linear Growth = 1.72%
Exponential Growth = 1.96%

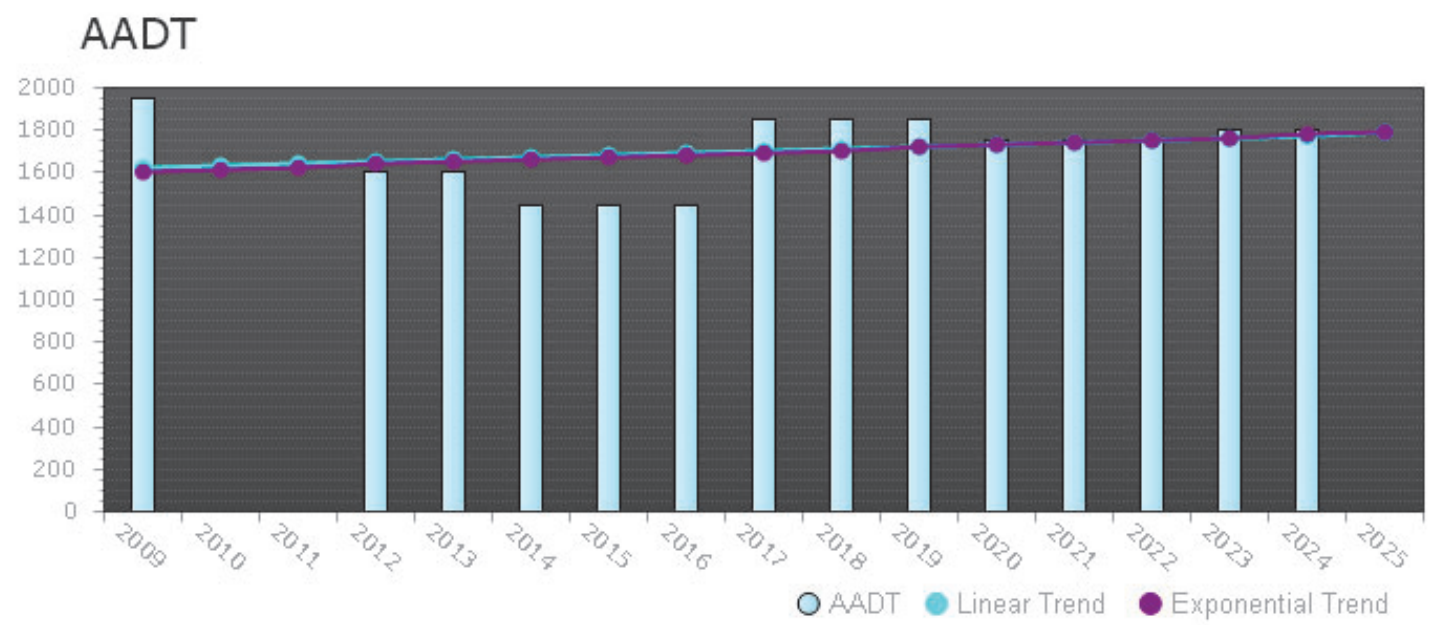


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947007	14200	0.09	0.511		1265	1265
2023	947007	17300	0.09	0.516		1541	1541
2022	947007	16900	0.09	0.514	0	1505	1505
2021	947007	17000	0.09	0.509	0	1514	1514
2020	947007	17200		0.51	-1		
2019	947007	18000		51			
2018	947007	18200		51.3			
2017	947007	13600		50.9			
2016	947007	13400		50.9			
2015	947007	13200		51			
2014	947007	13200		50.8			
2013	947007	13200		50.8			
2012	947007	13200		56.8			
2010	947007	14200			0	1210	1333

Station 947010

ON FARMER'S MARKET RD - W. OF US 1 SOUTH (COUNTY 112)

Linear Growth = 0.62%
Exponential Growth = 0.67%

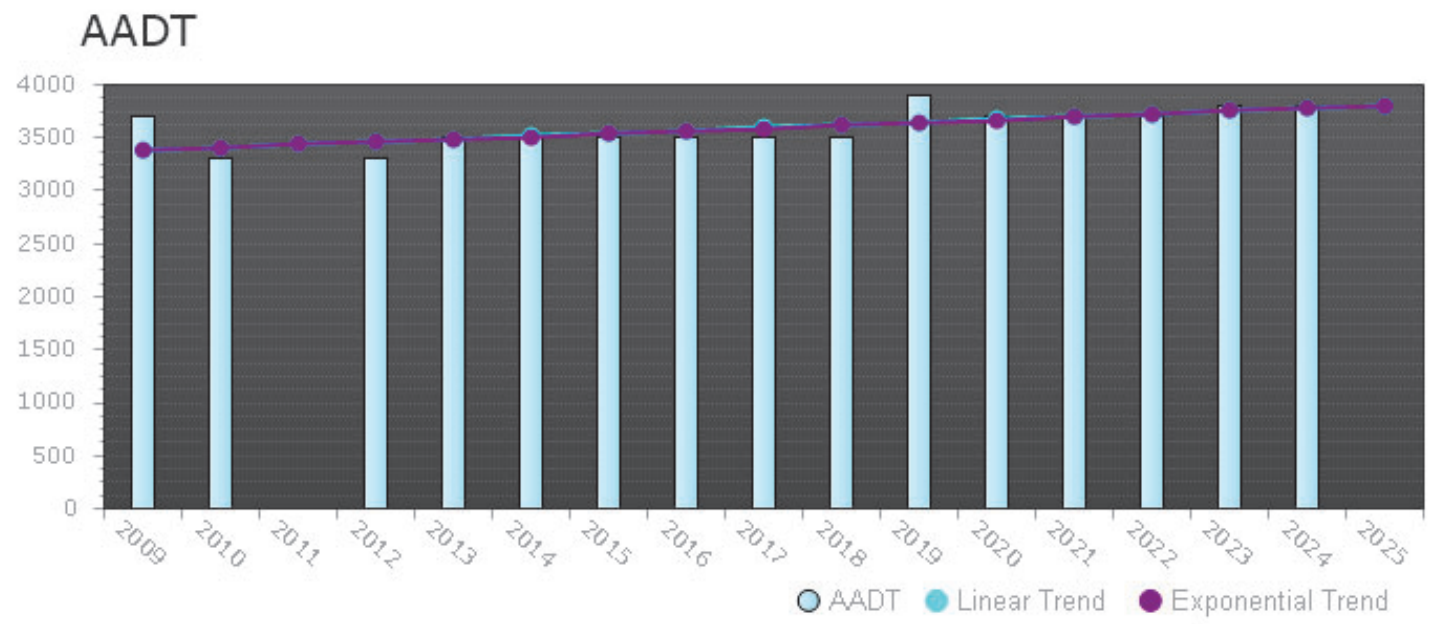


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947010	1800	0.09	0.511		160	160
2023	947010	1800	0.09	0.516		160	160
2022	947010	1750	0.09	0.514	0	155	155
2021	947010	1750	0.09	0.509	0	155	155
2020	947010	1750		0.51	-1		
2019	947010	1850		51			
2018	947010	1850		51.3			
2017	947010	1850		50.9			
2016	947010	1450		50.9			
2015	947010	1450		51			
2014	947010	1450		50.8	2.03		
2013	947010	1600		50.8			
2012	947010	1600		56.8	3.23		
2009	947010	1950			0	167	175

Station 947041

ON SUNRISE BLVD - S. OF EDWARDS RD (COUNTY 153)

Linear Growth = 0.68%
Exponential Growth = 0.74%

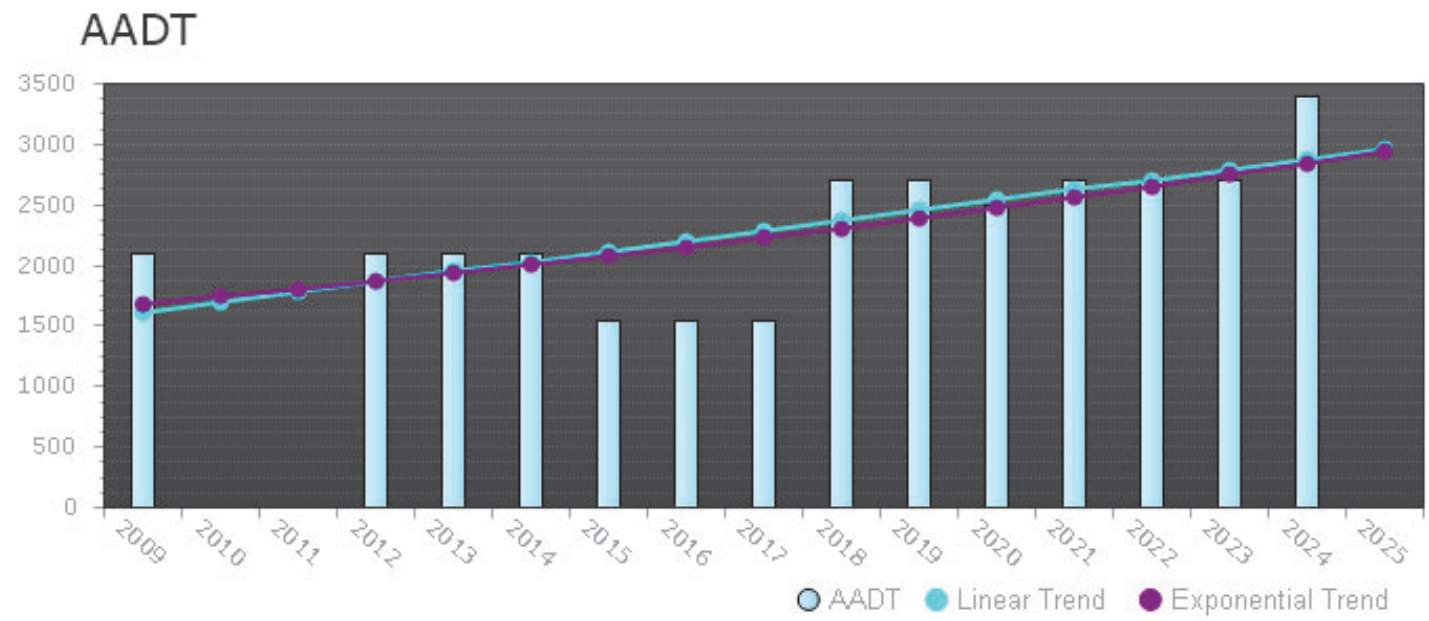


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947041	3800	0.09	0.511		338	338
2023	947041	3800	0.09	0.516		338	338
2022	947041	3700	0.09	0.514	0	330	330
2021	947041	3700	0.09	0.509	0	330	330
2020	947041	3700		0.51	-1		
2019	947041	3900		51			
2018	947041	3500		51.3			
2017	947041	3500		50.9			
2016	947041	3500		50.9			
2015	947041	3500		51			
2014	947041	3500		50.8			
2013	947041	3500		50.8			
2012	947041	3300		56.8			
2010	947041	3300			0	302	364
2009	947041	3700			0	356	365

Station 947045

ON SUNRISE BLVD - N. OF MIDWAY RD WEST (COUNTY 157)

Linear Growth = 2.87%
Exponential Growth = 3.43%

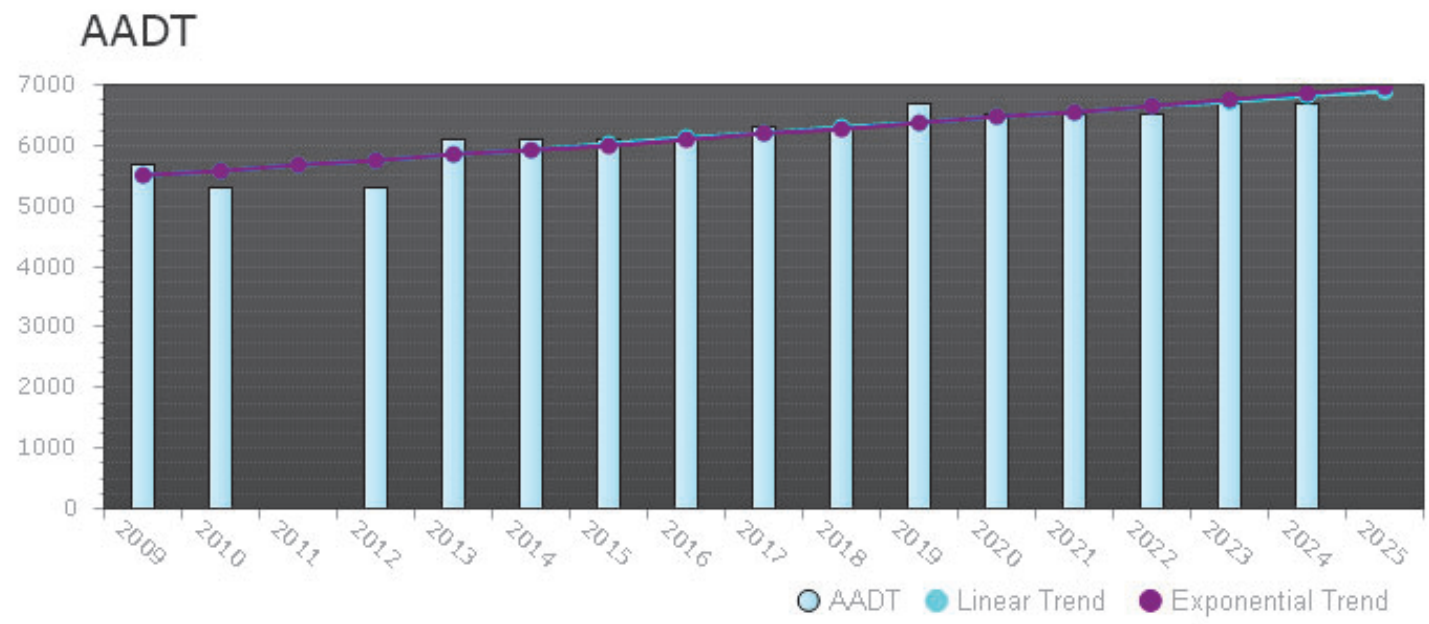


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947045	3400	0.09	0.511		329	329
2023	947045	2700	0.09	0.516		261	261
2022	947045	2700	0.09	0.514	0	261	261
2021	947045	2700	0.09	0.509	0	261	261
2020	947045	2500		0.51	-1		
2019	947045	2700		51			
2018	947045	2700		51.3			
2017	947045	1550		50.9			
2016	947045	1550		50.9			
2015	947045	1550		51			
2014	947045	2100		50.8			
2013	947045	2100		50.8			
2012	947045	2100		56.8			
2009	947045	2100			0	221	203

Station 947097

ON SUNRISE BLVD - S. OF VIRGINIA AVE (COUNTY 511)

Linear Growth = 1.27%
Exponential Growth = 1.44%

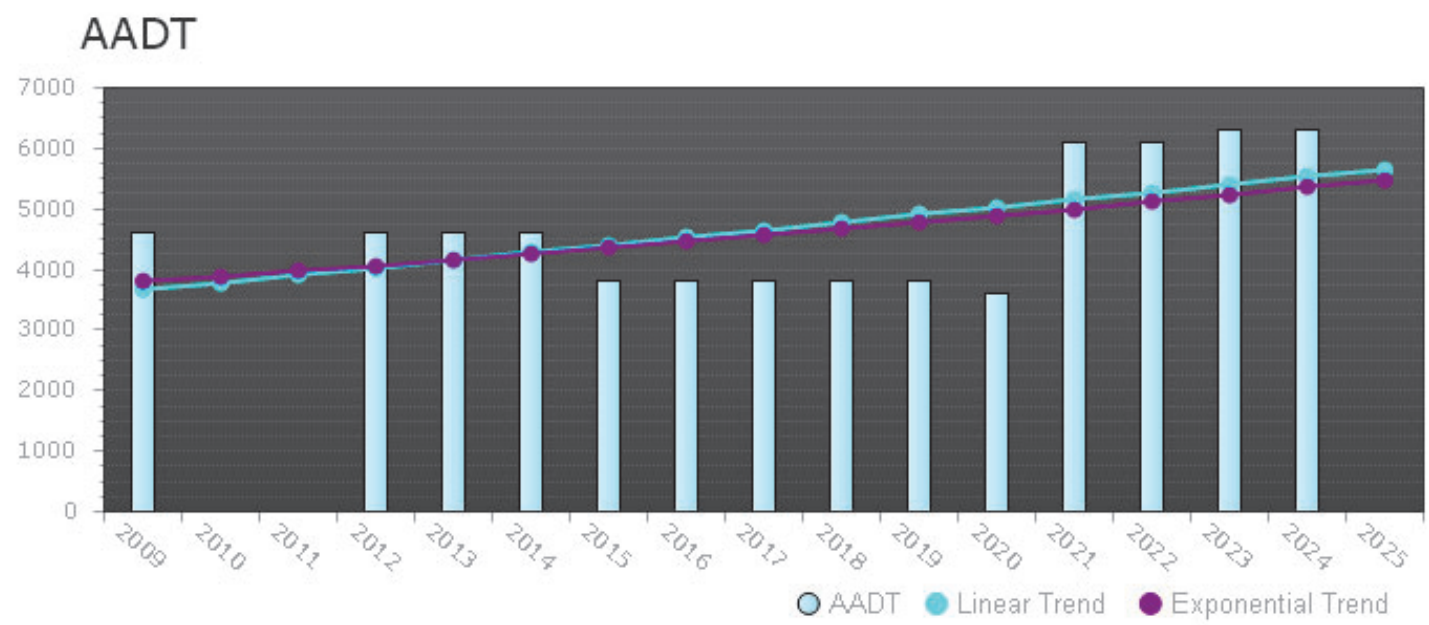


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947097	6700	0.09	0.511		597	597
2023	947097	6700	0.09	0.516		597	597
2022	947097	6500	0.09	0.514	0	579	579
2021	947097	6500	0.09	0.509	0	579	579
2020	947097	6500		0.51	-1		
2019	947097	6700		51			
2018	947097	6300		51.3			
2017	947097	6300		50.9			
2016	947097	6100		50.9			
2015	947097	6100		51			
2014	947097	6100		50.8			
2013	947097	6100		50.8			
2012	947097	5300		56.8			
2010	947097	5300			0	445	577
2009	947097	5700			0	494	559

Station 947099

ON SUNRISE BLVD - N. OF EDWARDS RD (COUNTY 513)

Linear Growth = 2.21%
Exponential Growth = 2.26%

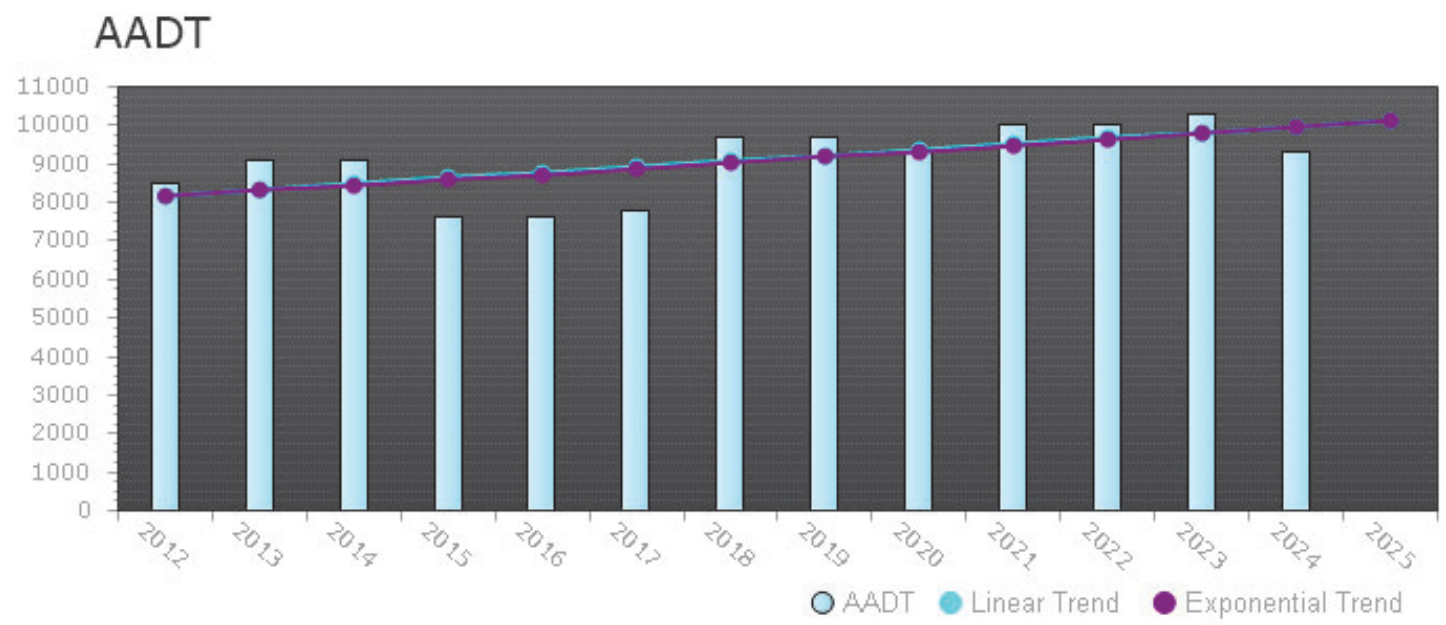


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	947099	6300	0.09	0.511		609	609
2023	947099	6300	0.09	0.516		609	609
2022	947099	6100	0.09	0.514	0	590	590
2021	947099	6100	0.09	0.509	0	590	590
2020	947099	3600		0.51	-1		
2019	947099	3800		51			
2018	947099	3800		51.3			
2017	947099	3800		50.9			
2016	947099	3800		50.9			
2015	947099	3800		51			
2014	947099	4600		50.8			
2013	947099	4600		50.8			
2012	947099	4600		56.8			
2009	947099	4600			0	428	492

Station 948541

OLEANDER AVE FROM FARMER MARKET RD TO KANNER DR (H

Linear Growth = 1.46%
Exponential Growth = 1.63%

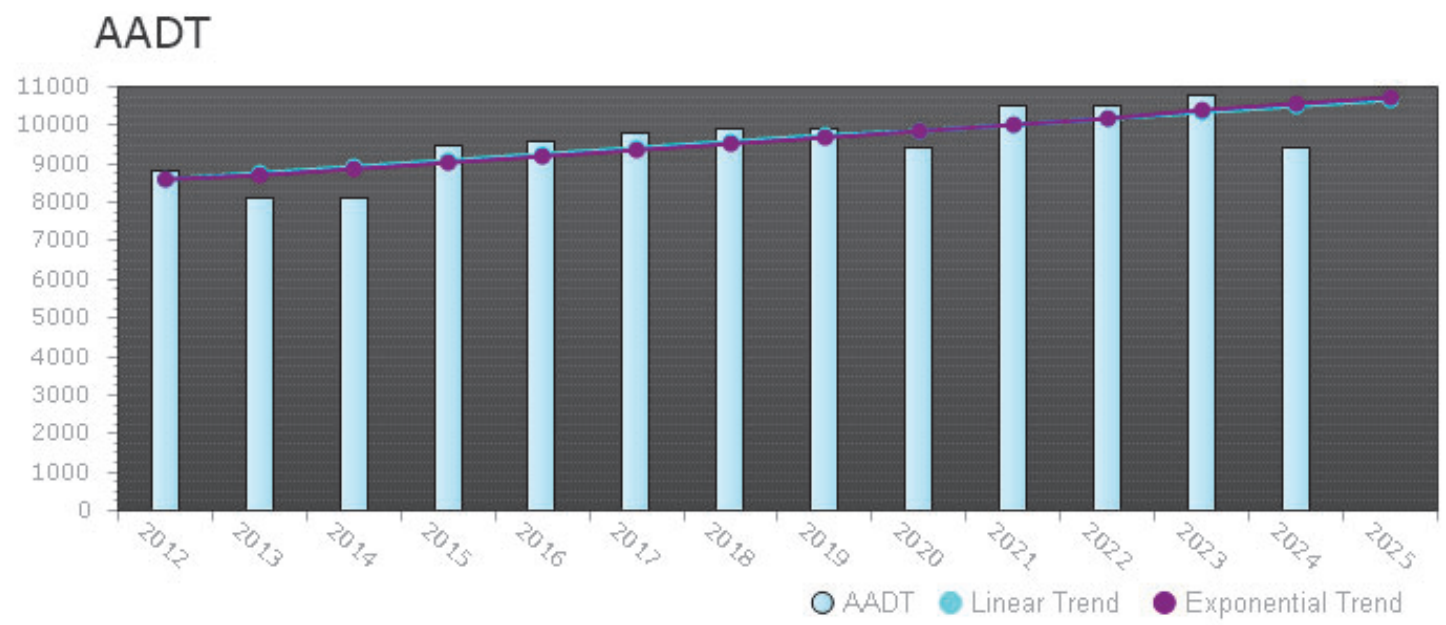


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	948541	9300	0.09	0.511		899	899
2023	948541	10300	0.09	0.516		996	996
2022	948541	10000	0.09	0.514	0	967	967
2021	948541	10000	0.09	0.509	0	967	967
2020	948541	9300		0.51	-1		
2019	948541	9700		51			
2018	948541	9700		51.3			
2017	948541	7800		50.9			
2016	948541	7600		50.9			
2015	948541	7600		51	2.97		
2014	948541	9100		50.8			
2013	948541	9100		50.8			
2012	948541	8500		56.8	1.2		

Station 948542

OLEANDER AVE FROM ROSELYN AVE TO OSCEOLA AVE (HPMS

Linear Growth = 1.52%
Exponential Growth = 1.71%

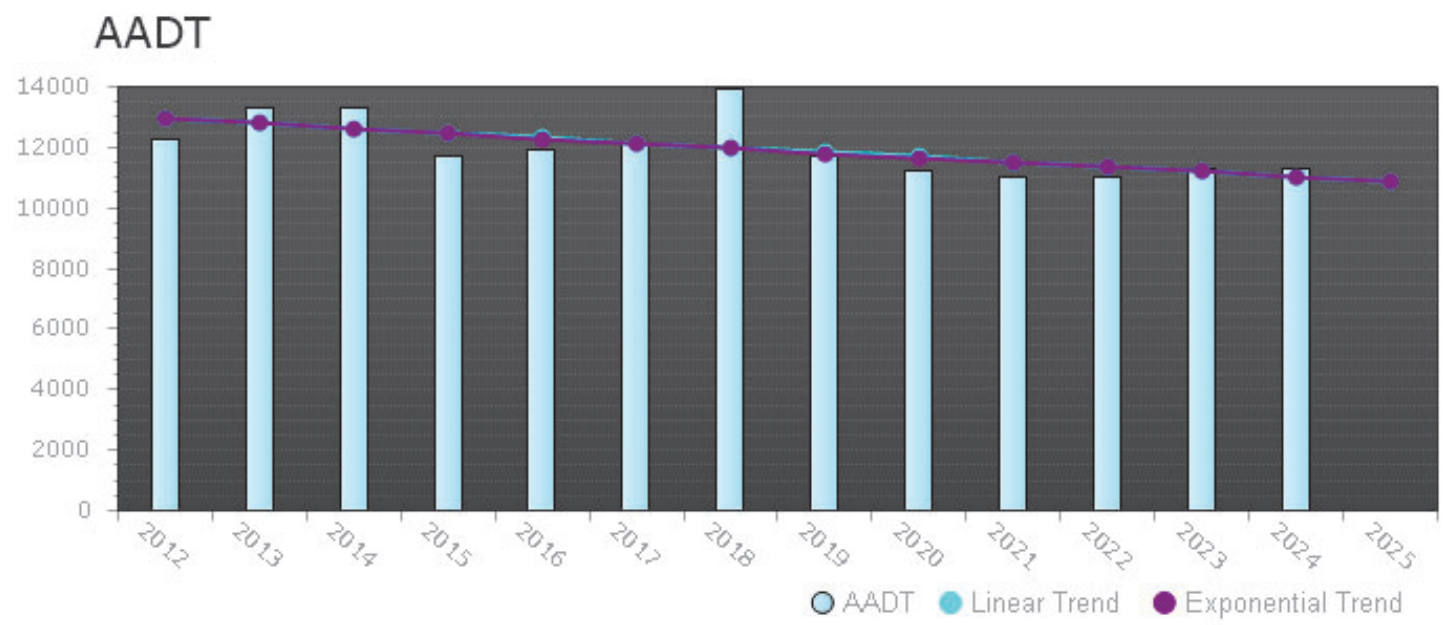


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	948542	9400	0.09	0.511		909	909
2023	948542	10800	0.09	0.516		1044	1044
2022	948542	10500	0.09	0.514	0	1015	1015
2021	948542	10500	0.09	0.509	0	1015	1015
2020	948542	9400		0.51	-1		
2019	948542	9900		51			
2018	948542	9900		51.3			
2017	948542	9800		50.9			
2016	948542	9600		50.9			
2015	948542	9500		51	1.5		
2014	948542	8100		50.8			
2013	948542	8100		50.8			
2012	948542	8800		56.8	0.4		

Station 948543

EDWARDS RD/CR 611B FROM S 25 ST TO OLEANDER AVE (

Linear Growth = -1.47%
Exponential Growth = -1.34%

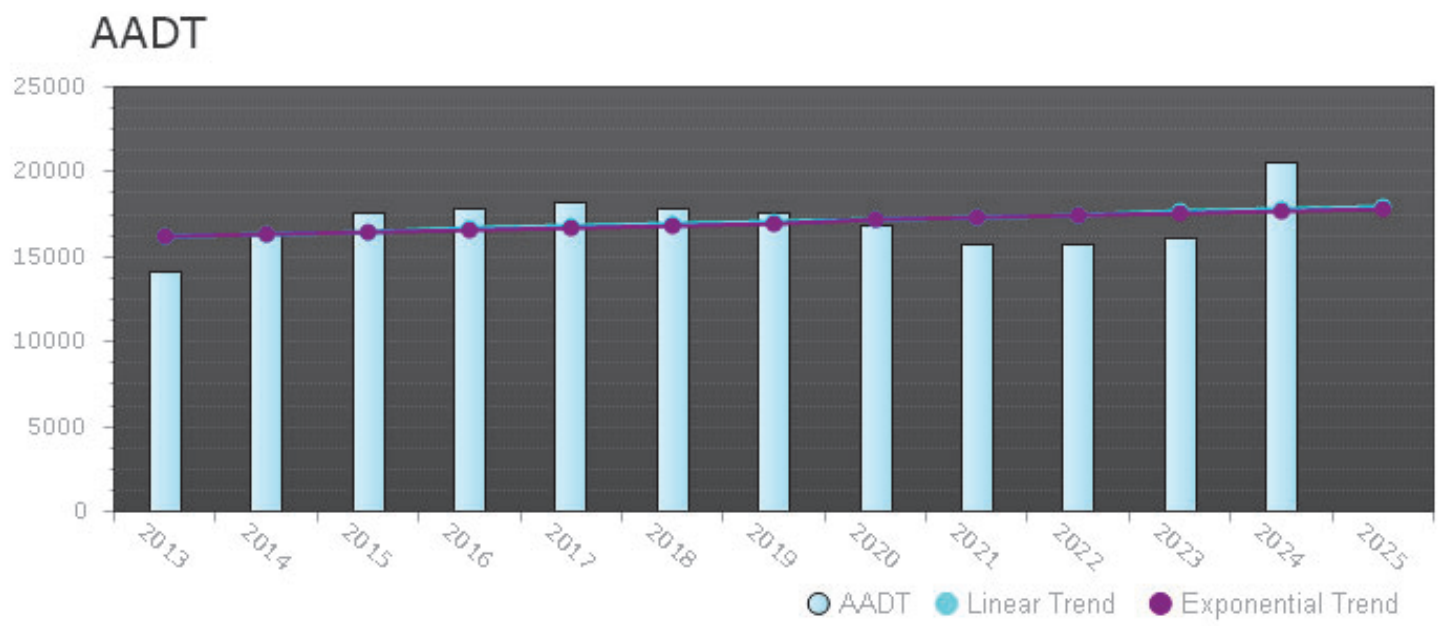


YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	948543	11300	0.09	0.511		1093	1093
2023	948543	11300	0.09	0.516		1093	1093
2022	948543	11000	0.09	0.514	0	1064	1064
2021	948543	11000	0.09	0.509	0	1064	1064
2020	948543	11200		0.51	-1		
2019	948543	11700		51			
2018	948543	13900		51.3			
2017	948543	12100		50.9			
2016	948543	11900		50.9			
2015	948543	11700		51	5.08		
2014	948543	13300		50.8			
2013	948543	13300		50.8			
2012	948543	12300		56.8	3.57		

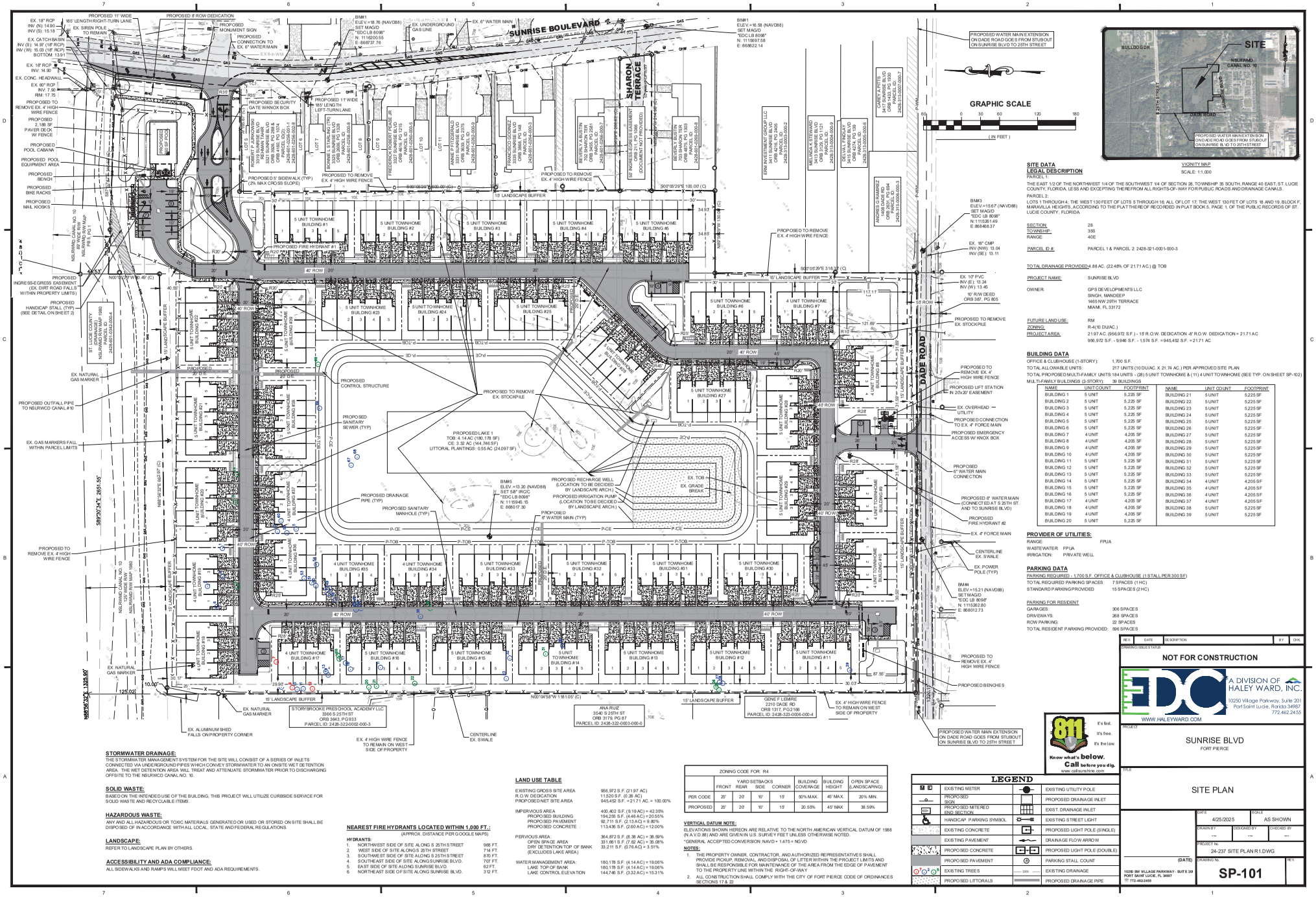
Station 948549

S 25TH ST (CR 615) - N OF DADE RD (HPMS)

Linear Growth = 0.79%
Exponential Growth = 0.81%



YEAR	STATION	AADT	K100	AVG DFACTOR	HEAVY VEHICLE %	AM PEAK VOL	PM PEAK VOL
2024	948549	20500	0.09	0.511		1982	1982
2023	948549	16100	0.09	0.516		1557	1557
2022	948549	15700	0.09	0.514	0	1518	1518
2021	948549	15700	0.09	0.509	0	1518	1518
2020	948549	16800		0.51	-1		
2019	948549	17600		51			
2018	948549	17800		51.3			
2017	948549	18200		50.9			
2016	948549	17800		50.9			
2015	948549	17600		51	5.1		
2014	948549	16300		50.8			
2013	948549	14100		50.8	1.15		



SITE DATA

LEGAL DESCRIPTION

PARCEL 1:

THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 28, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LESS AND EXCEPTING THEREFROM ALL RIGHTS-OF-WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

PARCEL 2:

LOTS 1 THROUGH 4, THE WEST 130 FEET OF LOTS 5 THROUGH 16, ALL OF LOT 17, THE WEST 130 FET OF LOTS 18 AND 19, BLOCK F, MARAVILLA HEIGHTS, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 5, PAGE 1, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

SECTION:	28
TOWNSHIP:	35S
RANGE:	40E
PARCEL ID #:	PARCEL 1 & PARCEL 2: 2428-321-0001-000-3
TOTAL DRAINAGE PROVIDED:	4.88 AC. (22.48% OF 21.71 AC.) @ TOB
PROJECT NAME:	SUNRISE BLVD
OWNER:	GPS DEVELOPMENTS LLC SINGH, MANDEEP 1465 NW 29TH TERRACE MIAMI, FL 33172
FUTURE LAND USE:	RM
ZONING:	R-4(16 DU/AC.)
PROJECT AREA:	21.97 AC. (956,972 S.F.) - 15' R.O.W. DEDICATION -8' R.O.W. DEDICATION = 21.71 AC 956,972 S.F. - 9,946 S.F. - 1,574 S.F. = 945,452 S.F. = 21.71 AC

BUILDING DATA

OFFICE & CLUBHOUSE (1-STORY): 1,700 S.F.

TOTAL ALLOWABLE UNITS: 217 UNITS (10 DU/AC. X 21.74 AC.) PER APPROVED SITE PLAN

TOTAL PROPOSED MULTI-FAMILY UNITS: 184 UNITS - (28) 5 UNIT TOWNHOME & (11) 4 UNIT TOWNHOME (SEE TYP. ON SHEET SP-102)

MULTI-FAMILY BUILDINGS (2-STORY): 39 BUILDINGS

NAME	UNIT COUNT	FOOTPRINT	NAME	UNIT COUNT	FOOTPRINT
BUILDING 1	5 UNIT	5,225 SF	BUILDING 21	5 UNIT	5,225 SF
BUILDING 2	5 UNIT	5,225 SF	BUILDING 22	5 UNIT	5,225 SF
BUILDING 3	5 UNIT	5,225 SF	BUILDING 23	5 UNIT	5,225 SF
BUILDING 4	5 UNIT	5,225 SF	BUILDING 24	5 UNIT	5,225 SF
BUILDING 5	5 UNIT	5,225 SF	BUILDING 25	5 UNIT	5,225 SF
BUILDING 6	5 UNIT	5,225 SF	BUILDING 26	5 UNIT	5,225 SF
BUILDING 7	4 UNIT	4,205 SF	BUILDING 27	5 UNIT	5,225 SF
BUILDING 8	4 UNIT	4,205 SF	BUILDING 28	5 UNIT	5,225 SF
BUILDING 9	4 UNIT	4,205 SF	BUILDING 29	4 UNIT	4,205 SF
BUILDING 10	4 UNIT	4,205 SF	BUILDING 30	4 UNIT	4,205 SF
BUILDING 11	5 UNIT	5,225 SF	BUILDING 31	5 UNIT	5,225 SF
BUILDING 12	5 UNIT	5,225 SF	BUILDING 32	5 UNIT	5,225 SF
BUILDING 13	5 UNIT	5,225 SF	BUILDING 33	5 UNIT	5,225 SF
BUILDING 14	5 UNIT	5,225 SF	BUILDING 34	4 UNIT	4,205 SF
BUILDING 15	5 UNIT	5,225 SF	BUILDING 35	4 UNIT	4,205 SF
BUILDING 16	5 UNIT	5,225 SF	BUILDING 36	4 UNIT	4,205 SF
BUILDING 17	4 UNIT	4,205 SF	BUILDING 37	4 UNIT	4,205 SF
BUILDING 18	4 UNIT	4,205 SF	BUILDING 38	5 UNIT	5,225 SF
BUILDING 19	4 UNIT	4,205 SF	BUILDING 39	5 UNIT	5,225 SF
BUILDING 20	5 UNIT	5,225 SF			

PROVIDER OF UTILITIES:

RANGE: FPUA

WASTEWATER: FPUA

IRRIGATION: PRIVATE WELL

PARKING DATA

PARKING REQUIRED - 1,700 S.F. OFFICE & CLUBHOUSE (1 STALL PER 300 SF)

TOTAL REQUIRED PARKING SPACES: 7 SPACES (1 HC)

STANDARD PARKING PROVIDED: 19 SPACES (2 HC)

PARKING FOR RESIDENT

GARAGES: 306 SPACES

DRIVEWAYS: 268 SPACES

ROW PARKING: 22 SPACES

TOTAL RESIDENT PARKING PROVIDED: 596 SPACES

STORMWATER DRAINAGE:
THE STORMWATER MANAGEMENT SYSTEM FOR THE SITE WILL CONSIST OF A SERIES OF INLETS CONNECTED VIA UNDERGROUND PIPES WHICH CONVEY STORMWATER TO AN ONSITE WET DETENTION AREA. THE WET DETENTION AREA WILL TREAT AND ATTENUATE STORMWATER PRIOR TO DISCHARGING OFFSITE TO THE NSLRWCD CANAL NO. 10.

SOLID WASTE:
BASED ON THE INTENDED USE OF THE BUILDING, THIS PROJECT WILL UTILIZE CURBSIDE SERVICE FOR SOLID WASTE AND RECYCLABLE ITEMS.

HAZARDOUS WASTE:
ANY AND ALL HAZARDOUS OR TOXIC MATERIALS GENERATED OR USED OR STORED ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

LANDSCAPE:
REFER TO LANDSCAPE PLAN BY OTHERS.

ACCESSIBILITY AND ADA COMPLIANCE:
ALL SIDEWALKS AND RAMPS WILL MEET FDOT AND ADA REQUIREMENTS.

NEAREST FIRE HYDRANTS LOCATED WITHIN 1,000 FT.:
(APPROX. DISTANCE PER GOOGLE MAPS)

HYDRANTS:

1.	NORTHWEST SIDE OF SITE ALONG S 25TH STREET	998 FT.
2.	WEST SIDE OF SITE ALONG S 25TH STREET	714 FT.
3.	SOUTHWEST SIDE OF SITE ALONG S 25TH STREET	870 FT.
4.	SOUTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	707 FT.
5.	EAST SIDE OF SITE ALONG SUNRISE BLVD.	627 FT.
6.	NORTHEAST SIDE OF SITE ALONG SUNRISE BLVD.	312 FT.

LAND USE TABLE

EXISTING GROSS SITE AREA	956,972 S.F. (21.97 AC.)	
R.O.W. DEDICATION	11,520 S.F. (0.26 AC.)	
PROPOSED NET SITE AREA	945,452 S.F. = 21.71 AC. =	100.00%
IMPERVIOUS AREA	400,402 S.F. (9.19 AC.) =	42.35%
PROPOSED BUILDING	194,255 S.F. (4.46 AC.) =	20.55%
PROPOSED PAVEMENT	92,711 S.F. (2.13 AC.) =	9.80%
PROPOSED CONCRETE	113,436 S.F. (2.60 AC.) =	12.00%
PERVIOUS AREA:	364,872 S.F. (8.38 AC.) =	38.59%
OPEN SPACE AREA	331,661 S.F. (7.62 AC.) =	35.08%
DRY DETENTION TOP OF BANK (EXCLUDES LAKE AREA)	33,211 S.F. (0.76 AC.) =	3.51%
WATER MANAGEMENT AREA:	180,178 S.F. (4.14 AC.) =	19.06%
LAKE TOP OF BANK	180,178 S.F. (4.14 AC.) =	19.06%
LAKE CONTROL ELEVATION	144746 S.F. (3.32 AC.) =	15.31%

ZONING CODE FOR: R4							
	YARD SETBACKS				BUILDING COVERAGE	BUILDING HEIGHT	OPEN SPACE (LANDSCAPING)
	FRONT	REAR	SIDE	CORNER			
PER CODE	25'	20'	10'	15'	50% MAX.	45' MAX.	20% MIN.
PROPOSED	25'	20'	10'	15'	20.55%	45' MAX	38.59%

VERTICAL DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

NOTES:
1. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE RIGHT-OF-WAY.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22

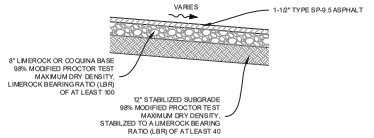
LEGEND

EXISTING METER		EXISTING UTILITY POLE	
PROPOSED SIGN		PROPOSED DRAINAGE INLET	
PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET	
HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT	
EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)	
EXISTING PAVEMENT		DRAINAGE FLOW ARROW	
PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)	
PROPOSED PAVEMENT	P	PARKING STALL COUNT	
EXISTING TREES		EXISTING DRAINAGE	
PROPOSED LITTORALS		PROPOSED DRAINAGE PIPE	

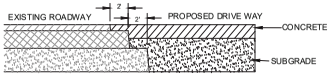
REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUES STATUS

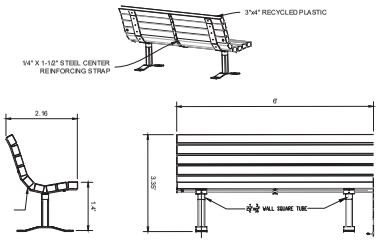
102D SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455



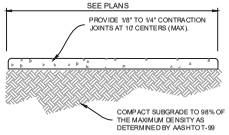
TYPICAL PAVEMENT SECTION
NTS



MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS

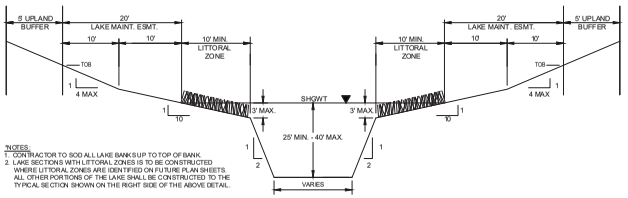


6' CONTOUR BENCH DETAIL
NTS



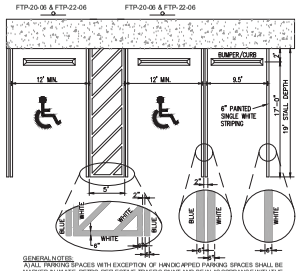
NOTES:
1. USE 3,000 P.S.I. CONCRETE AT 28 DAYS FOR SIDEWALK CONSTRUCTION.
2. SIDEWALK THICKNESS TO BE INCREASED TO 6" THICK AT DRIVEWAY LOCATIONS.
3. ALL REPAIRS REQUIRED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED 10' MINIMUM TO NEXT FULL JOINT.
4. ALL SIDEWALK WITHIN FDOT RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD PLANS 522-001.

TYPICAL SIDEWALK DETAIL
NTS



*NOTES:
1. CONTRACTOR TO SOD ALL LAKE BANKS UP TO TOP OF BANK.
2. LAKE SECTIONS WITH LITTORAL ZONES IS TO BE CONSTRUCTED WHERE LITTORAL ZONES ARE IDENTIFIED ON FUTURE PLAN SHEETS. ALL OTHER PORTIONS OF THE LAKE SHALL BE CONSTRUCTED TO THE TYPICAL SECTION SHOWN ON THE RIGHT SIDE OF THE ABOVE DETAIL.

TYPICAL LAKE CROSS SECTION



GENERAL NOTES:
A) ALL PARKING SPACES WITH EXCEPTION OF HANDICAPPED PARKING SPACES SHALL BE MARKED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 SECTION 710.

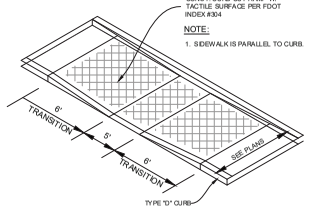
B) ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, FY 2017-18.

C) ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.

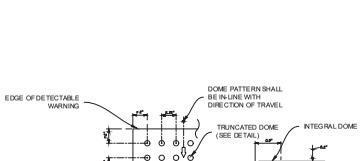


NOTES:
1. FTP-20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP-21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP-20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP-22-06 IS SUPPLEMENTAL PANEL FOR THE FTP-20-06 & FTP-21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "52-50 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

HANDICAP AND TYPICAL PARKING DETAIL
NTS



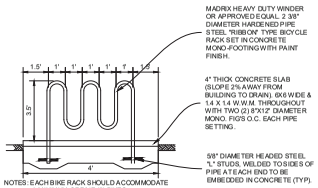
HANDICAP RAMP DETAIL
NTS



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB

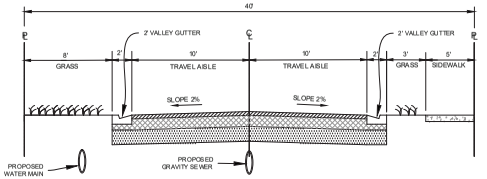
NOTES:
REFER TO FDOT INDEX 304 FOR FURTHER DETAILS
CAST IN PLACE

DETECTABLE WARNING SURFACE DETAIL
NTS

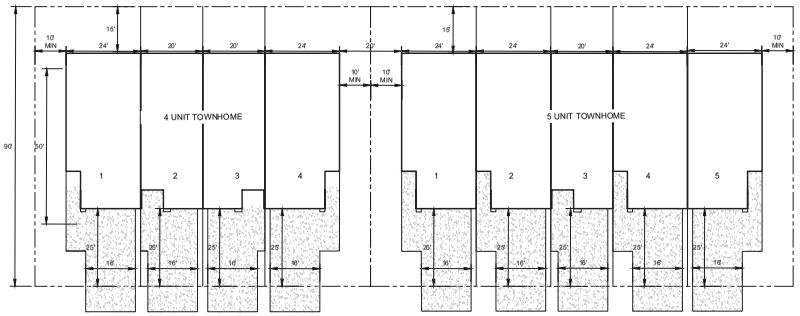


NOTES: EACH BIKE RACK SHOULD ACCOMMODATE A MINIMUM OF FIVE (5) BIKES.

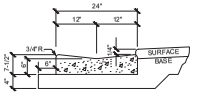
TYPICAL BIKE RACK DETAIL
NTS



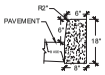
TYPICAL ROADWAY SECTION
NTS



TYPICAL TOWNHOME UNITS
NTS

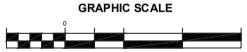


VALLEY GUTTER DETAIL
NTS



TYPE "D" CURB DETAIL
NTS

GRAPHIC SCALE



(IN FEET)

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUES STATUS

NOT FOR CONSTRUCTION

EDC A DIVISION OF HALEY WARD, INC.
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

SITE PLAN DETAILS

811 Know what's below. Call before you dig. It's fast. It's free. It's the law. www.callsunshine.com

(DATE)
102D SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
2025.03.13	AS SHOWN
DRAWN BY: ---	DESIGNED BY: ---
CHECKED BY: ---	
PROJECT No. 24-237 SITE PLAN R1.DWG	
DRAWING No. SP-102	REV.

FILE LOCATION: Z:\EDC\2024\24-237 - SUNRISE BLVD, FORT PIERCE\NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 SITE PLAN R1.DWG, 2025.04.03, 10:40 AM

FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - Alerts.

Florida Department of

TRANSPORTATION

Web Application

Office of Work Program and Budget

Updated: 4/9/2025 9:1

Five Year Work Program

Selection Criteria	
District 04 **St Lucie County** **Phase:**Construction	**2025-2030 G1** **Category:**Highways **Item Number:**231440-2

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: NON-INTRASTATE OFF STATE HIWAYDistrict 04 - St Lucie County
Description: W. MIDWAY RD/CR-712 FROM S. 25TH STREET/SR-615 TO SR-5/US-1
Type of Work: ADD LANES & RECONSTRUCT View Scheduled Activities
Item Number: 231440-2
Length: 1.803 View Map of Item

Construction Contract Information

Notice to Proceed Date	Work Begun Date	Present Contract Days	Contract Days Used	Percent Days Used
08/19/2016	11/07/2016	1859	1859	100.00%
Vendor Name: MORRISON - COBALT JV				

Project Detail

Fiscal Year:	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Highways/Preliminary Engineering						***(On-Going)***
Amount:						
Highways/Right of Way						***(On-Going)***
Amount:						
Highways/Railroad & Utilities						***(On-Going)***
Amount:						
Highways/Construction						***(On-Going)***
Amount:	$763,779					
Highways/Environmental						***(On-Going)***
Amount:						

Item Total:	**$763,779**					

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 323

View Contact Information for Office of Work Program and Budget

Application Home: Work Program
Office Home: Office of Work Program and Budget

- Contact Us
- Employment
- MyFlorida.com
- Performance
- Statement of Agency
- Web Policies & Notices

© 1996-2019 Florida Department of Transportation

Florida Department of Transportation

Consistent, Predictable, Repeatable

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables



(C3C-Suburban Commercial)

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**



(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

Input Parameters

Roadway Characteristics

	C3C	C3R
Number of Lanes (one direction)	1-4	1-3
Posted Speed (mph)	45	45
Facility Length (miles)	3.98	2.57

Traffic Characteristics

	C3C		C3R	
Planning Analysis Hour Factor (K)	0.09		0.09	
Directional Distribution Factor (D)	0.55		0.55	
Peak Hour Factor (PHF)	0.95		0.92	
Base Saturation Flow Rate	1,950		1,950	
Heavy Vehicle Percent (%)	4		4	
Lane Width	12		12	
Median Type	Non Restrictive (1 lane)	Restrictive (2,3,4 lanes)	Non Restrictive (1 lane)	Restrictive (2,3 lanes)
Roadway Edge Type	Curbed		Flush	
On-Street Parking	None		None	

Control Characteristics

	C3C		C3R
Cycle Length	160		190
Major Street Through g/c	0.5 (1,2,3 lanes)	0.45 (4 lanes)	0.5
Yellow Change Interval	5.1		5.1
Red Change Interval	2		2
Number of Signals	10		5

C2T, C4, C5, & C6

Motor Vehicle Arterial Generalized Service Volume Tables



(C2T-Rural Town)

Peak Hour Directional

	B	C	D	E
1 Lane	*	720	940	**
2 Lane	*	1,140	1,640	**
3 Lane	*	2,120	2,510	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,310	1,710	**
4 Lane	*	2,070	2,980	**
6 Lane	*	3,850	4,560	**

AADT

	B	C	D	E
2 Lane	*	13,800	18,000	**
4 Lane	*	21,800	31,400	**
6 Lane	*	40,500	48,000	**



(C4-Urban General)

	B	C	D	E
1 Lane	*	*	870	1,190
2 Lane	*	1,210	1,790	2,020
3 Lane	*	2,210	2,810	2,990
4 Lane	*	2,590	3,310	3,510

	B	C	D	E
2 Lane	*	*	1,580	2,160
4 Lane	*	2,200	3,250	3,670
6 Lane	*	4,020	5,110	5,440
8 Lane	*	4,710	6,020	6,380

	B	C	D	E
2 Lane	*	*	17,600	24,000
4 Lane	*	24,400	36,100	40,800
6 Lane	*	44,700	56,800	60,400
8 Lane	*	52,300	66,900	70,900

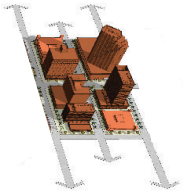


(C5-Urban Center)

	B	C	D	E
1 Lane	*	*	690	1,080
2 Lane	*	1,290	1,900	2,130
3 Lane	*	1,410	2,670	3,110
4 Lane	*	2,910	3,560	3,640

	B	C	D	E
2 Lane	*	*	1,250	1,960
4 Lane	*	2,350	3,450	3,870
6 Lane	*	2,560	4,850	5,650
8 Lane	*	5,290	6,470	6,620

	B	C	D	E
2 Lane	*	*	13,900	21,800
4 Lane	*	26,100	38,300	43,000
6 Lane	*	28,400	53,900	62,800
8 Lane	*	58,800	71,900	73,600



(C6-Urban Core)

	B	C	D	E
1 Lane	*	***	790	1,030
2 Lane	*	***	1,490	1,920
3 Lane	*	***	2,730	2,940
4 Lane	*	***	3,250	3,490

	B	C	D	E
2 Lane	*	***	1,440	1,870
4 Lane	*	***	2,710	3,490
6 Lane	*	***	4,960	5,350
8 Lane	*	***	5,910	6,350

	B	C	D	E
2 Lane	*	***	16,000	20,800
4 Lane	*	***	30,100	38,800
6 Lane	*	***	55,100	59,400
8 Lane	*	***	65,700	70,600

Adjustment Factors

The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80
Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* Cannot be achieved using table input value defaults.
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.

- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.

- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

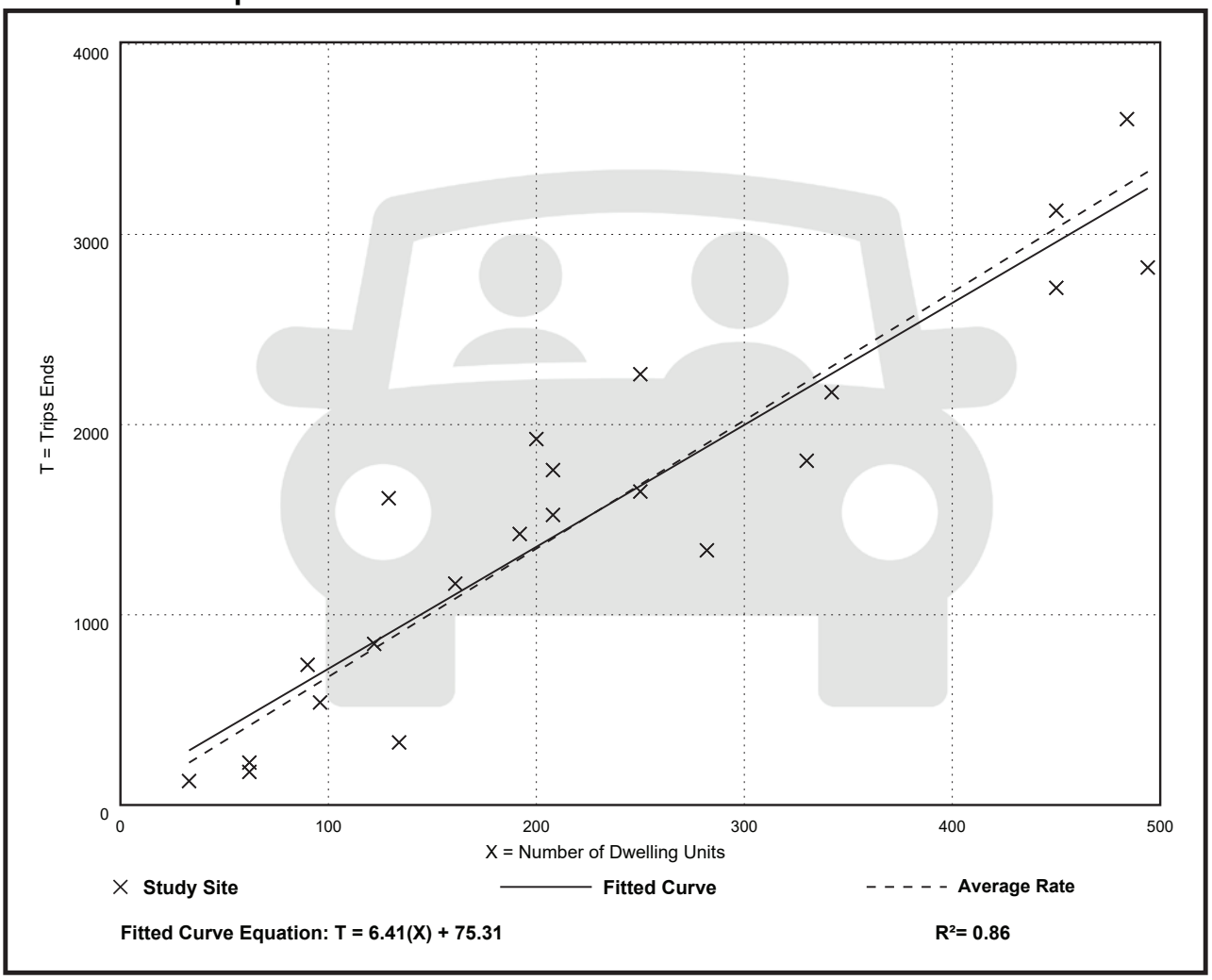
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

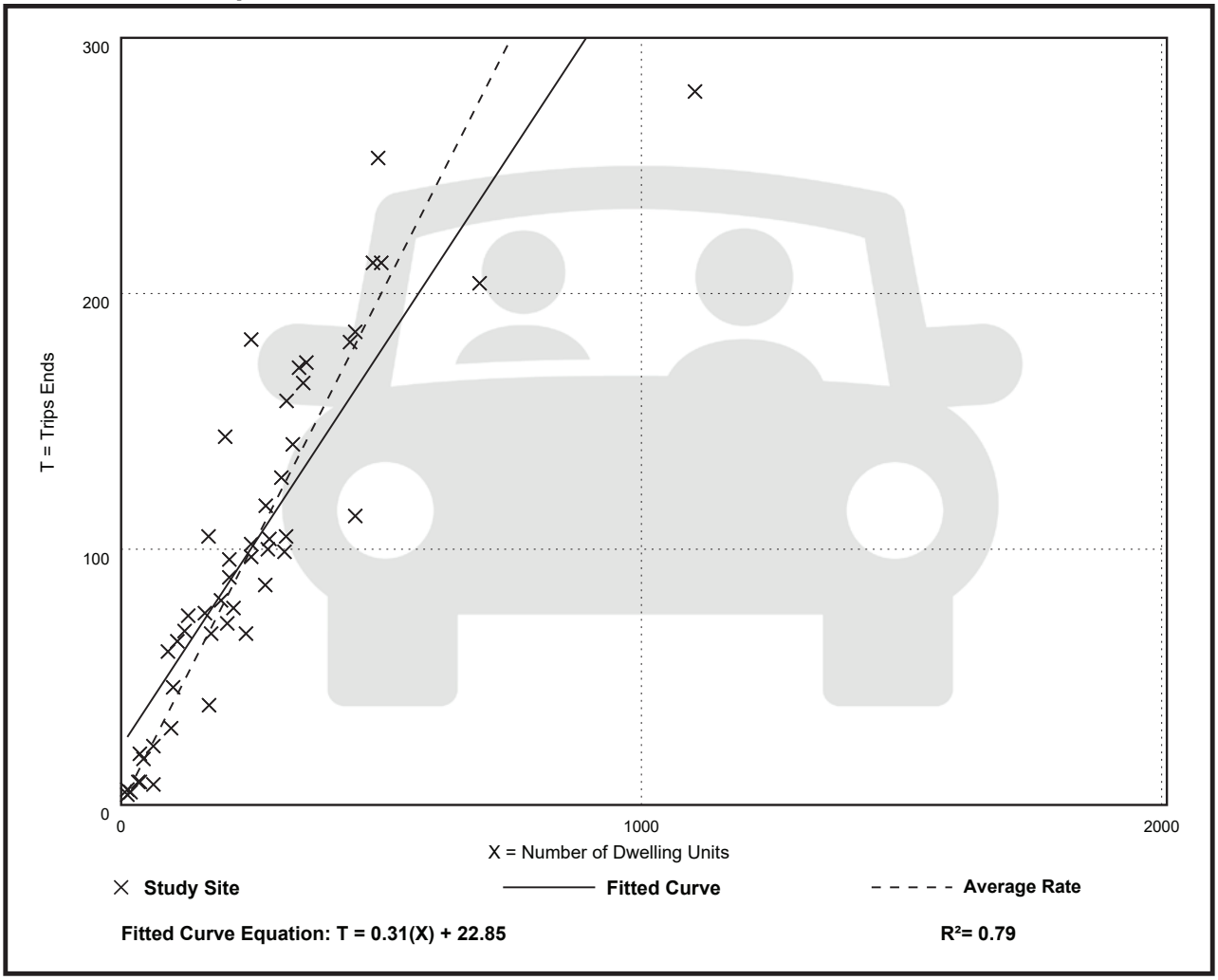
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



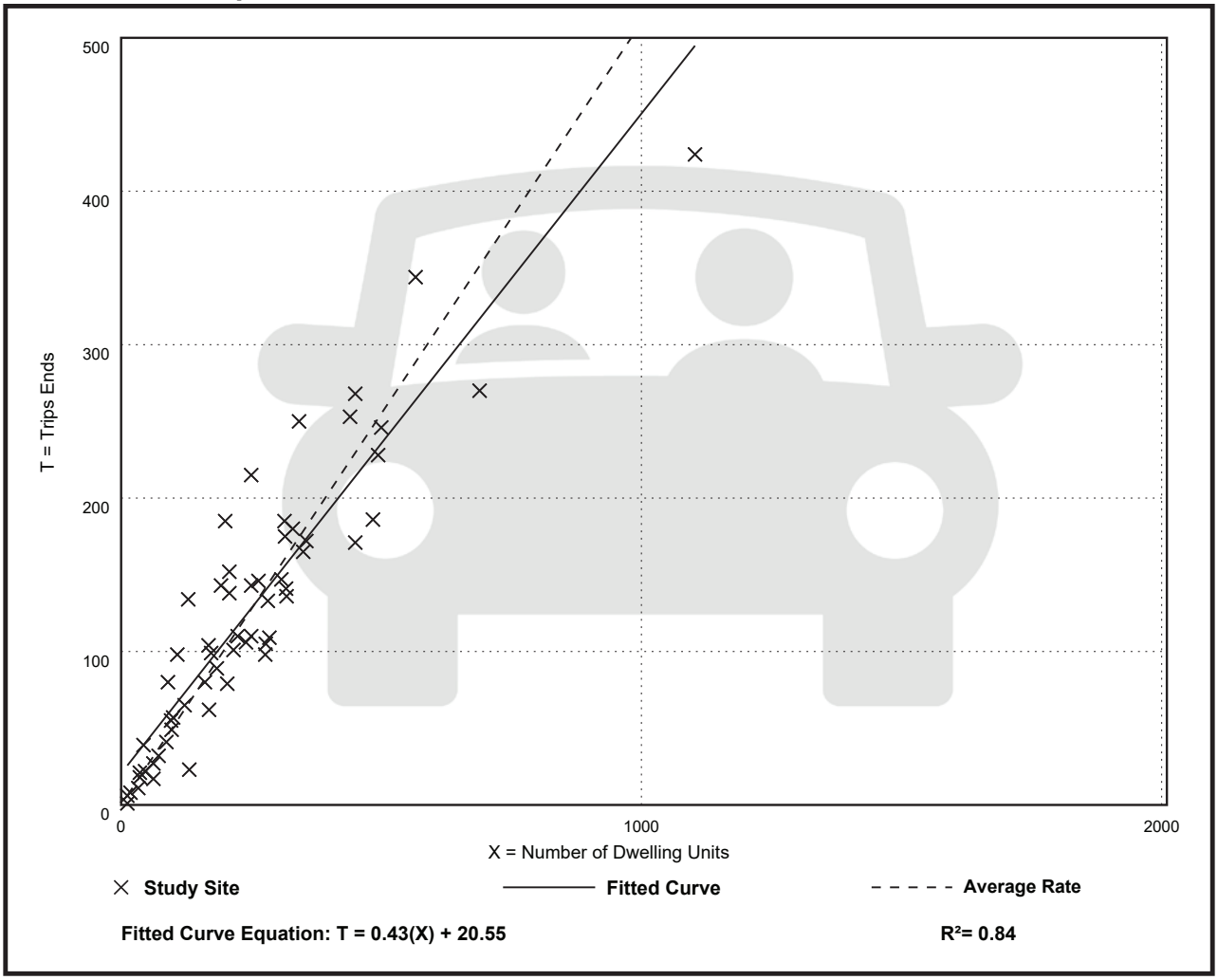
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Fitted Curve Equation: T = 0.43(X) + 20.55

R^2= 0.84

Property Identification

Site Address: 2100 Dade RD
Sec/Town/Range: 28/35S/40E
Parcel ID: 2428-321-0001-000-3
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 32173
Map ID: 24/28S
Zoning: Medium Den



Ownership

GPS Developments LLC
10465 NW 29th TER
Doral, FL 33172-2530

Legal Description

28 35 40 E 1/2 OF NW 1/4 OF SW 1/4-LESS CANAL, ROAD, FEC RR R/W-(17.88 AC)

Current Values

Just/Market Value:	$1,036,200
Assessed Value:	$493,996
Exemptions:	$0
Taxable Value:	$493,996

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office
Download TRIM for this parcel: Download PDF

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	17.88
Land Size (SF):	778,852.8

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	160	160

Sources/links:

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2025 Saint Lucie County Property Appraiser. All rights reserved.

2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 9401 CEN.-W OF US1 TO I95

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2024 - 01/06/2024	1.00	1.05
2	01/07/2024 - 01/13/2024	0.99	1.04
3	01/14/2024 - 01/20/2024	0.97	1.02
* 4	01/21/2024 - 01/27/2024	0.96	1.01
* 5	01/28/2024 - 02/03/2024	0.95	1.00
* 6	02/04/2024 - 02/10/2024	0.94	0.99
* 7	02/11/2024 - 02/17/2024	0.93	0.98
* 8	02/18/2024 - 02/24/2024	0.93	0.98
* 9	02/25/2024 - 03/02/2024	0.94	0.99
*10	03/03/2024 - 03/09/2024	0.94	0.99
*11	03/10/2024 - 03/16/2024	0.94	0.99
*12	03/17/2024 - 03/23/2024	0.94	0.99
*13	03/24/2024 - 03/30/2024	0.95	1.00
*14	03/31/2024 - 04/06/2024	0.95	1.00
*15	04/07/2024 - 04/13/2024	0.96	1.01
*16	04/14/2024 - 04/20/2024	0.96	1.01
17	04/21/2024 - 04/27/2024	0.98	1.03
18	04/28/2024 - 05/04/2024	1.00	1.05
19	05/05/2024 - 05/11/2024	1.01	1.06
20	05/12/2024 - 05/18/2024	1.03	1.08
21	05/19/2024 - 05/25/2024	1.04	1.09
22	05/26/2024 - 06/01/2024	1.04	1.09
23	06/02/2024 - 06/08/2024	1.05	1.11
24	06/09/2024 - 06/15/2024	1.05	1.11
25	06/16/2024 - 06/22/2024	1.06	1.12
26	06/23/2024 - 06/29/2024	1.06	1.12
27	06/30/2024 - 07/06/2024	1.07	1.13
28	07/07/2024 - 07/13/2024	1.07	1.13
29	07/14/2024 - 07/20/2024	1.08	1.14
30	07/21/2024 - 07/27/2024	1.07	1.13
31	07/28/2024 - 08/03/2024	1.07	1.13
32	08/04/2024 - 08/10/2024	1.06	1.12
33	08/11/2024 - 08/17/2024	1.05	1.11
34	08/18/2024 - 08/24/2024	1.05	1.11
35	08/25/2024 - 08/31/2024	1.05	1.11
36	09/01/2024 - 09/07/2024	1.05	1.11
37	09/08/2024 - 09/14/2024	1.05	1.11
38	09/15/2024 - 09/21/2024	1.05	1.11
39	09/22/2024 - 09/28/2024	1.04	1.09
40	09/29/2024 - 10/05/2024	1.03	1.08
41	10/06/2024 - 10/12/2024	1.01	1.06
42	10/13/2024 - 10/19/2024	1.00	1.05
43	10/20/2024 - 10/26/2024	1.00	1.05
44	10/27/2024 - 11/02/2024	1.00	1.05
45	11/03/2024 - 11/09/2024	1.00	1.05
46	11/10/2024 - 11/16/2024	1.00	1.05
47	11/17/2024 - 11/23/2024	1.00	1.05
48	11/24/2024 - 11/30/2024	1.00	1.05
49	12/01/2024 - 12/07/2024	1.00	1.05
50	12/08/2024 - 12/14/2024	1.00	1.05
51	12/15/2024 - 12/21/2024	1.00	1.05
52	12/22/2024 - 12/28/2024	0.99	1.04
53	12/29/2024 - 12/31/2024	0.97	1.02

* PEAK SEASON

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
2ND ST	CITRUS AVE to ORANGE AVE	601	1,837	2022	540	130	C	0.24	135	C	0.25
2ND ST	ORANGE AVE to AVENUE A	602	2,011	2022	540	125	C	0.23	124	C	0.23
7TH ST	SUNRISE BLVD to GEORGIA AVE	519	1,165	2023	600	77	C	0.13	91	C	0.15
7TH ST	GEORGIA AVE to DELAWARE AVE	517	1,888	2023	790	142	C	0.18	152	C	0.19
7TH ST	DELAWARE AVE to CITRUS AVE	515	2,576	2023	790	180	C	0.23	168	C	0.21
7TH ST	CITRUS AVE to ORANGE AVE	515	2,576	2023	750	180	C	0.24	168	C	0.22
7TH ST	ORANGE AVE to AVENUE C	603	2,664	2022	750	189	C	0.25	191	C	0.25
7TH ST	AVENUE C to AE BACKUS AVE	603	2,664	2022	540	189	C	0.35	191	C	0.35
7TH ST	AE BACKUS AVE to AVENUE D	603	2,664	2022	750	189	C	0.25	191	C	0.25
7TH ST	AVENUE D to AVENUE H	604	1,759	2022	750	118	C	0.16	120	C	0.16
10TH ST	DELAWARE AVE to ORANGE AVE	605	1,392	2022	600	92	C	0.15	82	C	0.14
10TH ST	ORANGE AVE to AVENUE C	605	1,392	2022	600	92	C	0.15	82	C	0.14
10TH ST	AVENUE C to AVENUE D	605	1,392	2022	540	92	C	0.17	82	C	0.15
13TH ST	VIRGINIA AVE to NEBRASKA AVE	527	6,270	2023	750	426	D	0.57	404	D	0.54
13TH ST	NEBRASKA AVE to GEORGIA AVE	527	6,270	2023	790	426	D	0.54	404	D	0.51
13TH ST	GEORGIA AVE to DELAWARE AVE	525	4,590	2021	750	225	C	0.30	233	C	0.31
13TH ST	DELAWARE AVE to ORANGE AVE	523	3,708	2022	750	230	C	0.31	201	C	0.27
13TH ST	ORANGE AVE to AVENUE B	521	3,037	2022	750	169	C	0.23	163	C	0.22
13TH ST	AVENUE B to AVENUE D	521	3,037	2022	750	169	C	0.23	163	C	0.22
13TH ST	AVENUE D to AVENUE H	165	2,639	2022	750	141	C	0.19	141	C	0.19
13TH ST	AVENUE H to AVENUE I	165	2,639	2022	540	141	C	0.26	141	C	0.26
13TH ST	AVENUE I to AVENUE O	165	2,639	2022	540	141	C	0.26	141	C	0.26
13TH ST	AVENUE O to AVENUE Q	165	2,639	2022	540	141	C	0.26	141	C	0.26
17TH ST	GEORGIA AVE to DELAWARE AVE	606	2,400	2022	600	150	C	0.25	148	C	0.25
17TH ST	DELAWARE AVE to ORANGE AVE	607	5,485	2023	790	279	C	0.35	264	C	0.33
17TH ST	ORANGE AVE to AVENUE D	608	2,384	2021	750	133	C	0.18	127	C	0.17
17TH ST	AVENUE D to AVENUE Q	608	2,384	2021	750	133	C	0.18	127	C	0.17
25TH ST	MIDWAY RD to BELL AVE	940016	19,433	2023							
25TH ST	BELL AVE to EDWARDS RD	159	22,500	2024	2,100	1,261	C	0.60	1,295	C	0.62
25TH ST	EDWARDS RD to CORTEZ BLVD	940021	22,252	2023							
25TH ST	CORTEZ BLVD to VIRGINIA AVE	529	23,512	2023	2,000	1,383	C	0.69	1,139	C	0.57

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
25TH ST	VIRIGINIA AVE to NEBRASKA AVE	940015	22,350	2023							
25TH ST	NEBRASKA AVE to OKEECHOBEE RD	940015	22,350	2023							
25TH ST	OKEECHOBEE RD to GEORGIA AVE	609	22,000	2024	1,630	1,133	D	0.70	1,105	D	0.68
25TH ST	GEORGIA AVE to DELAWARE AVE	609	22,000	2024	1,630	1,133	D	0.70	1,105	D	0.68
25TH ST	DELAWARE AVE to ORANGE AVE	940014	21,852	2023							
25TH ST	ORANGE AVE to AVENUE D	610	19,817	2023	1,630	986	D	0.60	1,141	D	0.70
25TH ST	AVENUE D to AVENUE Q	940050	18,497	2023							
25TH ST	AVENUE Q to JUANITA AVE	945152	17,404	2023							
25TH ST	JUANITA AVE to ST LUCIE BLVD	940791	16,732	2013							
25TH ST	ST LUCIE BLVD to US 1	945165	8,302	2023							
33RD ST	OKEECHOBEE RD to DELAWARE AVE	611	6,555	2023	750	371	D	0.49	334	C	0.45
33RD ST	DELAWARE AVE to ORANGE AVE	948507	6,503	2023	790	302	C	0.38	302	C	0.38
35TH ST	KIRBY LOOP RD to CORTEZ BLVD	612	5,386	2023	540	390	D	0.72	335	D	0.62
35TH ST	CORTEZ BLVD to VIRGINIA AVE	612	5,386	2023	790	390	C	0.49	335	C	0.42
35TH ST	VIRGINIA AVE to OKEECHOBEE RD	613	4,684	2021	750	230	C	0.31	248	C	0.33
53RD ST	ANGLE RD to JUANITA AVE	614	2,333	2022	540	152	C	0.28	157	C	0.29
AE BACKUS AVE	7TH ST to US 1	632	923	2022	750	66	C	0.09	67	C	0.09
AIROSO BLVD	PORT ST LUCIE BLVD to THORNHILL DR	303	17,551	2022	2,100	1,110	C	0.53	918	C	0.44
AIROSO BLVD	THORNHILL DR to CROSSTOWN PKWY	303	17,551	2022	2,100	1,110	C	0.53	918	C	0.44
AIROSO BLVD	CROSSTOWN PKWY to PRIMA VISTA BLVD	243	20,000	2024	2,100	1,015	C	0.48	1,033	C	0.49
AIROSO BLVD	PRIMA VISTA BLVD to FLORESTA DR	101	14,500	2024	2,000	770	C	0.39	819	C	0.41
AIROSO BLVD	FLORESTA DR to ST JAMES DR	301	22,596	2022	2,100	1,274	C	0.61	1,214	C	0.58
ANGLE RD	ORANGE AVE to AVENUE D	100	10,500	2024	790	566	D	0.72	551	D	0.70
ANGLE RD	AVENUE D to AVENUE Q	100	10,500	2024	540	566	E	1.05	551	E	1.02
ANGLE RD	AVENUE Q to 53RD ST	615	8,203	2023	600	549	D	0.92	494	D	0.82
ANGLE RD	53RD ST to KEEN RD	616	5,808	2023	630	365	C	0.58	315	C	0.50
ANGLE RD	KEEN RD to KINGS HWY	616	5,808	2023	880	365	C	0.41	315	C	0.36
ANGLE RD	KINGS HWY to JOHNSTON RD	617	3,733	2022	1,070	232	B	0.22	223	B	0.21
ANGLE RD	JOHNSTON RD to FLORIDA'S TURNPIKE	948505	2,067	2023	1,070	99	B	0.09	99	B	0.09
AVENUE A	7TH ST to US 1	945034	873	2023	790	82	C	0.10	82	C	0.10
AVENUE A	US 1 to INDIAN RIVER DR	945033	2,213	2023	600	109	C	0.18	109	C	0.18
AVENUE D	ANGLE RD to 29TH ST	164	4,331	2022	600	232	C	0.39	238	C	0.40

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
BELL AVE	25TH ST to SUNRISE BLVD	104	5,390	2023	790	364	C	0.46	337	C	0.43
BELL AVE	SUNRISE BLVD to OLEANDER AVE	102	4,132	2023	600	251	C	0.42	230	C	0.38
CALIFORNIA BLVD	CAMEO BLVD to DEL RIO BLVD	633	8,200	2024	750	588	D	0.78	464	D	0.62
CALIFORNIA BLVD	DEL RIO BLVD to SAVONA BLVD	634	13,344	2023	920	799	C	0.87	734	C	0.80
CALIFORNIA BLVD	SAVONA BLVD to DEL RIO BLVD	635	12,580	2023	920	718	C	0.78	842	C	0.92
CALIFORNIA BLVD	DEL RIO BLVD to CROSSTOWN PKWY	636	17,500	2024	920	1,090	F	1.18	983	F	1.07
CALIFORNIA BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	234	20,500	2024	920	1,100	F	1.20	1,071	F	1.16
CALIFORNIA BLVD	HEATHERWOOD BLVD to ST LUCIE WEST BLVD	234	20,500	2024	920	1,100	F	1.20	1,071	F	1.16
CALIFORNIA BLVD	ST LUCIE WEST BLVD to COUNTRY CLUB DR	233	8,984	2022	920	549	C	0.60	527	C	0.57
CALIFORNIA BLVD	COUNTRY CLUB DR to UNIVERSITY BLVD	724	7,180	2022	790	461	C	0.58	464	C	0.59
CALIFORNIA BLVD	UNIVERSITY BLVD to PEACOCK BLVD	724	7,180	2022	630	461	C	0.73	464	C	0.74
CALIFORNIA BLVD	PEACOCK BLVD to TORINO PKWY	637	13,035	2023	630	863	F	1.37	765	F	1.21
CAMEO BLVD	PORT ST LUICE BLVD to CALIFORNIA BLVD	638	4,711	2023	750	336	C	0.45	291	C	0.39
CAMEO BLVD	CALIFORNIA BLVD to CROSSTOWN PKWY	639	10,675	2021	790	755	D	0.96	635	D	0.80
CAMPBELL RD	PICOS RD to ORANGE AVE	640	745	2022	540	73	C	0.14	53	C	0.10
CANE SLOUGH RD	US 1 to LENNARD RD	167	9,654	2021	1,710	488	C	0.29	492	C	0.29
CARLTON RD	CARLTON RD (S) to OKEECHOBEE RD	641	592	2022	390	35	B	0.09	36	B	0.09
CASHMERE BLVD	PEACOCK BLVD to TORINO PKWY	676	12,000	2024	630	851	F	1.35	747	F	1.19
CASHMERE BLVD	DEL RIO BLVD to CROSSTOWN PKWY	642	10,500	2024	920	662	C	0.72	799	C	0.87
CASHMERE BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	232	16,500	2024	920	1,308	F	1.42	1,193	F	1.30
CASHMERE BLVD	HEATHERWOOD BLVD to ST LUCIE WEST BLVD	232	16,500	2024	920	1,308	F	1.42	1,193	F	1.30
CASHMERE BLVD	ST LUCIE WEST BLVD to PEACOCK BLVD	231	15,000	2024	920	1,054	F	1.15	1,111	F	1.21
CITRUS AVE	7TH ST to US 1	643	989	2023	750	146	C	0.19	146	C	0.19
CITRUS AVE	US 1 to 2ND ST	940160	4,421	2023	790	219	C	0.28	219	C	0.28
CITRUS AVE	2ND ST to INDIAN RIVER DR	644	3,572	2022	540	216	C	0.40	229	C	0.42
COMMUNITY BLVD	DISCOVERY WAY to TRADITION PKWY	735	5,200	2024	920	365	C	0.40	302	C	0.33
COMMUNITY BLVD	WESTCLIFFE LN to TRADITION PKWY	647	6,522	2021	1,470	360	C	0.24	376	C	0.26
COMMERCE CENTER DR	CROSSTOWN PKWY to ST LUCIE WEST BLVD	645	5,635	2021	1,710	334	C	0.20	404	C	0.24
COMMERCE CENTER DR	ST LUCIE WEST BLVD to END OF 4 LANES	646	9,440	2022	1,710	543	C	0.32	514	C	0.30
COMMERCE CENTER DR	END OF 4 LANES to GLADES CUT-OFF RD	732	6,300	2024	630	453	C	0.72	423	C	0.67
CORTEZ BLVD	35TH ST to 25TH ST	948500	2,167	2023	750	100	C	0.13	100	C	0.13
CORTEZ BLVD	25TH ST to SUNRISE BLVD	648	2,996	2023	750	210	C	0.28	192	C	0.26

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
COUNTRY CLUB DR	ST LUCIE WEST BLVD to CALIFORNIA BLVD	725	7,310	2023	1,710	529	C	0.31	500	C	0.29
CROSSTOWN PKWY	COMMERCE CENTER DR to I-95	650	18,982	2021	3,170	903	C	0.28	966	C	0.30
CROSSTOWN PKWY	I-95 to CALIFORNIA BLVD	651	44,500	2024	3,170	2,625	C	0.83	2,512	C	0.79
CROSSTOWN PKWY	CALIFORNIA BLVD to CASHMERE BLVD	652	39,500	2024	3,170	2,239	C	0.71	2,303	C	0.73
CROSSTOWN PKWY	CASHMERE BLVD to CAMEO BLVD	653	36,000	2024	3,170	2,016	C	0.64	1,935	C	0.61
CROSSTOWN PKWY	CAMEO BLVD to BAYSHORE BLVD	654	46,000	2024	3,170	2,385	C	0.75	2,367	C	0.75
CROSSTOWN PKWY	BAYSHORE BLVD to AIROSO BLVD	655	35,000	2024	3,170	1,920	C	0.61	1,855	C	0.59
CROSSTOWN PKWY	AIROSO BLVD to SANDIA DR	656	17,705	2021	3,170	857	C	0.27	919	C	0.29
CROSSTOWN PKWY	SANDIA DR to MANTH LN	657	21,986	2021	3,170	1,123	C	0.35	1,102	C	0.35
CROSSTOWN PKWY	FLORESTA DR to US 1	66	34,500	2024	3,170	2,331	C	0.74	2,070	C	0.65
CROSSROADS PKWY	OKEECHOBEE RD to KINGS HWY	649	2,204	2022	790	115	C	0.15	122	C	0.15
CROSSTOWN PKWY	VILLAGE PKWY to COMMERCE CENTER DR	733	27,500	2024	2,100	1,550	C	0.74	1,498	C	0.71
DARWIN BLVD	BECKER RD to PAAR DR	235	9,400	2024	630	812	F	1.29	715	F	1.13
DARWIN BLVD	PAAR DR to TULIP BLVD	235	9,400	2024	920	812	C	0.88	715	C	0.78
DARWIN BLVD	TULIP BLVD to PORT ST LUCIE BLVD	659	11,043	2023	920	582	C	0.63	542	C	0.59
DEL RIO BLVD	PORT ST LUCIE BLVD to CALIFORNIA BLVD	311	9,825	2022	920	585	C	0.64	518	C	0.56
DEL RIO BLVD	CALIFORNIA BLVD to CASHMERE BLVD	660	5,707	2022	880	336	C	0.38	357	C	0.41
DEL RIO BLVD	CASHMERE BLVD to CALIFORNIA BLVD	661	5,196	2021	880	276	C	0.31	280	C	0.32
DELAWARE AVE	HARTMAN RD to 33RD ST	662	1,600	2022	600	313	D	0.52	241	C	0.40
DELAWARE AVE	33RD ST to 25TH ST	500	2,160	2022	1,710	161	C	0.09	168	C	0.10
DELAWARE AVE	25TH ST to OKEECHOBEE RD	948526	1,308	2023	1,220	60	C	0.05	60	C	0.05
DELAWARE AVE	OKEECHOBEE RD to 13TH ST	663	10,632	2023	790	597	D	0.76	567	D	0.72
DELAWARE AVE	13TH ST to 10TH ST	664	8,100	2024	750	469	D	0.63	435	D	0.58
DELAWARE AVE	10TH ST to 7TH ST	664	8,100	2024	600	469	D	0.78	435	D	0.73
DELAWARE AVE	7TH ST to US 1	665	6,552	2023	750	424	D	0.57	382	D	0.51
EAST TORINO PKWY	CASHMERE BLVD to TORINO PKWY	710	10,500	2024	830	651	C	0.78	669	C	0.81
EAST TORINO PKWY	TORINO PKWY to MIDWAY RD	237	16,000	2024	880	1,093	F	1.24	918	F	1.04
EASY ST	US 1 to BUCHANAN DR	106	7,204	2021	750	399	D	0.53	505	D	0.67
EASY ST	BUCHANAN DR to YUCCA DR	106	7,204	2021	540	399	D	0.74	505	D	0.94
EDWARDS RD	JENKINS RD to MCNEIL RD	174	14,000	2024	630	742	F	1.18	718	F	1.14
EDWARDS RD	MCNEIL RD to SELVITZ RD	174	14,000	2024	700	742	F	1.06	718	F	1.03
EDWARDS RD	SELVITZ RD to 25TH ST	110	13,500	2024	880	711	C	0.81	702	C	0.80

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	25TH ST to SUNRISE BLVD	108	15,000	2024	1,630	747	D	0.46	747	D	0.46
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	502	10,500	2024	1,630	530	C	0.33	516	C	0.32
EDWARDS RD	OLEANDER AVE to US 1	173	9,757	2019	1,630	537	C	0.33	469	C	0.29
FARMER'S MARKET RD	OLEANDER AVE to US 1	112	1,665	2023	750	87	C	0.12	101	C	0.13
FLORESTA DR	OAKLYN ST to PORT ST LUCIE BLVD	317	16,500	2024	920	1,225	F	1.33	1,108	F	1.20
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	315	13,771	2022	880	938	F	1.07	832	D	0.95
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	315	13,771	2022	880	938	F	1.07	832	D	0.95
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	109	9,900	2024	920	548	C	0.60	503	C	0.55
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	107	8,900	2024	920	492	C	0.53	543	C	0.59
FLORESTA DR	SELVITZ RD to BAYSHORE BLVD	313	4,840	2021	630	347	C	0.55	370	C	0.59
FLORESTA DR	AIROSO BLVD to SELVITZ RD	313	4,840	2021	880	347	C	0.39	370	C	0.42
FLORIDA'S TURNPIKE	BECKER RD to PORT ST LUCIE BLVD	971960	52,535	2020							
FLORIDA'S TURNPIKE	MARTIN C.L. to BECKER RD	979913	63,053	2023							
FLORIDA'S TURNPIKE	PORT ST LUCIE BLVD to OKEECHOBEE RD	971964	55,700	2023							
FLORIDA'S TURNPIKE	OKEECHOBEE RD to INDIAN RIVER C.L.	971968	43,433	2023							
FT PIERCE BLVD	INDRIO RD to EMERSON AVE	226	3,353	2023	540	227	C	0.42	234	C	0.43
GARDENIA AVE	OLEANDER AVE to US 1	666	2,513	2022	750	194	C	0.26	185	C	0.25
GATLIN BLVD	W OF I-95 to E OF I-95	945075	51,531	2023	3,170	2,526	C	0.80	2,526	C	0.80
GATLIN BLVD	E OF I-95 to SAVAGE BLVD	945075	51,531	2023	3,170	2,526	C	0.80	2,526	C	0.80
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	945075	51,531	2023	3,170	2,526	C	0.80	2,526	C	0.80
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	945075	51,531	2023	3,170	2,526	C	0.80	2,526	C	0.80
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	945075	51,531	2023	3,170	2,526	C	0.80	2,526	C	0.80
GEORGIA AVE	25TH ST to OKEECHOBEE RD	667	4,061	2023	600	237	C	0.40	227	C	0.38
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	667	4,061	2023	750	237	C	0.32	227	C	0.30
GEORGIA AVE	17TH ST to 13TH ST	508	4,819	2023	600	245	C	0.41	247	C	0.41
GEORGIA AVE	13TH ST to 7TH ST	506	2,212	2023	600	134	C	0.22	151	C	0.25
GEORGIA AVE	7TH ST to US 1	504	1,969	2023	600	109	C	0.18	117	C	0.20
GILSON RD	MARTIN C.L. to BECKER RD	111	11,500	2024	710	979	F	1.38	1,036	F	1.46
GILSON RD	BECKER RD to LAKERIDGE DR	111	11,500	2024	540	979	F	1.81	1,036	F	1.92
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	668	2,686	2022	1,070	168	B	0.16	179	B	0.17
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	119	5,434	2022	1,070	427	C	0.40	497	C	0.46
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	668	2,686	2022	390	168	B	0.43	179	B	0.46

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
LENNARD RD	WALTON RD to S OF SAVANNA CLUB BLVD	679	3,734	2021	790	258	C	0.33	245	C	0.31
LYNGATE DR	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	306	10,212	2023	920	645	C	0.70	582	C	0.63
LYNGATE DR	MORNINGSIDE BLVD to US 1	306	10,212	2023	920	645	C	0.70	582	C	0.63
MARIPOSA AVE	LENNARD RD to HALLAHAN ST	166	6,758	2023	880	526	C	0.60	501	C	0.57
MCCARTY RD	WILLIAMS RD to MIDWAY RD	680	368	2022	540	27	C	0.05	25	C	0.05
MCCARTY RD	MIDWAY RD to OKEECHOBEE RD	681	300	2024	540	24	C	0.04	21	C	0.04
MCNEIL RD	OKEECHOBEE RD to KIRBY LOOP RD	682	5,510	2023	790	345	C	0.44	336	C	0.43
MCNEIL RD	KIRBY LOOP RD to EDWARDS RD	682	5,510	2023	540	345	D	0.64	336	D	0.62
MELALEUCA BLVD	LENNARD RD to GREEN RIVER PKWY	683	9,600	2024	920	613	C	0.67	586	C	0.64
MIDWAY RD	EAST TORINO PKWY to MILNER DR	134	25,500	2024	880	1,275	F	1.45	1,380	F	1.57
MIDWAY RD	MILNER DR to W OF SELVITZ RD	134	25,500	2024	790	1,275	F	1.61	1,380	F	1.75
MIDWAY RD	OKEECHOBEE RD to SHINN RD	940732	6,743	2023	760	342	C	0.45	342	C	0.45
MIDWAY RD	SHINN RD to MCCARTY RD	940732	6,743	2023	630	342	C	0.54	342	C	0.54
MIDWAY RD	MCCARTY RD to I-95	940732	6,743	2023	700	342	C	0.49	342	C	0.49
MIDWAY RD	I-95 to GLADES CUT-OFF RD	945140	21,637	2023	2,100	1,060	C	0.50	1,060	C	0.50
MIDWAY RD	GLADES CUT-OFF RD to EAST TORINO PKWY	228	23,000	2024	2,100	1,203	C	0.57	1,193	C	0.57
MIDWAY RD	W OF SELVITZ RD to SELVITZ RD	134	25,500	2024	2,100	1,275	C	0.61	1,380	C	0.66
MIDWAY RD	SELVITZ RD to CHRISTENSEN RD	132	22,500	2024	2,100	1,155	C	0.55	1,222	C	0.58
MIDWAY RD	CHRISTENSEN RD to 25TH ST	132	22,500	2024	2,100	1,155	C	0.55	1,222	C	0.58
MIDWAY RD	25TH ST to SUNRISE BLVD	130	25,000	2024	2,100	1,943	C	0.93	1,569	C	0.75
MIDWAY RD	SUNRISE BLVD to OLEANDER AVE	130	25,000	2024	2,100	1,943	C	0.93	1,569	C	0.75
MIDWAY RD	OLEANDER AVE to US 1	242	19,000	2024	2,100	1,050	C	0.50	972	C	0.46
MIDWAY RD	US 1 to WALLACE ST	940023	3,813	2023	790	189	C	0.24	189	C	0.24
MIDWAY RD	WALLACE ST to WEATHERBEE RD	940023	3,813	2023	920	189	C	0.21	189	C	0.21
MIDWAY RD	WEATHERBEE RD to INDIAN RIVER DR	940023	3,813	2023	630	189	C	0.30	189	C	0.30
MORNINGSIDE BLVD	WESTMORELAND BLVD to PORT ST LUCIE BLVD	333	2,110	2022	920	113	C	0.12	113	C	0.12
MORNINGSIDE BLVD	PORT ST LUCIE BLVD to LYNGATE DR	331	3,200	2024	880	262	C	0.30	258	C	0.29
NEBRASKA AVE	25TH ST to 13TH ST	684	3,437	2022	1,710	228	C	0.13	176	C	0.10
OAKRIDGE DR	MOUNTWELL ST to OAKLYN ST	621	6,100	2024	700	304	C	0.43	289	C	0.41
OHIO AVE	SUNRISE BLVD to COLONIAL RD	686	3,632	2022	540	192	C	0.36	212	C	0.39
OHIO AVE	COLONIAL RD to US 1	686	3,632	2022	750	192	C	0.26	212	C	0.28
OKEECHOBEE RD	OKEECHOBEE C.L. to BLUEFIELD RD	687	9,900	2024	1,580	536	B	0.34	542	B	0.34

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OKEECHOBEE RD	BLUEFIELD RD to CARLTON RD	687	9,900	2024	2,000	536	B	0.27	542	B	0.27
OKEECHOBEE RD	CARLTON RD to SNEED RD	940039	9,696	2023							
OKEECHOBEE RD	IDEAL HOLDING RD to HEADER CANAL RD	940039	9,696	2023							
OKEECHOBEE RD	SNEED RD to IDEAL HOLDING RD	940039	9,696	2023							
OKEECHOBEE RD	HEADER CANAL RD to MIDWAY RD	940039	9,696	2023							
OKEECHOBEE RD	MIDWAY RD to SHINN RD	940039	9,696	2023							
OKEECHOBEE RD	SHINN RD to MCCARTY RD	940195	7,267	2023							
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	940025	10,118	2023							
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	940025	10,118	2023							
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	940748	24,489	2023							
OKEECHOBEE RD	CROSSROADS PKWY to I-95	940106	26,459	2023							
OKEECHOBEE RD	I-95 to JENKINS RD	940029	33,776	2023							
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	940029	33,776	2023							
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	940742	32,311	2023							
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	688	13,178	2023	2,100	681	C	0.32	672	C	0.32
OKEECHOBEE RD	HARTMAN RD to 35TH ST	688	13,178	2023	1,630	681	C	0.42	672	C	0.41
OKEECHOBEE RD	35TH ST to 33RD ST	689	15,615	2023	1,630	813	D	0.50	778	D	0.48
OKEECHOBEE RD	33RD ST to 25TH ST	689	15,615	2023	1,630	813	D	0.50	778	D	0.48
OKEECHOBEE RD	25TH ST to GEORGIA AVE	690	11,736	2023	1,630	680	C	0.42	603	C	0.37
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	690	11,736	2023	1,710	680	C	0.40	603	C	0.35
OLD DIXIE HWY	US 1 to SR A1A NORTH	691	436	2022	790	68	C	0.09	64	C	0.08
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	948521	1,820	2023	750	85	C	0.11	85	C	0.11
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	227	1,785	2022	790	145	C	0.18	106	C	0.13
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	948523	1,495	2023	870	70	C	0.08	70	C	0.08
OLEANDER AVE	BEACH AVE to KITTERMAN RD	692	2,997	2021	540	173	C	0.32	196	C	0.36
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	141	6,174	2021	750	359	C	0.48	359	C	0.48
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	139	6,049	2023	750	342	C	0.46	345	C	0.46
OLEANDER AVE	WEATHERBEE RD to BELL AVE	139	6,049	2023	540	342	D	0.63	345	D	0.64
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	240	9,400	2024	540	465	D	0.86	461	D	0.85
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	240	9,400	2024	750	465	D	0.62	461	D	0.61
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	505	9,200	2024	750	590	D	0.79	518	D	0.69
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	505	9,200	2024	540	590	F	1.09	518	D	0.96

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	505	9,200	2024	790	590	D	0.75	518	D	0.66
OLEANDER AVE	VIRGINIA AVE to SUNRISE BLVD	503	4,768	2023	600	268	C	0.45	277	C	0.46
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	144	5,337	2021	670	312	C	0.47	297	C	0.44
ORANGE AVE	SNEED RD to HEADER CANAL RD	144	5,337	2021	670	312	C	0.47	297	C	0.44
ORANGE AVE	HEADER CANAL RD to SHINN RD	144	5,337	2021	670	312	C	0.47	297	C	0.44
ORANGE AVE	SHINN RD to CAMPBELL RD	940144	3,090	2023	1,070	147	B	0.14	147	B	0.14
ORANGE AVE	CAMPBELL RD to KINGS HWY	940144	3,090	2023	1,070	147	B	0.14	147	B	0.14
ORANGE AVE	KINGS HWY to I-95	940041	17,555	2023							
ORANGE AVE	I-95 to JENKINS RD	940035	15,314	2023							
ORANGE AVE	JENKINS RD to HARTMAN RD	940028	17,481	2023							
ORANGE AVE	HARTMAN RD to ANGLE RD	940028	17,481	2023							
ORANGE AVE	ANGLE RD to 25TH ST	940151	9,247	2013							
ORANGE AVE	25TH ST to 17TH ST	945040	13,991	2023							
ORANGE AVE	17TH ST to 13TH ST	945040	13,991	2023							
ORANGE AVE	13TH ST to 10TH ST	945040	13,991	2023							
ORANGE AVE	10TH ST to 7TH ST	940155	10,272	2023							
ORANGE AVE	7TH ST to US 1	945134	7,668	2023							
ORANGE AVE	US 1 to 2ND ST	945133	4,253	2023	600	211	C	0.35	211	C	0.35
ORANGE AVE	2ND ST to INDIAN RIVER DR	945133	4,253	2023	750	211	C	0.28	211	C	0.28
PARR DR	PORT ST LUCIE BLVD to DARWIN BLVD	209	2,040	2022	700	158	C	0.23	136	C	0.19
PARR DR	DARWIN BLVD to TULIP BLVD	723	1,928	2023	540	169	C	0.31	128	C	0.24
PARR DR	SAVONA BLVD to PORT ST LUCIE BLVD	209	2,040	2022	700	158	C	0.23	136	C	0.19
PARR DR	ROSSER BLVD to SAVONA BLVD	209	2,040	2022	630	158	C	0.25	136	C	0.22
PEACOCK BLVD	CALIFORNIA BLVD to CASHMERE BLVD	693	5,637	2021	630	357	C	0.57	396	C	0.63
PEACOCK BLVD	UNIVERSITY BLVD to CALIFORNIA BLVD	694	10,500	2024	920	756	C	0.82	758	C	0.82
PEACOCK BLVD	ST LUCIE WEST BLVD to UNIVERSITY BLVD	948514	14,858	2023	2,100	689	C	0.33	689	C	0.33
PETERSON RD	BENT CREEK DR to HARTMAN RD	695	2,114	2022	540	157	C	0.29	145	C	0.27
PICOS RD	CAMPBELL RD to KINGS HWY	696	1,211	2023	540	81	C	0.15	81	C	0.15
PORT ST LUCIE BLVD	MARTIN C.L. to BECKER RD	948519	17,264	2023	920	801	C	0.87	801	C	0.87
PORT ST LUCIE BLVD	BECKER RD to PAAR DR	948519	17,264	2023	920	801	C	0.87	801	C	0.87
PORT ST LUCIE BLVD	PAAR DR to TULIP BLVD	948519	17,264	2023	700	801	F	1.14	801	F	1.14
PORT ST LUCIE BLVD	TULIP BLVD to DARWIN BLVD	948519	17,264	2023	920	801	C	0.87	801	C	0.87

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
PORT ST LUCIE BLVD	DARWIN BLVD to GATLIN BLVD	697	35,121	2021	3,020	1,797	C	0.60	1,775	C	0.59
PORT ST LUCIE BLVD	GATLIN BLVD to DEL RIO BLVD	698	40,901	2023	3,170	2,307	C	0.73	2,221	C	0.70
PORT ST LUCIE BLVD	DEL RIO BLVD to CAMEO BLVD	945074	49,526	2023	3,170	2,427	C	0.77	2,427	C	0.77
PORT ST LUCIE BLVD	CAMEO BLVD to FLORIDA'S TURNPIKE	945074	49,526	2023	3,020	2,427	C	0.80	2,427	C	0.80
PORT ST LUCIE BLVD	FLORIDA'S TURNPIKE to BAYSHORE BLVD	945074	49,526	2023							
PORT ST LUCIE BLVD	BAYSHORE BLVD to AIROSO BLVD	945073	47,848	2023							
PORT ST LUCIE BLVD	AIROSO BLVD to FLORESTA DR	940780	48,530	2023							
PORT ST LUCIE BLVD	FLORESTA DR to VETERANS MEMORIAL PKWY	940778	55,266	2023							
PORT ST LUCIE BLVD	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	940776	37,800	2023							
PORT ST LUCIE BLVD	MORNINGSIDE BLVD to US 1	945072	37,326	2023							
PRIMA VISTA BLVD	BAYSHORE BLVD to AIROSO BLVD	314	21,500	2024	2,100	1,089	C	0.52	1,156	C	0.55
PRIMA VISTA BLVD	AIROSO BLVD to FLORESTA DR	150	21,500	2024	2,100	954	C	0.45	970	C	0.46
PRIMA VISTA BLVD	FLORESTA DR to NARANJA AVE	148	33,034	2023	2,100	1,869	C	0.89	1,678	C	0.80
PRIMA VISTA BLVD	NARANJA AVE to RIO MAR DR	148	33,034	2023	2,000	1,869	C	0.93	1,678	C	0.84
PRIMA VISTA BLVD	RIO MAR DR to US 1	146	19,500	2024	2,100	1,144	C	0.54	1,003	C	0.48
PRIMA VISTA BLVD	US 1 to LENNARD RD	699	8,934	2021	1,710	483	C	0.28	460	C	0.27
RANGE LINE RD	MARTIN C.L. to BECKER RD	145	1,963	2023	1,080	115	B	0.11	124	B	0.11
RANGE LINE RD	BECKER RD to DISCOVERY WAY	738	2,100	2024	1,080	170	B	0.16	161	B	0.15
RANGE LINE RD	DISCOVERY WAY to CROSSTOWN PKWY	737	2,100	2024	1,080	170	B	0.16	161	B	0.15
RANGE LINE RD	CROSSTOWN PKWY to GLADES CUT-OFF RD	736	2,100	2024	1,080	170	B	0.16	161	B	0.15
RIO MAR DR	PRIMA VISTA BLVD to BEACH AVE	147	5,389	2023	750	330	C	0.44	392	D	0.52
RIO MAR DR	BEACH AVE to US 1	147	5,389	2023	790	330	C	0.42	392	D	0.50
ROSSER BLVD	APRICOT RD to GATLIN BLVD	948510	5,267	2023	920	244	C	0.27	244	C	0.27
ROSSER BLVD	PAAR DR to APRICOT RD	948510	5,267	2023	1,070	244	B	0.23	244	B	0.23
SAVAGE BLVD	GATLIN BLVD to GALIANO RD	168	3,934	2023	920	287	C	0.31	234	C	0.25
SAVANNAH RD	US 1 to INDIAN RIVER DR	514	2,029	2023	540	126	C	0.23	130	C	0.24
SAVONA BLVD	BECKER RD to PAAR DR	236	11,500	2024	790	1,038	F	1.31	841	F	1.06
SAVONA BLVD	PAAR DR to GATLIN BLVD	236	11,500	2024	750	1,038	F	1.38	841	F	1.12
SAVONA BLVD	GATLIN BLVD to CALIFORNIA BLVD	702	14,000	2024	790	673	D	0.85	636	D	0.81
SELVITZ RD	BAYSHORE BLVD to ST JAMES BLVD	948501	9,844	2023	750	457	D	0.61	457	D	0.61
SELVITZ RD	ST JAMES BLVD to MIDWAY RD	948501	9,844	2023	750	457	D	0.61	457	D	0.61
SELVITZ RD	MIDWAY RD to GLADES CUT-OFF RD	703	9,000	2024	700	542	C	0.77	523	C	0.75

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
SELVITZ RD	GLADES CUT-OFF RD to EDWARDS RD	704	13,000	2024	790	765	D	0.97	770	D	0.97
SHINN RD	MIDWAY RD to OKEECHOBEE RD	705	460	2022	580	38	C	0.07	30	C	0.05
SHINN RD	OKEECHOBEE RD to ORANGE AVE	149	977	2023	1,080	65	B	0.06	63	B	0.06
SNEED RD	OKEECHOBEE RD to ORANGE AVE	151	1,089	2023	670	75	B	0.11	77	B	0.11
SOUTHBEND BLVD	BECKER RD to FLORESTA DR	337	18,636	2023	790	1,236	F	1.56	1,087	F	1.38
SR A1A NORTH	US 1 to OLD DIXIE HWY	940709	10,826	2023							
SR A1A NORTH	OLD DIXIE HWY to N HWY A1A	706	9,600	2024	920	551	C	0.60	563	C	0.61
SR A1A NORTH	SHOREWINDS DR to INDIAN RIVER C.L.	940114	8,339	2023							
SR A1A SOUTH	MARTIN C.L. to NETTLES ISLAND	890157	17,184	2023							
SR A1A SOUTH	NETTLES ISLAND to FPL PLANT	940719	4,953	2023							
SR A1A SOUTH	FPL PLANT to BLUE HERON BLVD	940116	4,405	2023							
SR A1A SOUTH	BLUE HERON BLVD to SEAWAY DR	945016	8,061	2023							
SR A1A SOUTH	OCEAN DR to BINNEY DR	940115	15,209	2023							
SR A1A SOUTH	BINNEY DR to S CAUSEWAY PARK	940115	15,209	2023							
SR A1A SOUTH	S CAUSEWAY PARK to INDIAN RIVER DR	940711	12,400	2023							
SR A1A SOUTH	INDIAN RIVER DR to US 1	940711	12,400	2023							
ST JAMES DR	AIROSO BLVD to ST JAMES BLVD	172	17,500	2024	2,100	1,161	C	0.55	1,180	C	0.56
ST JAMES DR	ST JAMES BLVD to PEACHTREE BLVD	239	18,960	2023	2,100	1,192	C	0.57	1,195	C	0.57
ST JAMES DR	PEACHTREE BLVD to TELFORD AVE	172	17,500	2024	1,800	1,161	C	0.65	1,180	C	0.66
ST JAMES DR	TELFORD AVE to MIDWAY RD	345	22,737	2023	2,100	1,281	C	0.61	1,339	C	0.64
ST JAMES BLVD	SELVITZ RD to ST JAMES DR	707	5,149	2021	790	286	C	0.36	286	C	0.36
ST LUCIE BLVD	KINGS HWY to KEEN RD	156	6,102	2021	880	408	C	0.46	448	C	0.51
ST LUCIE BLVD	KEEN RD to 25TH ST	156	6,102	2021	880	408	C	0.46	448	C	0.51
ST LUCIE BLVD	25TH ST to SENECA AVE	940270	4,423	2023							
ST LUCIE BLVD	SENECA AVE to US 1	940270	4,423	2023							
ST LUCIE WEST BLVD	COMMERCE CENTER DR to W OF I-95	152	15,500	2024	700	906	F	1.29	864	F	1.23
ST LUCIE WEST BLVD	I-95 to CALIFORNIA BLVD	318	39,595	2023	2,100	1,620	C	0.77	1,700	C	0.81
ST LUCIE WEST BLVD	CALIFORNIA BLVD to COUNTRY CLUB DR	318	39,595	2023	2,100	1,620	C	0.77	1,700	C	0.81
ST LUCIE WEST BLVD	COUNTRY CLUB DR to CASHMERE BLVD	318	39,595	2023	2,100	1,620	C	0.77	1,700	C	0.81
ST LUCIE WEST BLVD	CASHMERE BLVD to BAYSHORE BLVD	316	45,500	2024	3,170	2,262	C	0.71	2,316	C	0.73
SUNRISE BLVD	MIDWAY RD to BELL AVE	155	3,629	2021	540	219	C	0.41	232	C	0.43
SUNRISE BLVD	BELL AVE to EDWARDS RD	153	3,838	2022	750	253	C	0.34	256	C	0.34

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
SUNRISE BLVD	EDWARDS RD to CORTEZ BLVD	511	6,751	2023	600	520	D	0.87	454	D	0.76
SUNRISE BLVD	CORTEZ BLVD to VIRGINIA AVE	511	6,751	2023	750	520	D	0.69	454	D	0.61
SUNRISE BLVD	VIRGINIA AVE to OLEANDER AVE	509	5,522	2023	750	345	C	0.46	343	C	0.46
SUNRISE BLVD	OLEANDER AVE to 7TH ST	708	4,722	2022	1,540	272	C	0.18	333	C	0.22
SUNRISE BLVD	7TH ST to US 1	708	4,722	2022	1,710	272	C	0.16	333	C	0.19
TIFFANY AVE	US 1 to HILLMOOR DR	322	17,081	2022	2,100	967	C	0.46	880	C	0.42
TIFFANY AVE	HILLMOOR DR to VILLAGE GREEN DR	322	17,081	2022	2,100	967	C	0.46	880	C	0.42
TIFFANY AVE	VILLAGE GREEN DR to LENNARD RD	320	4,145	2021	2,100	201	C	0.10	195	C	0.09
TORINO PKWY	CASHMERE BLVD to CALIFORNIA BLVD	709	5,500	2024	630	308	C	0.49	287	C	0.46
TORINO PKWY	CALIFORNIA BLVD to EAST TORINO PKWY	238	5,144	2021	630	339	C	0.54	277	C	0.44
TRADITION PKWY	COMMUNITY BLVD to VILLAGE PKWY	711	7,800	2021	1,710	816	D	0.48	791	D	0.46
TRADITION PKWY	VILLAGE PKWY to W OF I-95	712	43,500	2024	3,170	2,047	C	0.65	2,040	C	0.64
TULIP BLVD	DARWIN BLVD to PORT ST LUCIE BLVD	713	8,851	2022	790	580	D	0.73	524	D	0.66
TULIP BLVD	PORT ST LUCIE BLVD to PAAR DR	714	8,900	2024	790	569	D	0.72	518	D	0.66
TULIP BLVD	PAAR DR to DARWIN BLVD	714	8,900	2024	790	569	D	0.72	518	D	0.66
TURNPIKE FEEDER RD	TURNPIKE FEEDER RD SB RAMP to US 1	940078	4,903	2015							
TURNPIKE FEEDER RD	INDIAN PINES BLVD to TURNPIKE FEEDER RD SB R...	940269	11,658	2023							
TURNPIKE FEEDER RD	INDRIO RD to INDIAN PINES BLVD	940745	13,517	2023							
US 1	MARTIN C.L. to LENNARD RD	945071	48,145	2023							
US 1	LENNARD RD to PORT ST LUCIE BLVD	945071	48,145	2023							
US 1	PORT ST LUCIE BLVD to JENNINGS RD	945070	33,953	2023							
US 1	JENNINGS RD to TIFFANY AVE	945070	33,953	2023							
US 1	TIFFANY AVE to WALTON RD	945070	33,953	2023							
US 1	WALTON RD to VILLAGE GREEN DR	945150	47,030	2023							
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	940265	46,803	2023							
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	940265	46,803	2023							
US 1	PRIMA VISTA BLVD to RIO MAR DR	940264	36,400	2023							
US 1	RIO MAR DR to KITTERMAN RD	940266	32,710	2023							
US 1	KITTERMAN RD to S OF SAEGER AVE	940266	32,710	2023							
US 1	S OF SAEGER AVE to EASY ST	940266	32,710	2023							
US 1	EASY ST to MIDWAY RD	945156	30,097	2023							
US 1	MIDWAY RD to WEATHERBEE RD	940012	30,959	2023							

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
US 1	WEATHERBEE RD to FARMER'S MARKET RD	940012	30,959	2023							
US 1	FARMER'S MARKET RD to EDWARDS RD	940012	30,959	2023							
US 1	EDWARDS RD to SAVANNAH RD	945002	28,117	2023							
US 1	GARDENIA AVE to VIRGINIA AVE	945002	28,117	2023							
US 1	SAVANNAH RD to GARDENIA AVE	945002	28,117	2023							
US 1	VIRGINIA AVE to OHIO AVE	945003	26,002	2023							
US 1	OHIO AVE to GEORGIA AVE	945003	26,002	2023							
US 1	GEORGIA AVE to DELAWARE AVE	945008	27,500	2023							
US 1	DELAWARE AVE to CITRUS AVE	945014	29,114	2023							
US 1	CITRUS AVE to ORANGE AVE	940118	25,392	2023							
US 1	ORANGE AVE to AVENUE A	945014	29,114	2023							
US 1	AVENUE A to AE BACKUS AVE	945014	29,114	2023							
US 1	AE BACKUS AVE to AVENUE D	945014	29,114	2023							
US 1	AVENUE D to SR A1A SOUTH	945014	29,114	2023							
US 1	SR A1A SOUTH to AVENUE H	715	30,660	2023	2,100	1,524	C	0.73	1,521	C	0.72
US 1	AVENUE H to OLD DIXIE HWY	715	30,660	2023	2,000	1,524	C	0.76	1,521	C	0.76
US 1	OLD DIXIE HWY to AVENUE O	940123	28,240	2023							
US 1	AVENUE O to SR A1A NORTH	940123	28,240	2023							
US 1	SR A1A NORTH to JUANITA AVE	940010	20,140	2023							
US 1	JUANITA AVE to ST LUCIE BLVD	940010	20,140	2023							
US 1	ST LUCIE BLVD to 25TH ST	940009	19,911	2023							
US 1	25TH ST to INDRIO RD	940009	19,911	2023							
US 1	INDRIO RD to TURNPIKE FEEDER RD	940107	25,091	2023							
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	940107	25,091	2023							
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	329	15,671	2022	2,100	763	C	0.36	741	C	0.35
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	327	8,900	2024	2,100	507	C	0.24	480	C	0.23
VILLAGE GREEN DR	US 1 to WALTON RD	716	17,000	2024	2,100	1,060	C	0.50	1,146	C	0.55
VILLAGE GREEN DR	WALTON RD to TIFFANY AVE	717	4,612	2022	920	302	C	0.33	255	C	0.28
VILLAGE PKWY	DISCOVERY WAY to TRADITION PKWY	718	26,500	2024	2,650	1,226	C	0.46	1,309	D	0.49
VILLAGE PKWY	BECKER RD to DISCOVERY WAY	734	8,800	2024	1,710	590	C	0.35	609	C	0.36
VILLAGE PKWY	TRADITION PKWY to WESTCLIFFE LN	719	27,500	2024	1,710	1,482	D	0.87	1,462	D	0.85
VILLAGE PKWY	WESTCLIFFE LN to CROSSTOWN PKWY	720	17,629	2023	1,710	935	D	0.55	987	D	0.58

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
VIRGINIA AVE	35TH ST to 25TH ST	940032	23,450	2023							
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	940030	22,526	2023							
VIRGINIA AVE	HARTMAN RD to 35TH ST	940030	22,526	2023							
VIRGINIA AVE	25TH ST to 13TH ST	940033	21,782	2023							
VIRGINIA AVE	13TH ST to 11TH ST	940794	23,667	2023							
VIRGINIA AVE	11TH ST to SUNRISE BLVD	940794	23,667	2023							
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	940792	20,380	2023							
VIRGINIA AVE	OLEANDER AVE to COLONIAL RD	940034	18,402	2023							
VIRGINIA AVE	COLONIAL RD to US 1	940034	18,402	2023							
WALTON RD	US 1 to VILLAGE GREEN DR	330	10,000	2024	1,710	581	C	0.34	589	C	0.34
WALTON RD	VILLAGE GREEN DR to LENNARD RD	328	17,500	2024	1,710	957	D	0.56	1,057	D	0.62
WALTON RD	LENNARD RD to GREEN RIVER PKWY	326	12,000	2024	880	747	C	0.85	757	C	0.86
WALTON RD	GREEN RIVER PKWY to INDIAN RIVER DR	324	6,014	2022	630	386	C	0.61	366	C	0.58
WEATHERBEE RD	OLEANDER AVE to US 1	721	3,164	2023	750	198	C	0.26	180	C	0.24
WEATHERBEE RD	US 1 to MIDWAY RD	158	5,987	2023	750	379	D	0.51	379	D	0.51
WESTCLIFFE LN	TREMONTE AVE to VILLAGE PKWY	722	6,219	2023	1,470	457	C	0.31	419	C	0.29
WESTMORELAND BLVD	MORNINGSIDE BLVD to PORT ST LUCIE BLVD	339	14,645	2023	920	784	C	0.85	884	D	0.96
WESTMORELAND BLVD	MARTIN C.L. to MORNINGSIDE BLVD	245	9,076	2022	920	477	C	0.52	522	C	0.57

Countywide Performance

Weighted V/C = **64.29**

% VMT below Standard = **77.98%**

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT. FDOT count stations use standard K and D factors to determine peak hour values.
Peak hour data is not available for locations on State roads due to differences in data availability, LOS Methodologies, and service level thresholds.
Please refer to FDOT sources for detailed data on FDOT traffic counts.

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

*** NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

ROADS IMPACT FEES COMBINED - FUND 3100XX
CAPITAL IMPROVEMENT PLAN

REVENUES:

	FY 2024 Recommended	FY 2025	FY 2026	FY 2027	FY 2028
		Un-Appropriated Subsequent Years			
Available Major Project Reserves	$ 20,195,476	$ 10,814,486	$ 9,646,658	$ 10,151,450	$ 12,470,055
Residential Impact Fees	$ 8,413,791	$ 8,126,589	$ 7,690,100	$ 7,459,529	$ 7,459,529
Commercial Impact Fees	$ 934,866	$ 902,954	$ 854,456	$ 828,837	$ 828,837
Reimbursement		$ 5,000,000	$ 5,000,000	$ 5,000,000	$ -
Interest	$ 302,932	$ 162,217	$ 144,700	$ 152,272	$ 187,051
Less 5 Percent	$ (482,579)	$ (709,588)	$ (684,463)	$ (672,032)	$ (423,771)
Total Budgeted Revenues	**$ 29,364,486**	**$ 24,296,658**	**$ 22,651,450**	**$ 22,920,055**	**$ 20,521,700**

EXPENDITURES:

	FY24 Recommended	FY 2025	FY 2026	FY 2027	FY 2028	FUTURE ANTICIPATED NEEDS
		Un-Appropriated Subsequent Years				
Arterial A (Midway Road to Orange Avenue)	$ -	$ -	$ -	$ -	$ 1,000,000	$ 2,000,000
Glades Cut Off Rd Widening & Improvements	$ -	$ 2,500,000	$ 2,000,000	$ 6,000,000	$ -	$ 81,100,000
Jenkins Road Phase 1 (from Midway to Glades Cut Off Rd)	$ 12,000,000	$ -	$ -	$ -	$ -	$ -
Jenkins Road Phase 2 (from Glades Cut Off Rd to Orange Ave)	$ 1,000,000	$ -	$ -	$ -	$ -	$ 69,000,000
Jenkins Road Phase 3 (from Orange Ave to St Lucie Blvd)	$ -	$ -	$ -	$ -	$ -	$ 49,000,000
Lennard Rd / Tilton Rd Drainage	$ -	$ 1,500,000	$ -	$ -	$ -	$ -
Midway Rd (Glades Cut Off to Jenkins) Includes Tpk Interchange	$ -	$ -	$ -	$ -	$ -	$ 75,250,000
Selvitz Road Improvements (Glades Cut Off Rd to Edwards Rd)	$ -	$ -	$ -	$ -	$ -	$ -
Walton Road Sidewalk (Lennard Rd to Green River Pkwy)	$ 1,500,000	$ -	$ -	$ -	$ -	$ -
North County Airport Connector (I-95 to King's Hwy)	$ 50,000	$ -	$ -	$ 2,000,000	$ 2,000,000	$ 50,000,000
Selvitz Rd and Glades Cut Off Rd Intersection Improvements	$ -	$ 8,500,000	$ 8,500,000	$ -	$ -	$ 17,000,000
Oleander Ave Sidewalk (South Market Ave to Edwards Rd)	$ 1,000,000	$ 150,000	$ -	$ 450,000	$ -	$ -
Edwards Rd Widening (Jenkins Rd to 25th St)	$ 1,500,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 1,000,000	$ 15,000,000
St. Lucie West at Peacock Blvd Intersection (City of PSL)	$ 1,500,000	$ -	$ -	$ -	$ -	$ -
Total Budgeted Expenses	**$ 18,550,000**	**$ 14,650,000**	**$ 12,500,000**	**$ 10,450,000**	**$ 3,000,000**	**$ 356,350,000**

SUMMARY:

Revenues	$ 29,364,486	$ 24,296,658	$ 22,651,450	$ 22,920,055	$ 20,521,700
Expenses	$ (18,550,000)	$ (14,650,000)	$ (12,500,000)	$ (10,450,000)	$ (3,000,000)
CIP Reserve for Future Projects	**$ 10,814,486**	**$ 9,646,658**	**$ 10,151,450**	**$ 12,470,055**	**$ 17,521,700**

St. Lucie County

ECONOLITE

00013 - EDWARDS RD @ SUNRISE BLVD - - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB								
Min Green	7	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	16	0	16	0	16	0	16	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	4.0	6.0	4.0	4.0	4.0	6.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	12	35	12	30	12	35	12	30	35	35	35	35	35	35	35	35
Max2	0	0	0	0	0	0	0	0	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Q in use

February 14, 2025

Joe Garofolo
Port Richey Village Investments, LLC
9010 20th Street
Vero Beach, FL 32966

VIA Email: joegprvi@gmail.com

Reference: **Environmental Assessment**
3315 Sunrise Boulevard
Ft. Pierce, FL 34982
Parcel ID #s: 2428-321-0001-000-3 & 2428-601-0252-000-6

Dear Mr. Garofolo,

EDC, Inc. (EDC) has completed this Environmental Assessment (EA) for the above-mentioned property. The purpose of this evaluation was to conduct a review of the above listed parcels by means of site visit, review of available aerial photography, listed species review, review of soil resources, and review of environmental regulations pertaining to this parcel.

The following report details the findings of our on-site and desktop investigations of the properties as they pertain to the City of Ft. Pierce land developmental review regulations.

Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,

EDC, a Division of Haley Ward, Inc.

Anthony A. Adams, B.S.
Sr. Biologist | Certified Arborist

ENVIRONMENTAL ASSESSMENT

Parcel ID Numbers:
2428-321-0001-000-3 & 2428-601-0252-000-6
3315 Sunrise Boulevard
Ft. Pierce, FL 34982

Date: February 14, 2025
Project # 24-237

Prepared For:
Joe Garofolo
Port Richey Village Investments, LLC
9010 20th Street
Vero Beach, FL 32966
joegprvi@gmail.com

Prepared By:
EDC, Inc.
10250 SW Village Parkway
Port St Lucie, Florida 34987
(772) 223-5200

INTRODUCTION:

The subject property evaluated as part of this Environmental Assessment consists of two tax parcels (Parcel ID #s: 2428-321-0001-000-3 & 2428-601-0252-000-6) comprised of 21.72 acres. The subject property is located at 3315 Sunrise Boulevard, Ft. Pierce, FL. The subject property has a Future Land Use designation of RM. The subject property has a zoning designation of R-4. The subject property is further located within Section 28, Township 35 South and Range 40 East.

This environmental assessment was completed as a precursor to permitting and review by governmental agencies as an applicable document for the supporting information associated with a building permit or land development application. EDC, Inc. staff visited the property on February 6th, 2025 in order to ascertain the status and composition of any critical habitats, wildlife species of section concern, wetlands, and native uplands which may be onsite.

VEGETATION:

The opinion of EDC is that there is NO native upland habitat located on site. Exotic vegetation makes up over 50% of plant composition of each three strata: ground cover, mid-story, canopy.

The habitat associations were determined via onsite assessment and classified according to the Florida Cooperative Land Cover (CLC) System developed by the Florida Fish and Wildlife Conservation Commission (FWC). The CLC incorporates classifications used by FWC, Florida Natural Areas Inventory (FNAI), and Florida's water management districts. The following upland CLC code(s) were identified onsite; Freshwater Marsh and Brazilian Pepper. Please refer to the attached Florida CLC map for the approximate location of the habitat(s) delineated onsite.

Common Name	Species Name
Slash Pine	*Pinus elliottii*
Brazilian Pepper**	*Schinus terebinthifolia*
Cabbage Palm	*Sabal palmetto*
Melaleuca**	*Melaleuca quinquinervia*
Earleaf Acacia**	*Acacia auriculiformis*
Old-World Climbing Fern**	*Lygodium microphyllum*
Rosary Pea**	*Abrus precatorius*
Cogon Grass**	*Imperata cylindrica*

***Nuisance Vegetation**
****Exotic/Invasive Vegetation**

Table 1: This table lists a representative sample of vegetative species observed during the site visit.

WETLAND DELINEATION:

According to aerial photographs and site visit, it appears that there are State jurisdictional wetlands on site. Based on the State definition, a wetland consists of three components: 1) hydric soils, 2) wetland plants, and 3) hydrologic indicators. These components were found in conjunction during the field reconnaissance on the property.

SFWMD previously issued a Jurisdictional Determination over the wetland areas on the subject property under Application 060531-18. Mitigation credits for on-site wetlands was purchased. Documentation is attached.

WILDLIFE EVALUATION:

EDC, Inc. conducted a pedestrian survey throughout the property to investigate the presence of any plant or animal listed species. No state or federally listed plant/animal species or their habitats were observed onsite during the site reconnaissance. Common waterfowl were observed in wetland areas on the subject property.

A 100% gopher tortoise survey should be conducted by a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent (AGTA) 90-days prior to any land-disturbing activities.

SOIL COMPOSITION:

Based on a review of the U.S. Department of Agriculture (USDA) Web Soil Survey the site is composed of the following soil series:

Ankona and Farmton sands- The Ankona and Farmton series consist of very deep, very poorly drained, slowly permeable soils. These sands formed in sandy and loamy marine sediments. A water table is within depths of 6 to 18 inches for 1 to 4 months, primarily in the winter and early spring and it is at depths of 18 to 40 inches for 6 months or more during the rest of the year in most years. Ankona and Farmton soils are found in broad flats and depressional areas. Typical vegetation consists of longleaf pine, slash pine, saw palmetto, wax myrtle, gallberry, fetterbush, creeping bluestem, chalky bluestem, lopsided Indian grass, low panicums and pineland threeawn. Depressional areas are dominated by marsh vegetation consisting of maidencane, cutgrass, sand cordgrass, and St. John's wort.

Oldsmar fine sand, depressional- This soil is in wet depressions in the flatwoods and the soil is often ponded for six to nine months. The potential for cultivation is low without aggressive water management. Oldsmar sand is sandy, siliceous, poorly drained and slowly permeable sand. These soils are nearly level and found in broad areas of flatwoods and wet depressional areas. In most years the water stands above the surface for 6 to 9 months or more. These soils are saturated for long periods during the wet season. Natural vegetation includes sand weed, stillingia, longleaf threeawn, maidencane and sand cordgrass. The most common grasses are Florida threeawn and pineland threeawn. Water control measures are necessary to overcome excessive wetness. The potential for cultivation is low without aggressive water management. The soil is well suited for pasture and hay crops.

Pepper and EauGallie sand- sands are sandy, siliceous, nearly level, poorly drained soil in broad open areas of the flatwoods. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and within a depth of 40 inches for more than 6 months. Natural vegetation includes Florida pine, saw palmetto, oak, inkberry, and fetterbush. The most common grasses are Florida threeawn and pineland threeawn. The

soil has high potential for dwellings without basements, small commercial buildings and roads. Water control measures may be necessary to overcome excessive wetness.

CITY OF FORT PIERCE REGULATIONS:

The following lists the City of Fort Pierce Land Development Code as they pertain to the subject property. As part of the local approval process, the applicant will be required to comply with the items below.

"Sec. 123-5. - Permit applications.
Application for landscape permit, tree removal and land-clearing permits required by this article shall be made prior to beginning any site work or tree removal, replacement, relocation or substantial alteration and shall be subject to the provisions of this subsection."

Trees meeting the protection criteria as stated above were observed onsite. A tree survey will be required as part of the building approval process.

Development plans will be approved by the State via Environmental Resource Permit (ERP). The ERP approval will need to be part of your building application to City of Ft. Pierce.

SUMMARY:

The subject property evaluated as part of this Environmental Assessment consists of two tax parcels (Parcel ID #s: 2428-321-0001-000-3 & 2428-601-0252-000-6) comprised of 21.72 acres. The subject property is located at 3315 Sunrise Boulevard, Ft. Pierce, FL.

It is the professional opinion of EDC that no native upland habitat is located onsite. Wetlands are located on the subject property, which have previously been mitigated for with SFWMD.

A 100% gopher tortoise survey should be conducted by a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent (AGTA) 90-days prior to any land-disturbing activities.

Lastly, trees meeting the City of Fort Pierce protection criteria were located onsite and a tree survey will be required as part of building approval process and vegetation removal.

Attachment 1
SITE MAPS

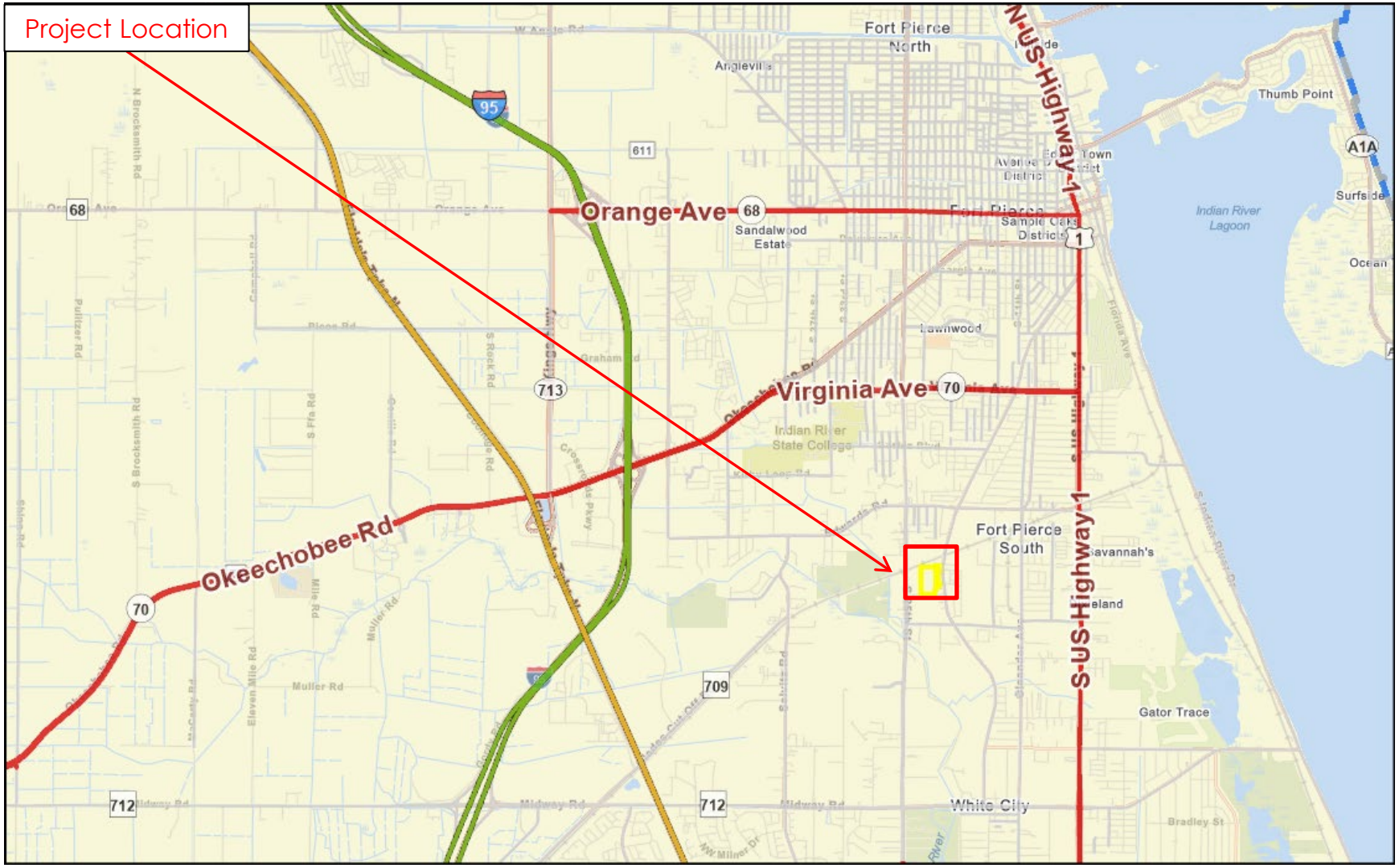
EDC
A DIVISION OF HALEY WARD, INC.

Environmental Assessment
3315 Sunrise Boulevard
Ft. Pierce, Florida 34982

Location Map

Project: 24-237	Port Richey Village Investments	02/14/2025

N



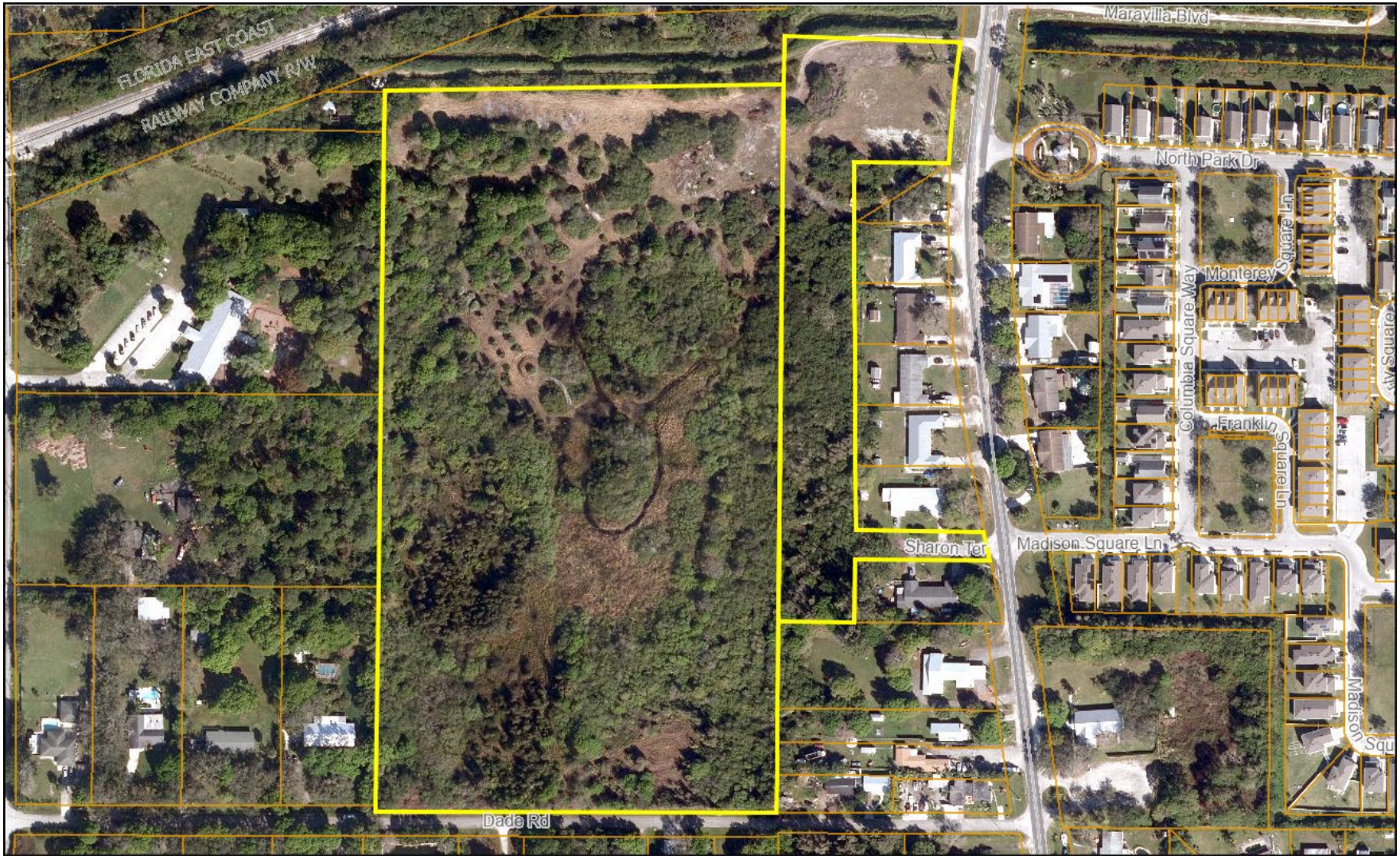
A DIVISION OF HALEY WARD, INC.

Environmental Assessment
3315 Sunrise Boulevard
Ft. Pierce, Florida 34982

Property Appraiser Map

Project: 24-237	Port Richey Village Investments	02/14/2025

N



A DIVISION OF HALEY WARD, INC.

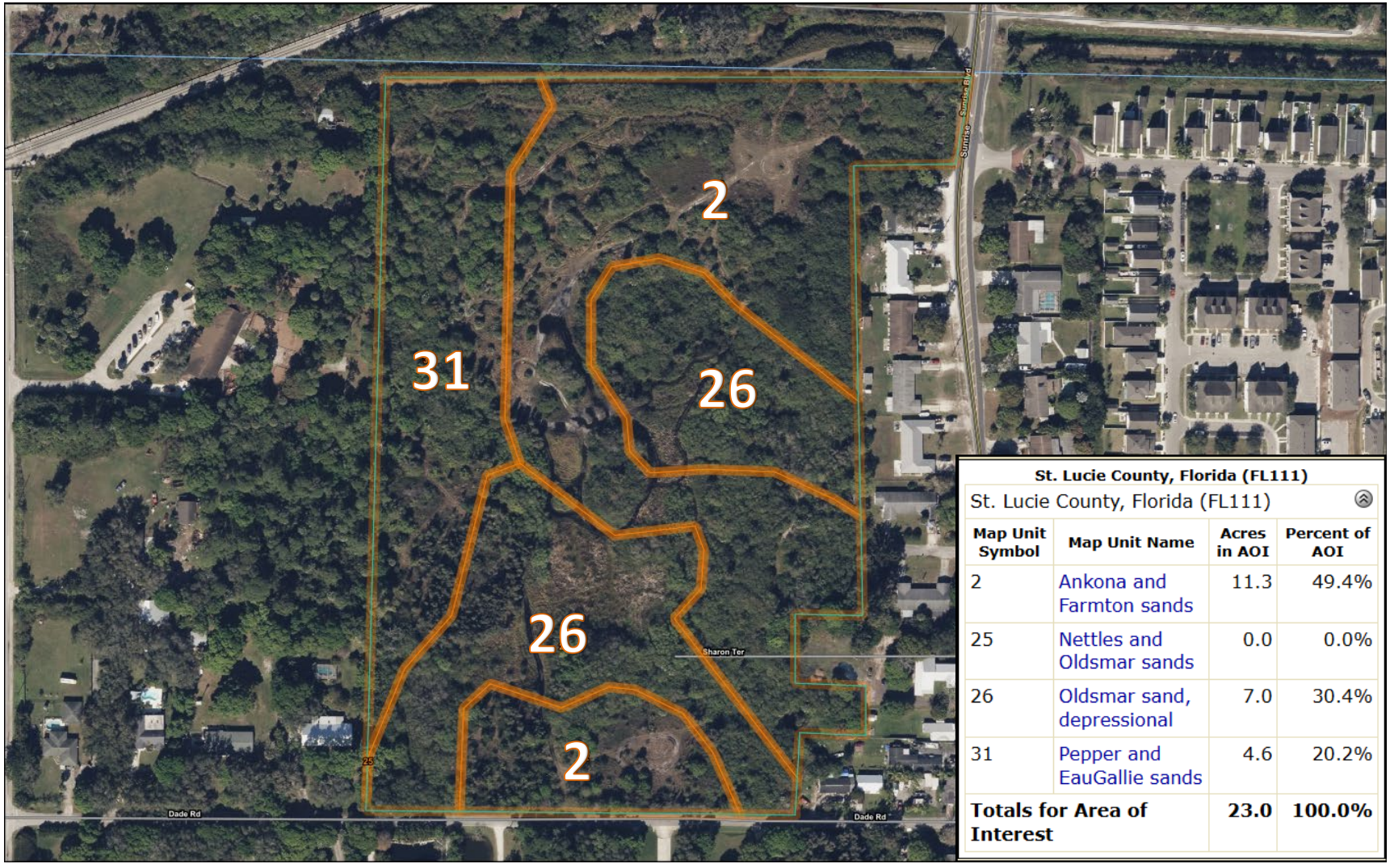
Environmental Assessment

3315 Sunrise Boulevard
Ft. Pierce, Florida 34982

Soil Map

Project: 24-237	Port Richey Village Investments	02/14/2025

N



St. Lucie County, Florida (FL111)

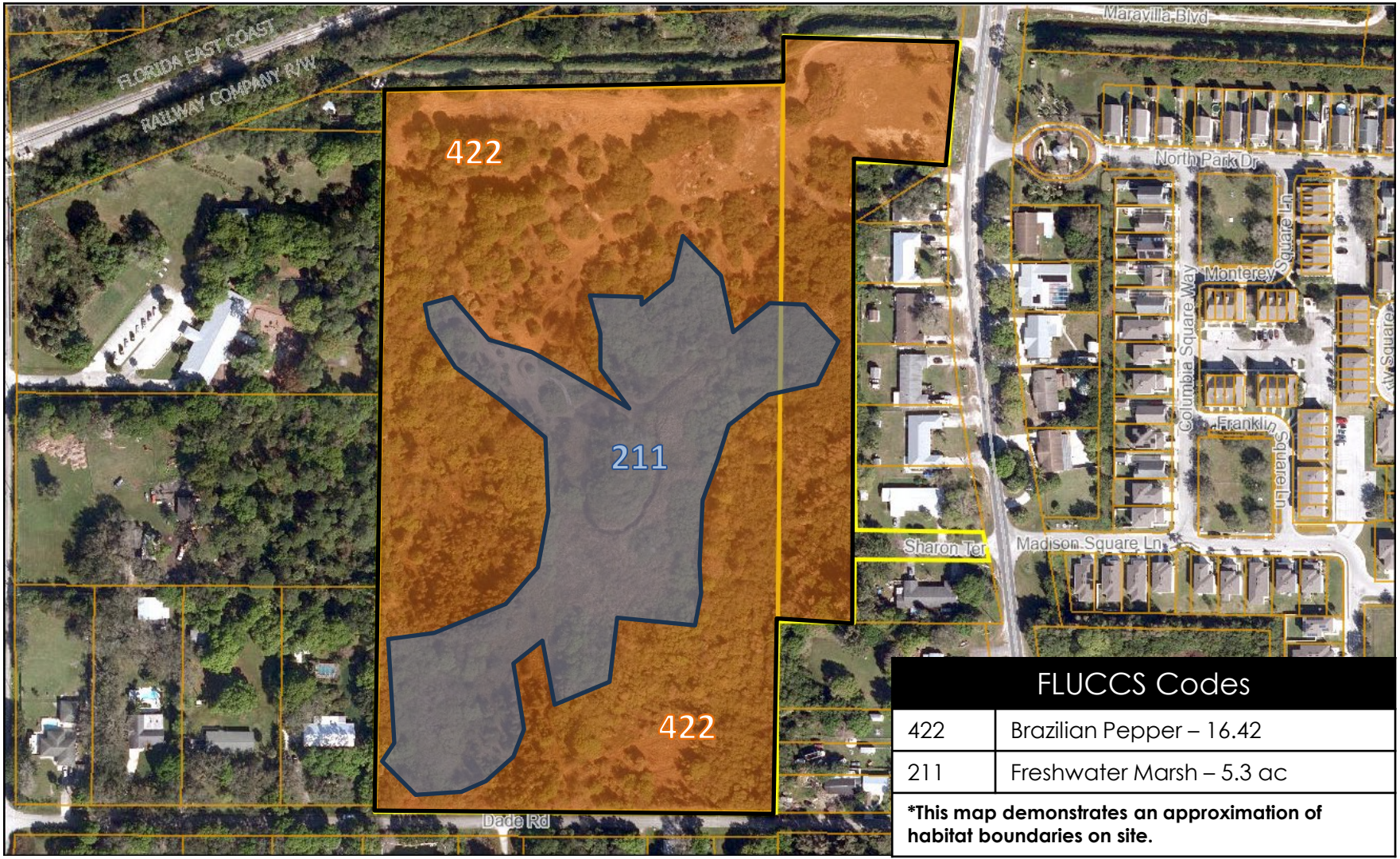
St. Lucie County, Florida (FL111)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ankona and Farmton sands	11.3	49.4%
25	Nettles and Oldsmar sands	0.0	0.0%
26	Oldsmar sand, depressional	7.0	30.4%
31	Pepper and EauGallie sands	4.6	20.2%
Totals for Area of Interest		**23.0**	**100.0%**

Environmental Assessment
3315 Sunrise Boulevard
Ft. Pierce, Florida 34982

Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

Project: 24-237	Port Richey Village Investments	02/14/2025



FLUCCS Codes	
422	Brazilian Pepper – 16.42
211	Freshwater Marsh – 5.3 ac

***This map demonstrates an approximation of habitat boundaries on site.**

Attachment 2
SFWMD PERMIT EXHIBIT

Mar 05 07 12:49p Avi Baba 3058322228 p.1

Client

Bluefield Ranch Mitigation Bank

David McIntosh, Trustee
901 North Olive Avenue
West Palm Beach, FL 33401
Phone (561) 355-3900; Fax (561) 659-9811
C (561) 346-4072
DaveMcI@bellsouth.net

Memorandum by fax

To: South Florida Water Management District
Environmental Resource Permitting (561-682-6896)

From: Dave McIntosh

Subject: Privilege Development, LLC: Sunrise Lakes
SFWMD Permit # 56-02552-P:
Mitigation at Bluefield Ranch Mitigation Bank

Date: January 24, 2007

Ladies and Gentlemen:

I hereby advise you that Privilege Development, LLC, has completed all its obligations under its contract with Bluefield Ranch Mitigation Bank for the purchase of five and three-tenths (5.3) herbaceous wetland mitigation credits. By completing its obligations, Privilege Development, LLC, has fully satisfied Special Condition 14 of the above-referenced SFWMD Permit.

As you are aware, Bluefield Ranch Mitigation Bank is permitted by SFWMD for the sale of such credits by virtue of Permit #56-00002-M.

Bluefield now requests your permanent withdrawal of those five and three-tenths (5.3) herbaceous credits from Bluefield's credit ledger and the permanent association of those credits with the Permit of Privilege Development, LLC, for its Sunrise Lakes project.

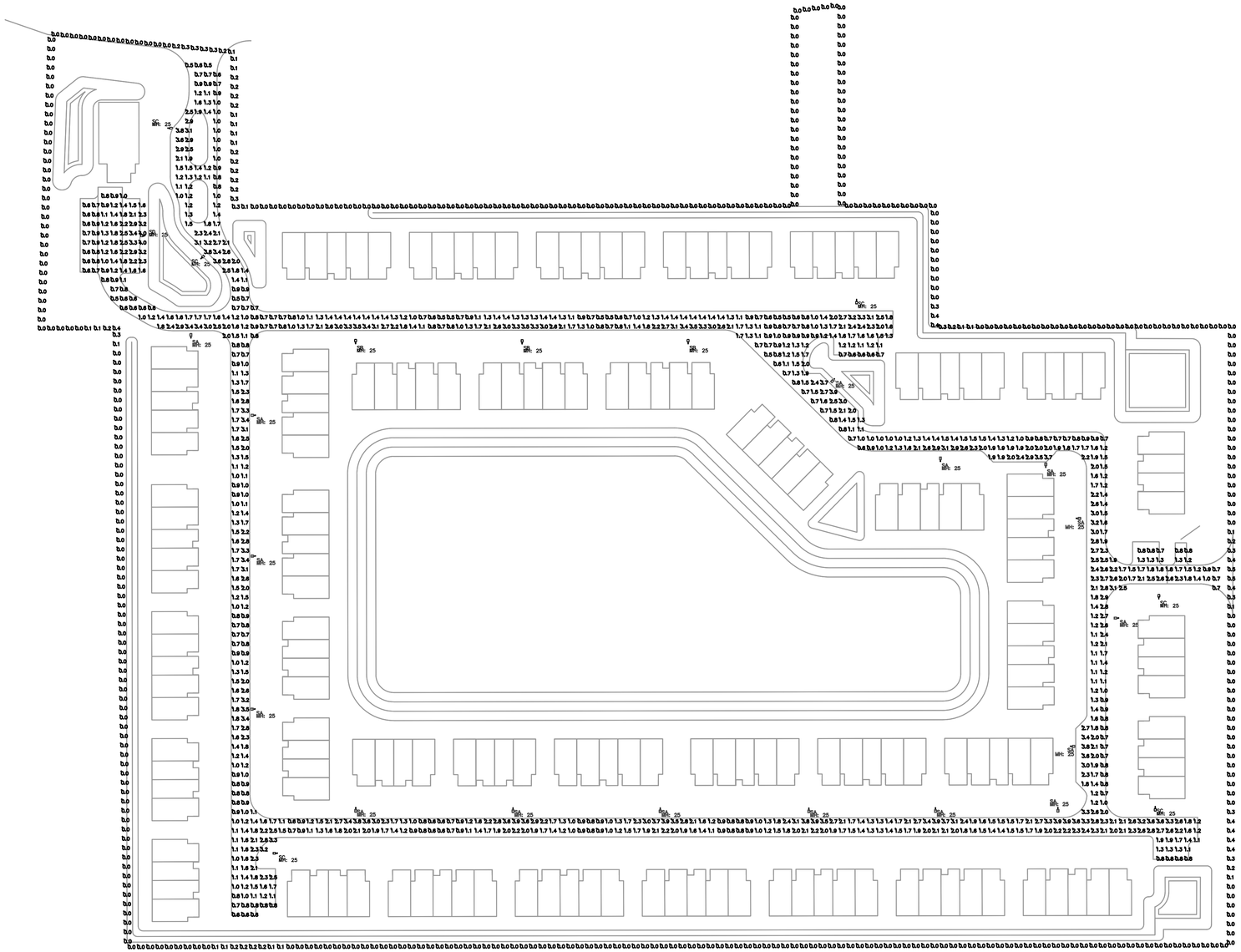
If you have any questions, please contact me directly.

Thank you.

David McIntosh

✓ Cc: Mr. Simon Cohen ~~(305-832-2228)~~
VIA HAND DELIVERY to Avi on 1-25-07.

TOTAL PAGES TRANSMITTED – 1



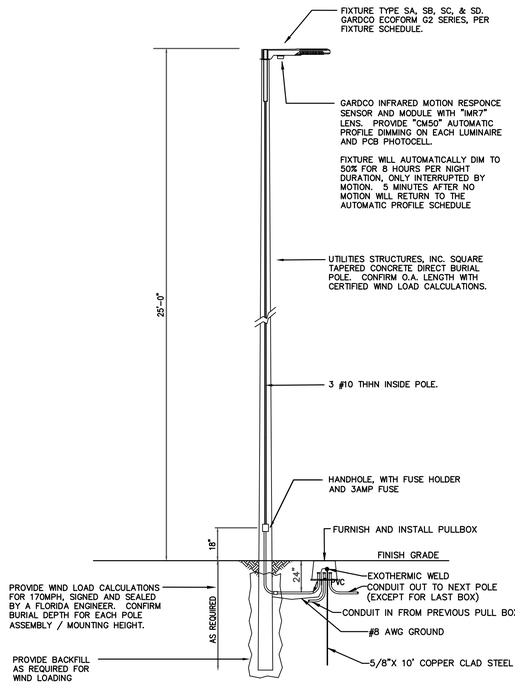
SITE PHOTOMETRIC PLAN

3/16"=1'-0"

NORTH

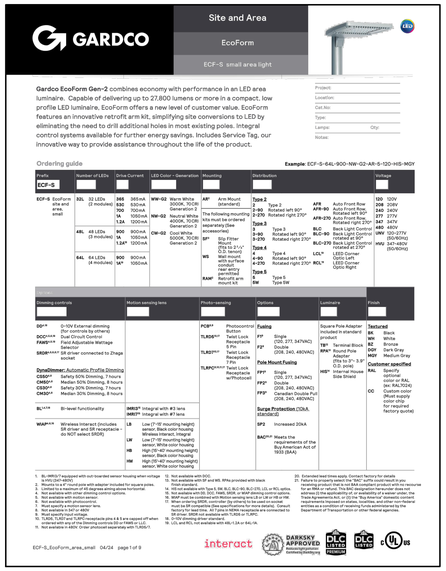
Calculation Summary								
Project: SUNRISE BLVD FT PIERCE SITE 06-23-2025								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
DRIVE & PARKING_Planar	Illuminance	Fc	1.63	4.0	0.5	3.26	8.00	
PROPERTY LINE	Illuminance	Fc	0.03	0.5	0.0	N.A.	N.A.	

Luminaire Schedule							
Project: SUNRISE BLVD FT PIERCE SITE 06-23-2025							
Symbol	Label	[MANUFAC]	Description	Arr. Lum. Lumens	LLF	Lum. Watts	Total Watts
	SA	Gardco	ECF-S-32L-1_2A-NW-G2-2-HIS POLE MOUNT 25' AFG	11627	0.900	121.6	1945.6
	SB	Gardco	ECF-S-48L-1_2A-NW-G2-2-HIS POLE MOUNT 25' AFG	17346	0.900	182.71	548.13
	SC	Gardco	ECF-S-48L-1A-NW-G2-3-HIS POLE MOUNT 25' AFG	15899	0.900	158.7	952.2
	SD	Gardco	ECF-S-48L-1A-NW-G2-4-HIS POLE MOUNT 25' AFG	16372	0.900	158.7	158.7



"SB" LIGHT POLE DETAIL

N.T.S.



PERMIT ISSUED	-
CONSTRUCTION ISSUED	-

revision	date

KAMM Consulting
405 Angle Road
Fort Pierce, Florida 34947
Phone: 561-504-6464
bbrown@kammconsulting.com
Certification of Authorization #8189
DESIGNED | date
Brady J. Brown | Florida License #58232
signed

project title:
SUNRISE BLVD - PRIVILEGE NORTH SITE LIGHTING
Dade Rd. / Sunrise Blvd. Fort Pierce, FL

sheet title:
SITE PHOTOMETRIC PLAN

proj. no.:	2025-0323
project manager:	JM
checked by:	BB
scale:	AS NOTED
date:	06/20/2025

sheet
E1.1
project

HALEY WARD

SUNRISE BLVD DRAINAGE REPORT

TO: **SFWMD**
FOR: **SUNRISE BLVD (GPS DEVELOPMENTS LLC)**

APPLICANT:
GPS Developments LLC
10465 NW 29th Ter | Doral, FL 33172

MARK DAVID LANDSMAN LICENSE No. 98288 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Mark Landsman
Date: 2025.06.19 11:01:34 -04'00'

May 6, 2025
JN: 24-237

REPORT PREPARED BY:
Haley Ward, Inc.
10250 SW VILLAGE PKWY, STE 201, PORT ST. LUCIE, FL

Table of Contents

1.0 Executive Summary 4
2.0 History and Existing Storm Water Management System 4
3.0 Drainage Calculation Summary 5
3.1 Project Description 5
3.2 Datum 5
3.3 Proposed Stormwater Management System 5
3.4 Land Use Tables 5
3.5 Wet Season Water Table 6
3.6 Tailwater 6
3.7 Water Quality Treatment 7
3.8 Discharge Rates – SFWMD Standard 7
3.9 Discharge Volume – NSLRWCD Standard 8
3.10 Minimum Road and Parking 8
3.11 Minimum Finished Floor 8
3.12 Minimum Perimeter Berm 9
3.13 Control Structures 9
3.14 Net Improvement 9
3.15 Back-to-Back Storm Results 10
3.16 Design Storm Summary 10
4.0 Conclusion 11
APPENDIX A: Maps and Exhibits 12
APPENDIX B: Drainage Calculations 31
APPENDIX C: Storm Routing Results 51
APPENDIX D: Geotechnical Report 130

List of Tables

Table 1-Site Details 5
Table 2-Pre-Development Land Use 6
Table 3-Post Development Land Use 6
Table 4-Water Quality Treatment Volume 7
Table 5-Stormwise Results, 25-year/3-Day 7
Table 6-NSLRWCD Discharge Volume 8
Table 7-Minimum Road Elevation 8
Table 8-Minimum Finished Floor Elevation 8
Table 9-Minimum Perimeter Berm 9
Table 11-Back-to-Back Storm Results 10
Table 12-Design Storm Summary 10

1.0 Executive Summary

The project known as Sunrise Blvd proposed to develop vacant parcels into a townhome community consisting of 39 buildings and 184 units. The project is located near the intersection of Sunrise Blvd and Dade Rd in the City of Fort Pierce. A proposed lake in the center of the development will provide water quality and attenuation prior to discharging off site to the NSLRWCD Canal No. 10. Since the project is located in the NSLRWCD, discharge rates are regulated by the NSLRWCD volumetric standards. The stormwater management system for the project will meet all local and state water quality standards. The appendices provide supporting documentation for the assumptions and statements made in this report.

2.0 History and Existing Storm Water Management System

The project area is located in the NSLRWCD and SFWMD. An Environmental Resource Permit was obtained on the subject parcel under Permit # 56-02552-P, Application # 060531-18. However, this permit has since expired/cancelled. As such, a new individual ERP is required with this application. The previous permit does note a 5.3-acre wetland on site that has since been mitigated. Please see Appendix A for information on the wetland and purchased mitigation credits.

Since the site is vacant and unimproved, there is no existing stormwater management system. The site is mostly flat with a few small depressions and mounds. Stormwater currently sheet flows from the site to northwest corner discharging through a low area and into the NSLRWCD Canal No. 10.

3.0 Drainage Calculation Summary

3.1 Project Description

The following Table 1 outlines the parcels that comprise of the entire project.

Table 1-Site Details

Parcel ID	Size (acres)	Sec/Town/Range	Jurisdiction
2428-321-0001-000-3	17.88	28/35S/40E	Fort Pierce
2428-601-0252-000-6	3.84	28/35S/40E	Fort Pierce
Total:	**21.72**		

3.2 Datum

All elevations included on the project construction plans are in reference to the North American Vertical Datum 1988. The vertical datum conversion has been determined to be approximately 1.50 feet in the project area. This is used to convert NGVD to NAVD, in other words NGVD elevation minus 1.50 feet = NAVD elevation.

3.3 Proposed Stormwater Management System

The proposed stormwater management system for the site is comprised of 4.18-acre lake and 1.51 acres of dry retention. The lake is capable of providing up to 35.96 ac-ft of permanent pool volume and the dry retention areas provide up to 1.38 ac-ft of retention volume to meet net improvement standards. The stormwater management system is capable of providing 3.48 ac-ft of water quality treatment volume exceeding the required minimum.

3.4 Land Use Tables

The following Table 2 outlines the pre-development land use breakdown, while Table 3 outlines the post development land use breakdown for the project.

Table 2-Pre-Development Land Use

Land Use	Area (ac)	Percentage of Basin (%)
Pervious	21.74	100%
Total:	**21.74**	**100%**

Table 3-Post Development Land Use

Land Use	Area (ac)	Percentage of Basin (%)
Buildings	4.46	20.5%
Impervious	4.73	21.8%
Lake @ CE	3.36	15.5%
Lake Banks	0.82	3.8%
Retention	1.51	6.9%
Pervious	6.83	31.5%
Basin Total:	**21.71**	**100%**

3.5 Wet Season Water Table

The wet season water table elevation for the project is derived from a geotechnical report completed by Nutting Engineers in January 2025. The borings in the report indicate that groundwater was encountered approximately 2-feet below natural grade. The seasonal high-water table was determined to be 12.00 NAVD which is comparable to the piezometer readings in application 060531-18.

3.6 Tailwater

The tailwater condition for the project is derived from the controlled elevation of the NSRLWCD Canal No 10. This canal is controlled at 2.5 NAVD year-round as there is no deviation during the dry season. The St Lucie County stormwater master plan provides maximum tailwater elevations. A copy of this master plan and the NSLRWCD map is provided in Appendix A.

3.7 Water Quality Treatment

The project proposes to treat the required water quality treatment volume based on three criteria. The three criteria are 1-inch over the project area, 2.5-inches times the percent impervious and net improvement. The following Table 4 outlines the results of the water quality treatment volume calculations. The controlling factor for water quality treatment volume is 1-inch over the project area. The calculations for 1-inch over the project area and 2.5-inches times the percent impervious are increased by 50% for an Outstanding Florida Waterbody (OFW).

Table 4-Water Quality Treatment Volume

1-inch Over the Project Area (acre-feet)	2.5-inches Times Percent Impervious (acre-feet)	Net Improvement (acre-feet)
2.71	1.95	1.38

The treatment volume for net improvement is reduced due to a portion of the treatment being provided in the permanent pool volume in the lake. The 1.38 acre-feet of remaining treatment is required in retention.

3.8 Discharge Rates – SFWMD Standard

A pre vs post discharge rate analysis was conducted on the site using the 25-year/3-day storm event simulation in the routing model. The following Table 5 outlines the results of the simulations. Please see Appendix C for further information regarding the results of the simulations.

Table 5-Stormwise Results, 25-year/3-Day

Pre-Development	Post Development	Max Stage
36.67 cfs	5.74 cfs	15.24 NAVD

3.9 Discharge Volume – NSLRWCD Standard

The project proposes to discharge to the NSLRWCD Canal No. 10. The NSLRWCD has a pre-established maximum discharge volume of no more than 2-inches across a site within a 24-hour period. The following Table 6 outlines the maximum versus proposed discharge volume for the project.

Table 6-NSLRWCD Discharge Volume

Maximum Discharge Volume (ac-ft)	Proposed Discharge Volume (ac-ft)
3.62	2.58

3.10 Minimum Road and Parking

The minimum road and parking elevation for the site was determined based on the results of the routing simulation for the 10-year/1-day storm event. The maximum stage of the 10-year/1-day storm event is provided in the following Table 7. Please see Appendix C for further details on the routing simulation inputs and results.

Table 7-Minimum Road Elevation

Stormwise Result	Proposed Minimum Road
14.41 NAVD	15.70 NAVD

3.11 Minimum Finished Floor

The minimum finished floor elevation for the project is determined by the results of the routing simulation of the 100-year/3-day storm event. The maximum stage of the 100-year/3-day storm event is provided in the following Table 8.

Table 8-Minimum Finished Floor Elevation

Stormwise Result	Minimum FFE
16.25 NAVD	17.75 NAVD

3.12 Minimum Perimeter Berm

The minimum perimeter berm is determined by the results of the routing simulation for the 25-year/3-day storm event. The perimeter berm elevations are noted in Table 9.

Table 9-Minimum Perimeter Berm

Stormwise Result	Minimum Berm
15.24 NAVD	15.25 NAVD

3.13 Control Structures

The proposed outfall control structure for the project is a FDOT Type E box. The outfall control structure does not have a bleeder. Instead, the control structure has a 3-inch by 3-inch vertical weir at 13.00 NAVD. The rim of the structure is set at 15.00 NAVD. A Please see the construction plans and routing model inputs for further information.

To provide the required retention to meet net improvement standards, catch basins, CB-26, CB-21, and drainage manhole DMH-2 require an internal weir at 14.85 NAVD. These structures directly discharge stormwater to the proposed on-site lake. The weir elevation of 14.85 NAVD is capable of providing the required 1.38 ac-ft of treatment volume.

3.14 Net Improvement

A net improvement analysis was completed on the project to demonstrate that total nitrogen and phosphorus loading is reduced in the post development condition. Net improvement for the project is attained using a combination of the permanent pool volume in the lake and the dry retention ponds. Please see Appendix B for the net improvement calculations.

3.15 Back-to-Back Storm Results

To provide assurance that the site can recovery from a storm event without flooding, a back-to-back storm was simulated in the routing model. The ending stage of the 25-year/3-day storm was used as the starting stage for the second storm. The 100-year/3-day storm was routed without discharge for both the initial and secondary storm.

Table 10-Back-to-Back Storm Results

Storm	Maximum Stage Initial Storm (NAVD)	Maximum Stage Secondary Storm (NAVD)	Proposed Elevation (NAVD)	Note
10-1	14.41	15.23	15.70	Minimum Pavement
25-3	15.24	15.58	15.25	Perimeter Berm
100-3	16.25	16.84	17.75	Minimum FFE

Since the perimeter berm elevation is based on the initial storm results only, an increase in the proposed elevation is not warranted due to the results of the secondary storm.

3.16 Design Storm Summary

The following Table 11 outlines the design storm summary for the project.

Table 11-Design Storm Summary

Storm	Rainfall (inches)	Maximum Stage (NAVD)	Proposed Elevation (NAVD)	Note
10-1	6	14.41	15.70	Min. Pavement
10-3	9	15.13	--	NSLRWCD
25-3	10	15.24	15.25	Min. Perimeter Berm
100-3	12	16.25	17.75	Min. FFE

4.0 Conclusion

The project known as Sunrise Blvd proposes to develop vacant land into a townhome style product. The proposed dry retention and lake provides water quality and attenuation prior to discharging to the NSLRWCD Canal No. 10. The project meets all local and stormwater regulations. The following appendices provide calculations and suppporting documentation.

APPENDIX A: Maps and Exhibits

Mar 05 07 12:49p Avi Baba 3058322228 p.1

Client

Bluefield Ranch Mitigation Bank

David McIntosh, Trustee
901 North Olive Avenue
West Palm Beach, FL 33401
Phone (561) 355-3900; Fax (561) 659-9811
C (561) 346-4072
DaveMcI@bellsouth.net

Memorandum by fax

To: South Florida Water Management District
Environmental Resource Permitting (561-682-6896)

From: Dave McIntosh

Subject: Privilege Development, LLC: Sunrise Lakes
SFWMD Permit # 56-02552-P:
Mitigation at Bluefield Ranch Mitigation Bank

Date: January 24, 2007

Ladies and Gentlemen:

I hereby advise you that Privilege Development, LLC, has completed all its obligations under its contract with Bluefield Ranch Mitigation Bank for the purchase of five and three-tenths (5.3) herbaceous wetland mitigation credits. By completing its obligations, Privilege Development, LLC, has fully satisfied Special Condition 14 of the above-referenced SFWMD Permit.

As you are aware, Bluefield Ranch Mitigation Bank is permitted by SFWMD for the sale of such credits by virtue of Permit #56-00002-M.

Bluefield now requests your permanent withdrawal of those five and three-tenths (5.3) herbaceous credits from Bluefield's credit ledger and the permanent association of those credits with the Permit of Privilege Development, LLC, for its Sunrise Lakes project.

If you have any questions, please contact me directly.

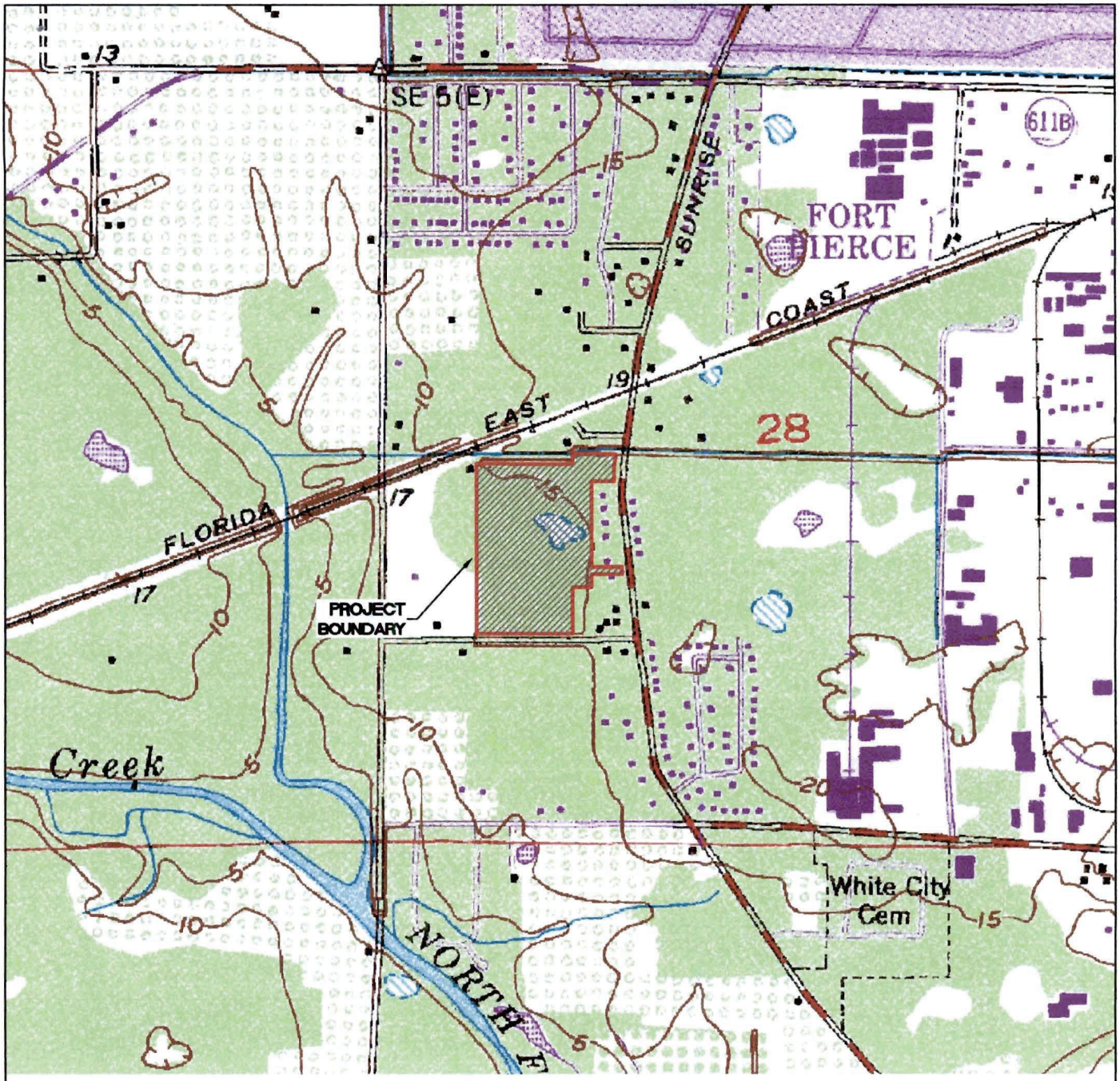
Thank you.

David McIntosh

✓ Cc: Mr. Simon Cohen ~~(305-832-2228)~~
VIA HAND DELIVERY to Avi on 1-25-07.

TOTAL PAGES TRANSMITTED – 1

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

Project Boundary (±21.66 ACRES)

0 500 1000

GRAPHIC SCALE
1 INCH = 1000 FEET

Coordinate System:

Project/File No.:	Twp/Rng/Sec:	Date Drawn:
06-00103	35-40-28	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

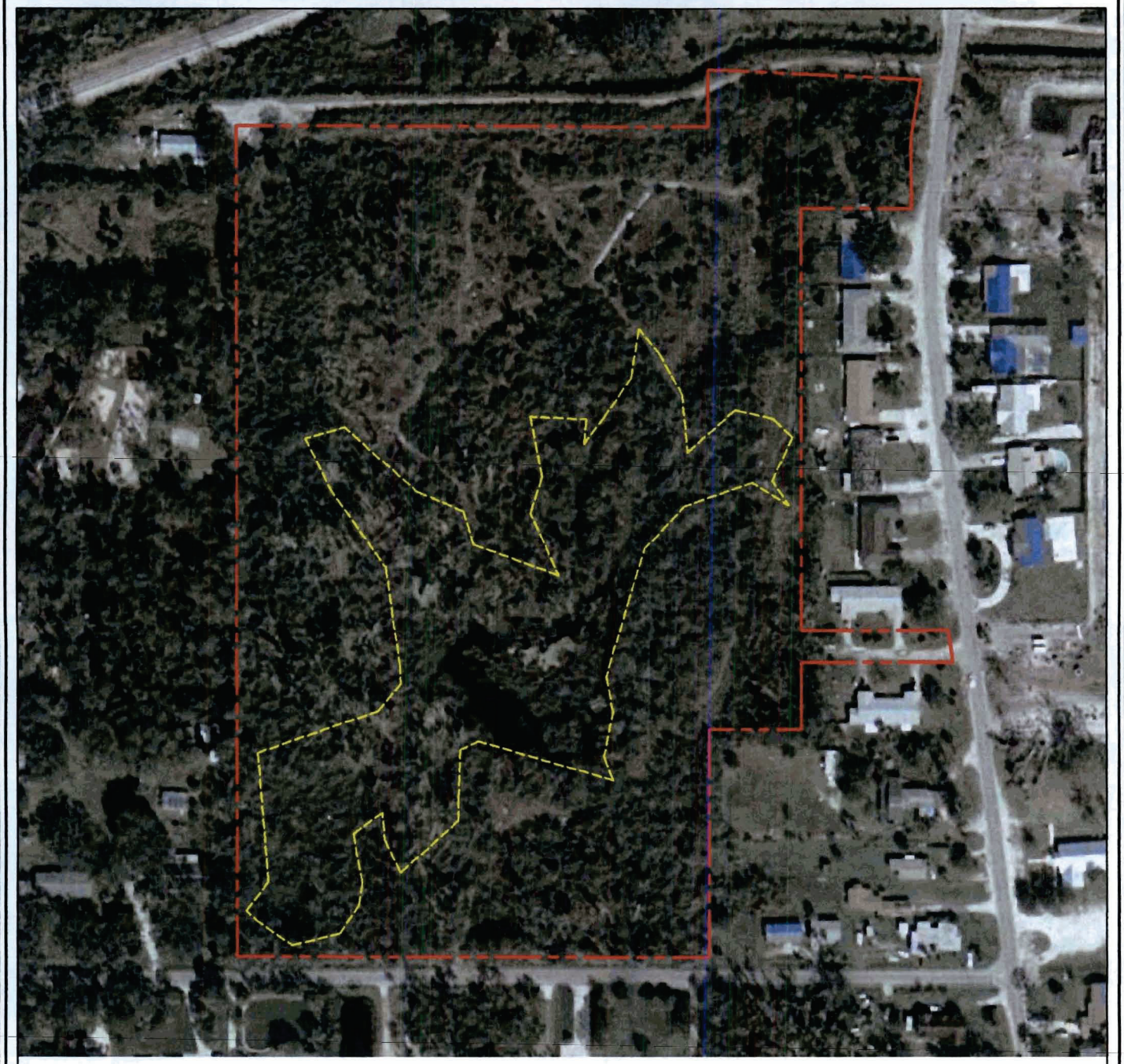
ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 2

USGS TOPO MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 ACRES)

APPROXIMATE WETLAND BOUNDARY (±5.3 ACRES)

ORIGINAL SUBMITTAL

MAY 31 2006

WPB

060531-18

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 3

WETLAND LOCATION MAP



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

		Project Boundary (±21.66 ACRES)
		SOILS BOUNDARY
2		ANKONA AND FARMTON SAND
26	–	OLDSMAR SAND
31		PEPPER AND EUAGILLE SAND

0 100 200
GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 4

SOILS LOCATION MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 ACRES)

ORIGINAL SUBMITTAL
MAY 31 2006
WPB
-060531-18

0 100 200
GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 5

SITE AERIAL MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 acres)

422	Brazilian Pepper (±2.00 acres)
436	Upland Scrub (±9.26 acres)
439	Other Hardwoods (±5.13 acres)
510	Streams & Waterways
619	Exotic Wetland Hardwoods (±3.30 acres)
631	Wetland Scrub (±1.00 acres)
641	Freshwater Marsh (±0.97 acres)

ORIGINAL SUBMITTAL

MAY 31 2006

WPB

060531-18

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.: 06-00103

Twp/Rng/Sec: 35-40-28

Date Drawn: 5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 6

EXISTING FLUCCS MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

Project Boundary (±21.66 acres)

524 Lakes (less than 10 acres)

133 Multiple Dwelling Units, Low Rise (two-stories or less)

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

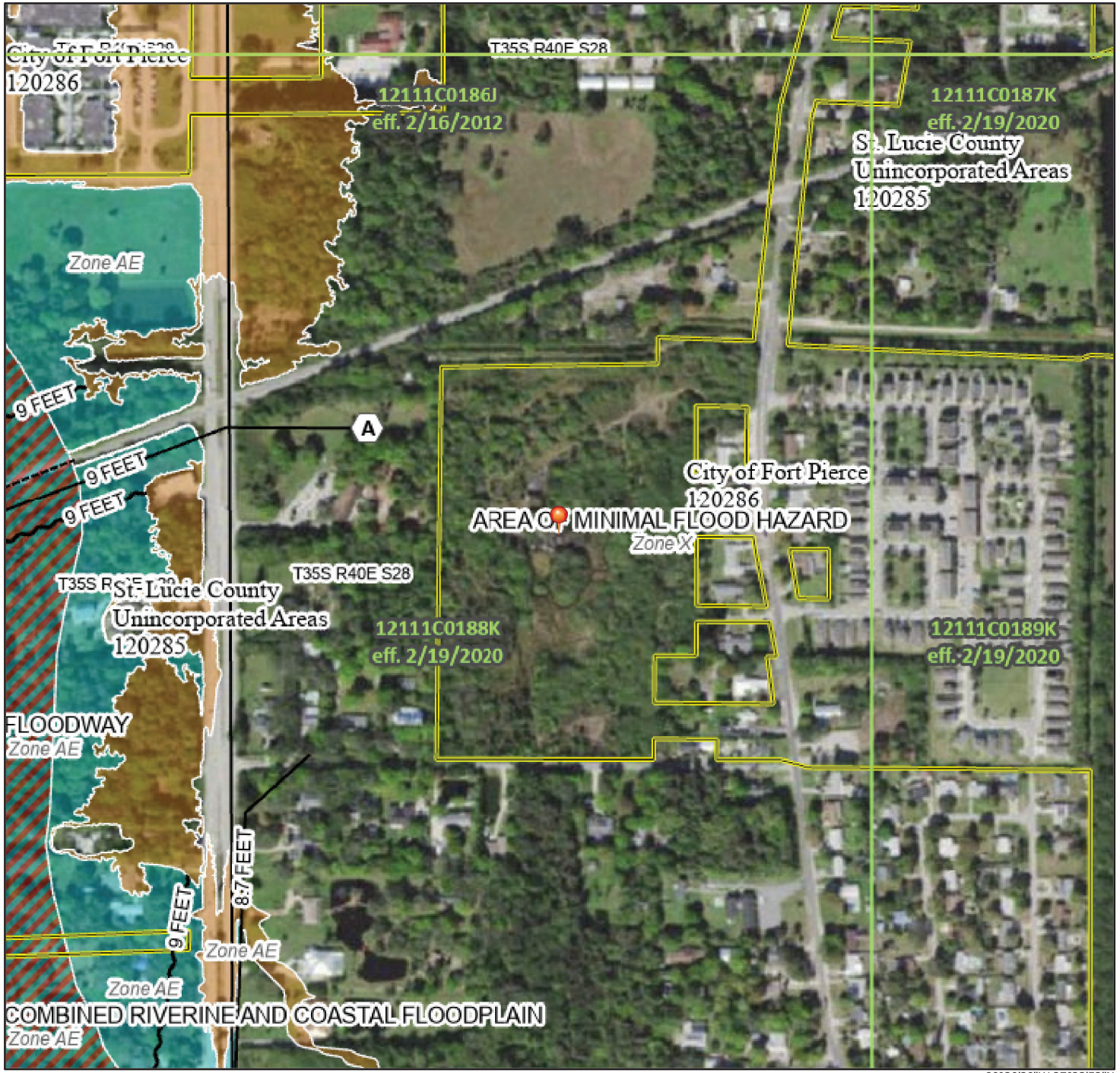
Coordinate System:

Project/File No.: 06-00103 Twp/Rng/Sec. 35-40-28 Date Drawn: 5/15/06	MILLER LEGG Palm Beach Office: 2005 Vista Parkway · Suite 100 West Palm Beach, Florida · 33411-2719 561-689-1138 · Fax: 561-689-8108 www.millerlegg.com	**SUNRISE LAKES** ST. LUCIE COUNTY, FLORIDA FOR: PRIVELEDGE DEVELOPMENT	*FIGURE 7* *PROPOSED FLUCCS MAP*

National Flood Hazard Layer FIRMette

FEMA

80°21'7"W 27°24'24"N



80°20'29"W 27°23'52"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

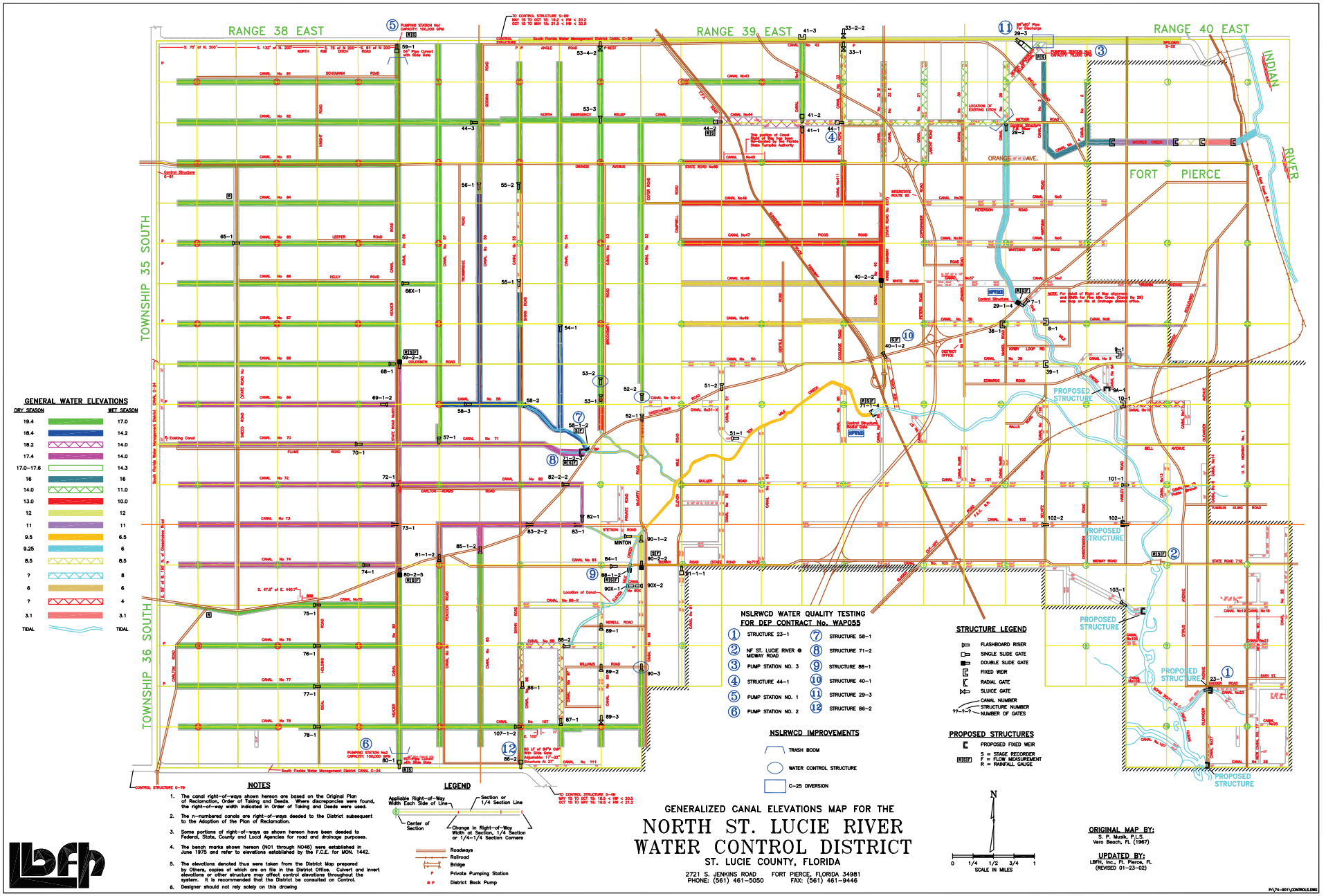
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

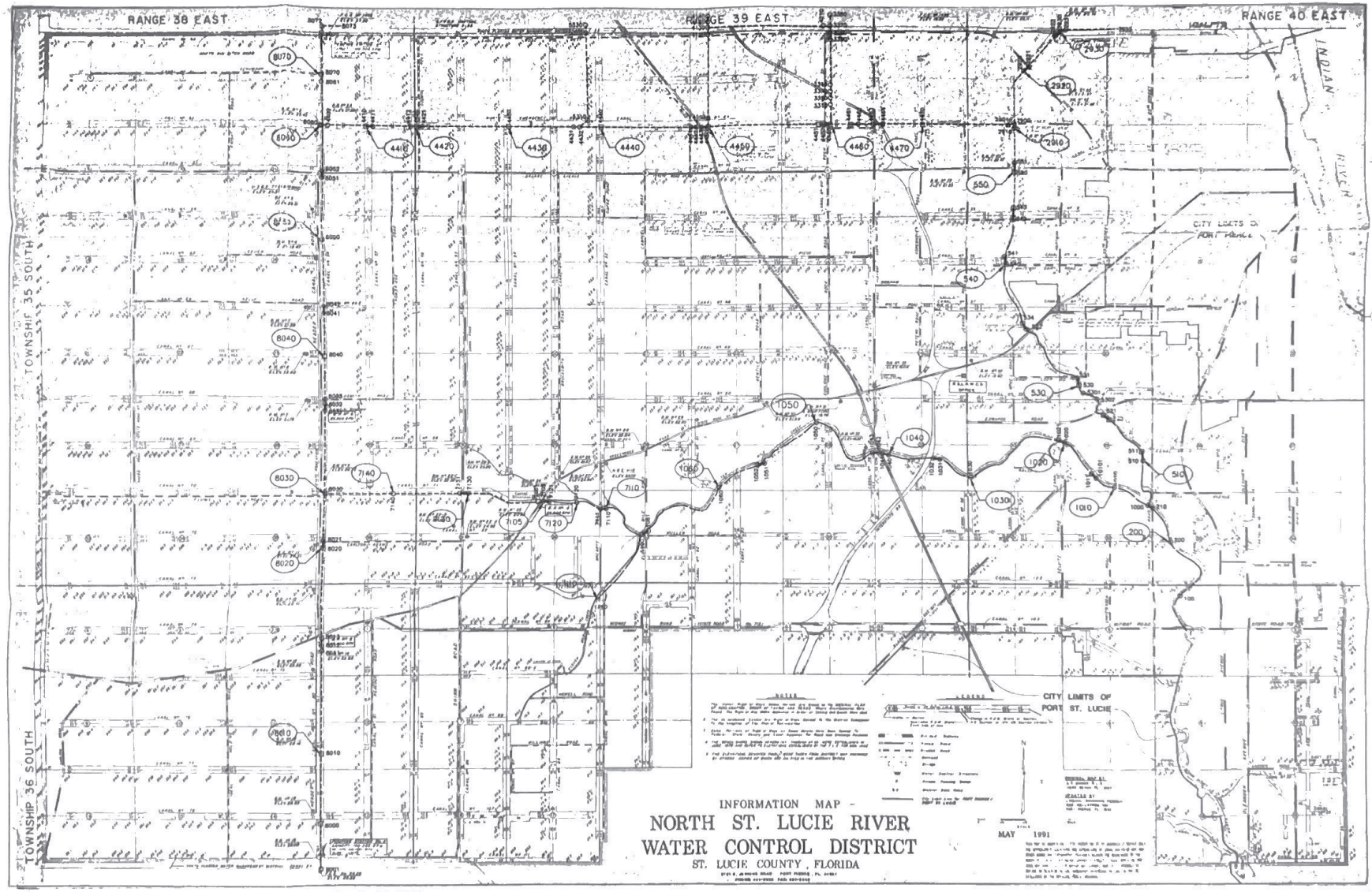
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/26/2025 at 7:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



P:\74-0901\Maps\CONTROLS\2-02-05-2004.dwg, 03/05/2004 11:08:45 AM, Russ-C, LBFH Inc.

MODELING SCHEMATIC OF THE NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT WATERSHED



ST. LUCIE COUNTY STORMWATER MASTER PLAN (3/92)

EXHIBIT 4

TABLE 4–1

FORT PIERCE FARMS WATER CONTROL DISTRICT CANAL NO. 1
Summary of Flood Stages and Problem Areas (1)

Present Land Use

Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length	Invert Elev (ft)	10–YEAR 24–HOUR Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	10YR/72HR Base Cond Max Flood Elev (ft)
1					0	0	−10.0	2.7				2.7
2	CONTROL STRUCTURE				430	430	−3.7	16.5				17.8
1000					1,320	1,750	−1.6	16.5				17.9
1005	25TH STREET				450	2,200	−1.6	16.5				17.9
1010					5,280	7,480	−0.2	16.7				18.3
1015	@ Canal No. 2				5,280	12,760	0.4	16.7				18.5
1016	KEEN ROAD BRIDGE				399	13,159	0.4	16.8				18.5
1017					1,900	15,059	2.5	16.8				18.6
1020	TAYLOR DAIRY RD BRIDGE	@ Canal 3			395	15,454	2.6	16.8				18.7
1030					2,640	18,094	3.4	16.9				18.8
1035	KINGS HWY @ Canal 4				353	18,447	3.4	16.9				18.9
1040	@ Canal 5				2,640	21,087	0.6	16.9				19.0
1050	@ Canal 20				2,640	23,727	0.8	16.9				19.0
1060					2,640	26,367	1.5	16.9				19.0
1070					2,640	29,007	3.5	17.0				19.1
1080					2,640	31,647	5.5	17.0				19.2
1090					2,640	34,287	5.8	17.1				19.3
1100	@ Canal 6				2,640	36,927	7.1	17.1				19.4
1110					2,640	39,567	8.4	17.1				19.4
1115	@ Canal 7				1,320	40,887	8.8	17.1				19.5
1116	CONTROL STRUCTURE				150	41,037	6.5	17.2				19.7
1117					1,320	42,357	9.5	17.2				19.7
1120	JOHNSTON RD CROSSING				280	42,637	8.9	17.5				20.6
1130	@ Canal 8				2,640	45,277	8.0	17.5				20.7
1140					2,920	48,197	10.4	17.6				20.8
1145	INDRIO RD CROSSING				260	48,457	10.4	17.7				21.2
1150					2,640	51,097	9.1	17.7				21.3
1160					2,640	53,737	9.4	17.8				21.3
1170					2,640	56,377	9.7	17.8				21.4
1180					2,640	59,017	10.0	17.8				21.4
1190					2,640	61,657	10.3	17.8				21.4

(1) All stages and elevations referenced to National Geodetic Vertical Datum of 1929 (FT_NGVD) unless noted otherwise.

TABLE 4–2

From North St. Lucie Fork River to Pump Station No. 3
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
10							−11.0	2.7	2.7	2.7	2.7	2.7
1					0	0	−10.8	3.6	3.6	3.6	3.6	5.0
100					3,100	3,100	−6.5	4.0	4.0	4.0	4.0	5.5
200					5,000	8,100	−5.3	5.5	5.5	5.5	5.5	7.4
210					1,400	9,500	−7.4	5.7	5.7	5.7	5.7	7.6
1000	25TH ST SPAN BRIDGE				410	9,910	−7.4	5.7	5.7	5.8	5.7	7.7
510					2,200	12,110	−2.6	7.8	7.5	7.5	7.5	8.3
511	FEC RAR SPAN BRIDGE				395	12,505	−2.6	7.8	7.5	7.5	7.5	8.3
520					2,400	14,905	−2.4	8.5	8.3	8.3	8.3	9.0
521	EDWARDS RD SPAN BRIDGE				350	15,255	−2.4	8.6	8.3	8.3	8.3	9.0
5302					1,000	16,255	−1.8	8.6	8.3	8.3	8.3	9.0
5301					1,700	17,955	−0.6	8.9	8.8	8.8	8.8	9.3
530					800	18,755	−0.1	10.8	10.8	10.8	10.8	11.1
531	KIRBY LOOP RD SPAN BRIDGE				400	19,155	−0.1	10.8	10.8	10.8	10.8	11.1
532					4,200	23,355	1.6	13.0	12.9	12.9	12.9	14.3
534					5	23,360	2.1	13.2	13.1	13.1	13.1	14.6
540					3,700	27,060	4.0	13.5	13.4	13.4	13.4	14.8
541	WHITEWAY DAIRY RD	16.6			245	27,305	4.1	13.5	13.5	13.5	13.5	15.0
542					3,000	30,305	4.6	13.6	13.6	13.6	13.6	15.1
543	PETERSON RD SPAN BRIDGE				320	30,625	4.6	13.7	13.6	13.6	13.6	15.1
550					2,600	33,225	3.1	14.0	13.9	13.9	13.9	15.3
551	ORANGE AVE SPAN BRIDGE				360	33,585	3.1	14.0	14.0	14.0	14.0	15.3
2910					2,800	36,385	7.8	14.0	14.0	14.0	14.0	15.4
2901	METZGER RD CROSSING	19.8			245	36,630	7.6	14.0	14.0	14.0	14.0	16.4
2900					325	36,955	7.3	14.0	14.0	14.0	14.0	16.7
2920	ANGLE RD CROSSING	21.1			3,080	40,035	7.2	14.0	14.0	14.0	14.0	16.7
2921					210	40,245	7.4	13.9	13.9	13.9	13.9	16.5
2922	AVENUE Q CROSSING	20.1			1,400	41,645	7.7	13.9	13.9	13.9	13.9	16.5
2930					245	41,890	7.7	13.9	13.9	13.9	13.9	16.5
2931					5	41,895	7.7	13.6	13.6	13.6	13.6	13.6
2932					500	42,395	7.7	13.5	13.5	13.5	13.5	13.5

(1) All stages and elevations referenced to National Geodetic Vertical Datum of 1929 (FT_NGVD) unless noted otherwise.

TABLE 4–3

From Ten Mile Creek to Header Canal
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
1000					0	0	−7.4	5.7	5.7	5.8	5.7	7.7
1010					2,500	2,500	−6.3	6.2	6.2	6.2	6.2	8.4
10101					1,400	3,900	−5.2	6.4	6.4	6.4	6.4	8.7
1011	FEC RR SPAN BRIDGE				415	4,315	−5.2	6.4	6.4	6.4	6.4	8.7
1020					2,800	7,115	−4.2	7.3	7.1	7.2	7.1	9.9
1021	SELVITZ RD SPAN BRIDGE				380	7,495	−4.2	7.3	7.2	7.2	7.2	10.0
1030					5,320	12,815	−1.5	9.2	8.9	9.0	8.9	12.0
1031					2,800	15,615	−0.8	9.7	9.3	9.4	9.4	12.5
1032	I–95 SPAN BRIDGE				500	16,115	−0.8	9.7	9.4	9.5	9.5	12.6
1040	@ C-40				3,080	19,195	−0.2	10.6	10.5	10.5	10.5	13.7
1041					445	19,640	−0.2	10.6	10.5	10.6	10.5	13.7
1042	GORDY RD STRUCTURE	14			200	19,840	−1.8	10.8	10.6	10.7	10.7	14.3
1043	GORDY RD SPAN BRIDGE				400	20,240	−1.8	10.8	10.6	10.7	10.7	14.3
1050					2,800	23,040	−0.3	10.9	10.8	10.9	10.9	14.4
1051					4,200	27,240	−1.3	11.2	11.1	11.2	11.2	14.8
1052	PRIVATE CROSSING				395	27,635	−1.3	11.2	11.1	11.2	11.2	14.8
1060					3,640	31,275	3.2	11.4	11.3	11.4	11.4	14.9
1061					5,600	36,875	1.0	11.7	11.7	11.8	11.7	15.1
1100	ELEVEN MILE RD BRIDGE				395	37,270	1.0	11.7	11.7	11.8	11.8	15.2
7110					2,800	40,070	2.5	11.9	11.8	11.9	11.9	15.3
7111	McCARTY RD SPAN BRIDGE				390	40,460	2.5	11.9	11.8	12.0	11.9	15.4
7120					1,400	41,860	6.1	12.0	11.9	12.1	12.0	15.4
7121					4,900	46,760	6.2	12.8	12.9	13.0	13.0	16.2
7105	SR 70 SPAN BRIDGE				405	47,165	6.2	12.9	12.9	13.1	13.0	16.2
7101					300	47,465	6.3	14.8	14.8	14.9	14.8	16.2
7130					5,040	52,505	6.4	15.2	15.2	15.3	15.2	17.1
7131	SHIN RD SPAN BRIDGE				375	52,880	6.4	15.2	15.2	15.3	15.2	17.1
7140					3,640	56,520	9.6	15.3	15.4	15.5	15.4	17.5
8030					3,920	60,440	9.6	15.7	15.8	15.9	15.9	18.2

TABLE 4–4

Header Canal from Pump St. No 1 to Pump St. No 2
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
8003					0	0	13.8	14.5	14.5	14.5	14.5	14.5
8002					500	500	13.8	15.6	15.6	15.6	15.6	16.0
8001					5	505	13.8	17.8	17.8	17.8	17.8	18.8
8000					1,960	2,465	10.4	17.8	17.8	17.8	17.8	18.8
8010					4,200	6,665	11.7	17.8	17.8	17.8	17.8	18.8
8011					5,600	12,265	10.8	17.8	17.8	17.8	17.8	18.8
8012	SR 70 SPAN BRIDGE				5	12,270	7.5	15.9	15.9	16.0	16.0	18.5
8013					370	12,640	7.5	15.9	15.9	16.0	16.0	18.5
8020	CARLTON ADAMS CROSSING				4,200	16,840	10.6	15.8	15.9	16.0	16.0	18.5
8021					275	17,115	10.2	15.8	15.9	16.0	15.9	18.3
8030					4,200	21,315	9.6	15.7	15.8	15.9	15.9	18.2
8031					6,440	27,755	10.3	16.1	16.2	16.4	16.3	18.5
8032	GOLDSMITH RD CROSSING				240	27,995	10.4	16.1	16.2	16.5	16.4	18.7
8033					2,800	30,795	10.4	18.8	18.8	19.0	19.0	19.5
8040					340	31,135	13.1	19.2	18.9	19.1	19.5	20.5
8041					2,800	33,935	11.9	19.2	19.0	19.2	19.2	20.5
8042	KELLY RD CROSSING	25			150	34,085	11.9	19.6	19.5	19.3	19.3	22.2
8050					2,240	36,325	13.4	19.6	19.5	19.3	19.4	22.2
8051					3,920	40,245	13.4	19.6	19.5	19.3	19.4	22.2
8052	ORANGE AVE SPAN BRIDGE				335	40,580	13.4	19.6	19.5	19.3	19.4	22.2
8060					2,800	43,380	14.5	19.6	19.5	19.3	19.4	22.2
8061	SCHUMANN RD CROSSING				2,520	45,900	12.8	19.5	19.4	19.3	19.3	22.1
8070					210	46,110	12.6	19.3	19.3	19.2	19.3	22.0
8071					2,240	48,350	14.2	19.3	19.3	19.2	19.2	21.9
8072					5	48,355	14.2	16.5	16.4	16.2	16.2	16.8
8073					500	48,855	14.2	14.9	14.9	14.7	14.7	15.1

TABLE 4–5

North Emergency Relief Canal from Header Canal to Five Mile Creek
Summary of Flood Stages and Problem Areas (1)

Present Land Use

Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	10–YEAR 24 HOUR Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	10YR/72HR Base Cond Max Flood Elev (ft)
8060					0	0	14.5	19.6	19.5	19.3	19.3	22.2
4409					210	210	15.4	19.8	19.8	19.6	19.5	22.5
4410					2,800	3,010	16.2	20.5	20.4	20.4	20.2	22.6
4411					210	3,220	15.5	20.6	20.5	20.5	20.3	22.7
4412					2,800	6,020	14.8	20.6	20.6	20.6	20.4	22.7
4420	GODWIN RD CROSSING	24.9			210	6,230	13.9	20.7	20.7	20.6	20.4	22.8
4421					210	6,440	15.4	20.7	20.7	20.6	20.4	22.8
4430					3,920	10,360	13.7	20.7	20.7	20.7	20.4	22.8
4431					3,920	14,280	13.9	20.7	20.7	20.6	20.4	22.7
4432					210	14,490	14.0	20.6	20.6	20.5	20.3	22.7
4440					1,400	15,890	13.0	20.6	20.6	20.5	20.3	22.7
4441	FFA RD CROSSING				4,760	20,650	13.9	20.4	20.4	20.4	20.1	22.6
4442					210	20,860	14.4	20.1	20.1	20.1	19.9	22.4
4443					2,520	23,380	14.3	19.8	19.8	19.7	19.6	22.3
4450					5	23,385	14.1	19.7	19.7	19.6	19.5	22.1
4451					4,730	28,115	11.6	18.0	18.0	17.4	17.2	21.4
4452	ROCK RD CROSSING	22.6			330	28,445	11.6	17.8	17.8	17.2	17.0	21.2
4460					245	28,690	11.4	16.7	16.7	16.7	16.5	19.2
4461	PRIVATE CROSSING				1,400	30,090	10.0	16.4	16.4	16.4	16.2	19.0
4462					245	30,335	10.0	15.9	15.9	15.9	15.8	18.1
4463	KINGS HWY/I–95				1,400	31,735	10.0	15.5	15.5	15.5	15.4	17.8
4464					450	32,185	10.0	15.3	15.3	15.3	15.2	17.7
4470	Canal 31				2,800	34,985	8.1	15.1	15.1	15.1	15.0	17.6
2920	C-31/44 Junction				2,800	37,785	7.2	14.0	14.0	14.0	14.0	16.7



Map Scale: 1:2,370 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 18, Aug 23, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ankona and Farmton sands	16.3	57.0%
26	Oldsmar sand, depressional	7.8	27.1%
31	Pepper and EauGallie sands	4.6	15.9%
Totals for Area of Interest		**28.7**	**100.0%**

APPENDIX B: Drainage Calculations

Complete Report (not including cost) Ver 5.3.2

Project: Sunrise Blvd
Date: 5/5/2025 2:56:46 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Sunrise Blvd Lake
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	55.00

Pre-Condition Landuse Information

Landuse	Undeveloped - Ruderal/Upland Pine: TN=1.694 TP=0.162
Area (acres)	21.97
Rational Coefficient (0-1)	0.11
Non DCIA Curve Number	80.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.694
Phosphorus EMC (mg/l)	0.162
Runoff Volume (ac-ft/yr)	11.177
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	23.346
Phosphorus Loading (kg/yr)	2.233

Post-Condition Landuse Information

Landuse	Multi-Family: TN=2.320 TP=0.520
Area (acres)	21.71
Rational Coefficient (0-1)	0.52
Non DCIA Curve Number	92.00
DCIA Percent (0-100)	42.00
Wet Pond Area (ac)	3.36
Nitrogen EMC (mg/l)	2.320
Phosphorus EMC (mg/l)	0.520
Runoff Volume (ac-ft/yr)	43.542
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000

Nitrogen Loading (kg/yr)	124.556
Phosphorus Loading (kg/yr)	27.918

Catchment Number: 1 Name: Sunrise Blvd Lake

Project: Sunrise Blvd
Date: 5/5/2025

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	0.900
Retention Volume (ac-ft)	1.376

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	23.500
Permanent Pool Volume (ac-ft) for 31 days residence	3.698
Annual Residence Time (days)	197
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

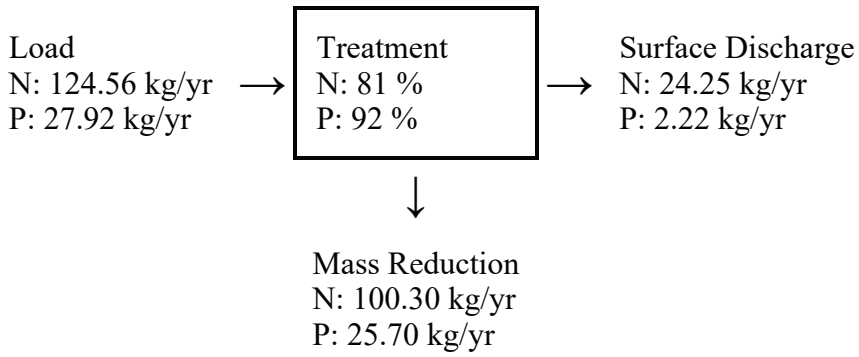
Watershed Characteristics

Catchment Area (acres)	21.71
Contributing Area (acres)	18.350
Non-DCIA Curve Number	92.00
DCIA Percent	42.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	55.00

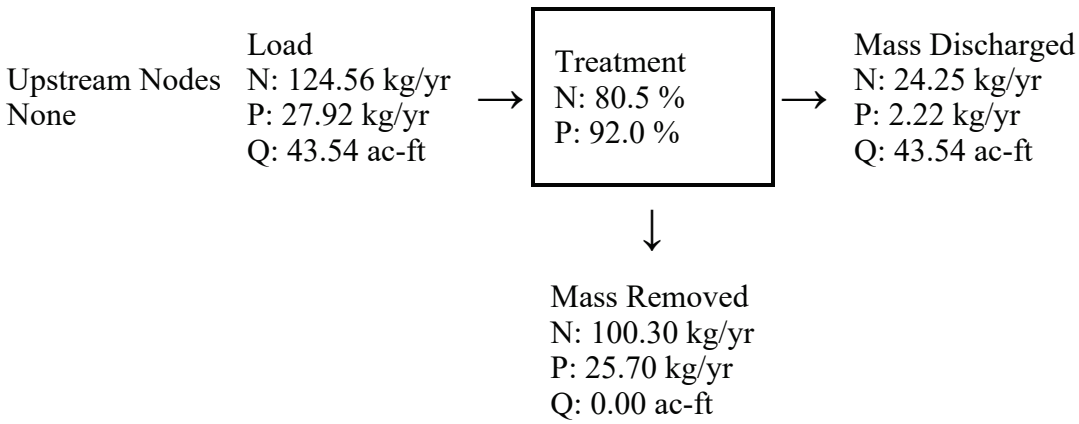
Surface Water Discharge

Required TN Treatment Efficiency (%)	81
Provided TN Treatment Efficiency (%)	81
Required TP Treatment Efficiency (%)	92
Provided TP Treatment Efficiency (%)	92

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Summary Treatment Report Version: 5.3.2

Project: Sunrise Blvd

Analysis Type: Net Improvement
Date:5/5/2025

BMP Types:
Catchment 1 - (Sunrise Blvd Lake)
Multiple BMP
Based on discharge load to 2 decimal places

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	23.35 kg/yr	
Total N post load	124.56 kg/yr	
Target N load reduction	81.26 %	
Target N discharge load	23.35 kg/yr	
Percent N load reduction	80.53 %	
Provided N discharge load	24.25 kg/yr	53.48 lb/yr
Provided N load removed	100.3 kg/yr	221.17 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	2.233 kg/yr	
Total P post load	27.918 kg/yr	
Target P load reduction	92 %	
Target P discharge load	2.233 kg/yr	
Percent P load reduction	92.04 %	
Provided P discharge load	2.222 kg/yr	4.9 lb/yr
Provided P load removed	25.696 kg/yr	56.659 lb/yr

Pre Development Stormwater Calculations

Project: Sunrise Blvd
Project #: 24-237
Engineer: MDL
Date: 3/26/2025
Revised:

Land Use Table

Use	Imp. (ac)	Pervious (ac)	Total (ac)
Undeveloped =	0.000	21.970	21.97
TOTAL =	0.00	21.97	21.97

Find Curve Number:

Avg. Pervious Ground El. =	15.00
Avg. Seasonal High Water Table =	12.00
Control Elevation =	12.00
Distance to Water Table =	3.00

Land Use and CN Calcs

Land Use	Area	Soil Grp	CN	Product	NRCS Cover
Undeveloped	21.74	D	80	1739	Open - Good
TOTAL =	21.74			1739	
			Weighted CN =	80	

* Stormwater BMP Area considered impervious with CN = 98, per SFWMD ERP Manual 5.7.8
**Wetlands CN Based on reccomended design value from SJRWMD Technical Publication 85-5 "A Guide to SCS Runoff Procedures"

Pre-Development Time of Concentration

The following formulas are per the SCS "Urban Hydrology for Small Watersheds" Technical Publication-55.

Sheet flow occurs over plane surfaces.

$$T_{sf} = \frac{.007 * (n * L)^{.8}}{(P_2)^{.5} * (s)^{.4}}$$

T_{sf} = Time of Sheet Flow (hour)
n = Mannings Roughness Coefficient
P_2 = 2-year 24-hour Rainfall (inches)
s = Slope of Hydraulic Grade (feet/feet)
L = Flow Length (feet)

After 300-feet sheet flow usually becomes shallow concentrated flow.

(Unpaved) $V = 16.1345 * (s)^{.5}$
(Paved) $V = 20.3282 * (s)^{.5}$

s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)

Use the velocity to solve for travel time.

$$T_t = \frac{L}{3600 * V}$$

T_t = Travel Time (hour)
L = Flow Length (feet)
V = Average Velocity (feet/second)

When determining flows in open channels use Manning's equation.

$$V = \frac{1.49 * r^{.67} * s^{.5}}{n}$$

r = Hydraulic Radius (feet) equal to a/p_w
s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)
n = Mannings Roughness Coefficient
a = cross sectional area (sq.ft.)
p_w = wetted perimeter (feet)

* Use the velocity to solve for travel time with the formula above.

This following calculations for the project have a segmented travel flow line.

T_1 = On site (sheet flow).

Parameters for T_{1A} :	n =	0.011	coefficient
	P_2 =	5.00	inches
	s =	0.001	foot/foot
	L =	300	feet

T_{1A} =	0.1290	hour	=	7.74 minutes
T_t =	0.1290	hour	=	8.0

Parameters for T_{1b} :	n =	0.400	coefficient
	P_2 =	5.00	inches
	s =	0.003	foot/foot
	L =	0	feet

T_{1B} =	0.0000	hour	=	0.00 minutes
T_t =	0.0000	hour	=	0.0

Parameter for T2:

V= 0.51021769

V=	0.51	
s =	0.001	foot/foot
L =	1000	feet

T_1 =	0.5447	hour	=	32.68 minutes
T_t =	0.5447	hour	=	33.0

TC= total T1A+T1B+T2 41.0

Pre Development -Stage Storage Calculations

Land use Category	Storage Type	Area (ac.)	From Elev.	To Elev.	Cumulative Stage-Storage (ac-ft)																		
					10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00
Existing Grades	Vertical	21.97	10.60	23.60	0.00	0.14	0.68	1.66	3.05	4.87	7.11	9.77	12.85	16.36	20.29	24.64	29.41	34.61	40.23	46.27	52.74	59.62	66.93	74.66
Total WQTV Volume					**0.00**	**0.14**	**0.68**	**1.66**	**3.05**	**4.87**	**7.11**	**9.77**	**12.85**	**16.36**	**20.29**	**24.64**	**29.41**	**34.61**	**40.23**	**46.27**	**52.74**	**59.62**	**66.93**	**74.66**
Sub-Total:		21.97		**Totals:**	**0.00**	**0.14**	**0.68**	**1.66**	**3.05**	**4.87**	**7.11**	**9.77**	**12.85**	**16.36**	**20.29**	**24.64**	**29.41**	**34.61**	**40.23**	**46.27**	**52.74**	**59.62**	**66.93**	**74.66**
Building Pads		0.00	*Not included in Stage-storage calculations																					
	Total:	21.97																						

ICPR Volume to Area Conversion

$A_2 = 2((V_2-V_1)/(S_2-S_1)) - A1$

Stage	Volume
Basin Storage (Does not include exfil)	
10.50	**0.00**
11.00	**0.14**
11.50	**0.68**
12.00	**1.66**
12.50	**3.05**
13.00	**4.87**
13.50	**7.11**
14.00	**9.77**
14.50	**12.85**
15.00	**16.36**
15.50	**20.29**
16.00	**24.64**
17.00	**34.61**
18.00	**46.27**
19.00	**59.62**
20.00	**74.66**

Post Development Stormwater Calculations

Project: Sunrise Blvd
Project #: 24-237

Engineer: MDL
Date: 3/26/2025
Revised:

Land Use Table

Use	Imp. (ac)	Pervious (ac)	Total (ac)
Buildings =	4.46	0.00	4.46
Impervious =	4.73	0.00	4.73
Lakes =	3.36	0.82	4.18
Dry Detention =	0.00	1.51	1.51
Pervious =	0.00	6.83	6.83
TOTAL =	12.55	9.16	21.71

Find Curve Number:

Avg. Pervious Ground El. =	18.00
Avg. Seasonal High Water Table =	12.00
Control Elevation =	12.00
Distance to Water Table =	6.00

Land Use and CN Calcs

Land Use	Area	Soil Grp	CN	Product	NRCS Cover
Buildings =	4.46	N/A	98	437	Impervious
Impervious =	4.73	N/A	98	464	Impervious
Lakes @ CE =	3.36	N/A	98	329	Impervious
Dry Retention =	1.51	N/A	98	148	Impervious
Total Pervious =	7.65	D	80	612	Open - Good
TOTAL =	21.71			1990	
			Weighted CN =	92	

* Stormwater BMP Area considered impervious with CN = 98, per SFWMD ERP Manual 5.7.8
**Wetlands CN Based on reccomended design value from SJRWMD Technical Publication 85-5 "A Guide to SCS Runoff Procedures"

Post Development - Time of Concentration

The following formulas are per the SCS "Urban Hydrology for Small Watersheds" Technical Publication-55.

Sheet flow occurs over plane surfaces.

$$T_{sf} = \frac{.007 * (n * L)^{.8}}{(P_2)^{.5} * (s)^{.4}}$$

T_{sf} = Time of Sheet Flow (hour)
n = Mannings Roughness Coefficient
P_2 = 2-year 24-hour Rainfall (inches)
s = Slope of Hydraulic Grade (feet/feet)
L = Flow Length (feet)

After 300-feet sheet flow usually becomes shallow concentrated flow.

(Unpaved) $V = 16.1345 * (s)^{.5}$
(Paved) $V = 20.3282 * (s)^{.5}$

s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)

Use the velocity to solve for travel time.

$$T_t = \frac{L}{3600 * V}$$

T_t = Travel Time (hour)
L = Flow Length (feet)
V = Average Velocity (feet/second)

When determining flows in open channels use Manning's equation.

$$V = \frac{1.49 * r^{.67} * s^{.5}}{n}$$

r = Hydraulic Radius (feet) equal to a/p_w
s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)
n = Mannings Roughness Coefficient
a = cross sectional area (sq.ft.)
p_w = wetted perimeter (feet)

* Use the velocity to solve for travel time with the formula above.

This following calculations for the project have a segmented travel flow line.

T_1 = On site (sheet flow).

Parameters for T_{1A} :	n =	0.011	coefficient
	P_2 =	5.00	inches
	s =	0.001	foot/foot
	L =	300	feet

T_{1A} =	0.1290	hour	=	7.74	minutes
T_t =	0.1290	hour	=	8.0	

Parameters for T_{1b} :	n =	0.400	coefficient
	P_2 =	5.00	inches
	s =	0.003	foot/foot
	L =	0	feet

T_{1B} =	0.0000	hour	=	0.00	minutes
T_t =	0.0000	hour	=	0.0	

Parameter for T2:

V= 0.51021769

V=	0.64	
s =	0.001	foot/foot
L =	800	feet

T_1 =	0.3456	hour	=	20.74	minutes
T_t =	0.3456	hour	=	21.0	

TC= total T1A+T1B+T2 29.0 minutes

Post Development Water Quality Calculations

Project: Sunrise Blvd
Project #: 24-237

Engineer MDL
Date 3/26/2025
Revised:

1-inch Over the Project Area - per SFWMD

(Treated Volume) 1-inch * 1-ft/12-in * **21.71** = 1.81 ac-ft

21.71 — PROJECT AREA (EXCLUDES UNDEV/WETLANDS)
1.81 — TREATED VOLUME

2.5-inches Times the Percent Impervious - per SFWMD

(Site Area) 21.71 - (3.36 + 4.46) = 13.89 ac

21.71 — PROJECT AREA (AC)
3.36 — LAKES (AC)
4.46 — ROOFS (AC)
13.89 — SITE AREA

(Impervious Area) 13.89 - 9.16 = 4.73 ac

13.89 — SITE AREA (AC)
9.16 — PERVIOUS AREA (AC)
4.73 — IMPERVIOUS AREA

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 34.05%

(2.5-in * % Imp.) 2.5-inches * 34.05% = 0.85

34.05% — PERCENT IMPERVIOUS
0.85 — INCHES TO BE TREATED

(Treated Volume) 0.85 * 1-ft/12-in * 18.35 = 1.30

0.85 — TREATED (IN)
18.35 — PROJECT AREA - LAKES (AC)
1.30 — TREATED VOLUME

	SFWMD - STND	OFW - 150%	
Required Wet Detention =	**1.81**	**2.71**	
Required Dry Detention =	**1.36**	**2.04**	
Required Retention =	**0.90**	**1.36**	
	1" Governs		

* An additional 0.5-inch of pretreatment for industrial or commercial projects will be needed.
* Per SFWMD, standard water quality volume is 100% for wet detention, 75% for dry detention, and 50% for dry retention
* OFW volume is 150% of the standard SFWMD criteria

Post Development -Stage Storage Calculations

Land use Category	Storage Type	Area (ac.)	From Elev.	To Elev.	Cumulative Stage-Storage (ac-ft)																	
					12.00	12.50	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00	20.50	21.00	21.50
SE Swale Slopes	Linear	0.270	13.00	15.00	0.00	0.00	0.00	0.02	0.07	0.15	0.27	0.41	0.54	0.68	0.81	0.95	1.08	1.22	1.35	1.49	1.62	1.76	1.89	2.03
N/W Swale Slopes	Linear	0.480	13.00	15.00	0.00	0.00	0.00	0.03	0.12	0.27	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16	2.40	2.64	2.88	3.12	3.36	3.60
Dry Detention Bot	Vertical	0.278	13.00	13.00	0.00	0.00	0.00	0.14	0.28	0.42	0.56	0.69	0.83	0.97	1.11	1.25	1.39	1.53	1.67	1.81	1.95	2.08	2.22	2.36
Dry Detetention Slopes	Linear	0.486	13.00	17.00	0.00	0.00	0.00	0.02	0.06	0.14	0.24	0.38	0.55	0.74	0.97	1.22	1.46	1.70	1.94	2.19	2.43	2.67	2.92	3.16
Total Retention Volume					0.00	0.00	0.00	0.20	0.53	0.98	1.55	2.20	2.88	3.59	4.33	5.09	5.85	6.60	7.36	8.12	8.88	9.63	10.39	11.15
Pond @ CE	Vertical	3.36	12.00	12.00	0.00	1.68	3.36	5.04	6.72	8.40	10.08	11.76	13.44	15.12	16.80	18.48	20.16	21.84	23.52	25.20	26.88	28.56	30.24	31.92
Pond Slopes	Linear	0.82	12.00	15.50	0.00	0.03	0.12	0.26	0.47	0.73	1.05	1.44	1.85	2.26	2.67	3.08	3.49	3.90	4.31	4.72	5.13	5.54	5.95	6.36
Total WQTV Volume					**0.00**	**1.71**	**3.48**	**5.50**	**7.71**	**10.11**	**12.68**	**15.39**	**18.17**	**20.97**	**23.80**	**26.65**	**29.49**	**32.34**	**35.19**	**38.03**	**40.88**	**43.73**	**46.57**	**49.42**
Pavement and Concrete	Linear	4.73	15.70	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.54	1.43	2.74	4.47	6.62	8.99	11.35	13.72	16.08	18.45	20.81
Pervious	Linear	6.83	15.50	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.14	2.56	4.55	7.11	10.25	13.66	17.08	20.49	23.91	27.32	30.74
	Sub-Total:	17.25		**Totals:**	**0.00**	**1.71**	**3.48**	**5.50**	**7.71**	**10.11**	**12.68**	**15.39**	**18.53**	**22.65**	**27.79**	**33.94**	**41.08**	**49.21**	**57.83**	**66.46**	**75.09**	**83.71**	**92.34**	**100.97**
Building Pads		4.46	*Not included in Stage-storage calculations																					
	Total:	21.71																						

ICPR Volume to Area Conversion

$A_2 = 2((V_2-V_1)/(S_2-S_1)) - A1$

Stage	Volume
Basin Storage (Does not include exfil)	
12.00	**0.00**
12.50	**1.71**
13.00	**3.48**
13.50	**5.50**
14.00	**7.71**
14.50	**10.11**
15.00	**12.68**
15.50	**15.39**
16.00	**18.53**
16.50	**22.65**
17.00	**27.79**
17.50	**33.94**
18.00	**41.08**
18.50	**49.21**

Set Water Quality Elevation

Total Water Quality Volume Required:	2.71 ac-ft	<---	Based on 1" over the Project Area (See WQTV Calculations)
Permanent Pool Volume (PPV):	35.96 ac-ft		
Retention Volume Remaining for Net Improvement:	1.38 ac-ft	<--	Remaining retention volume required to meet net improvement (Exclusive of PPV)
Retention Volume Stage for Net Improvement:	**14.85** NAVD	<---	Retention Swale Rim Elevation set at 14.85 NAVD
Detention Water Quality Volume Remaining:	**1.33** ac-ft		
Required Water Quality Detention Stage:	**12.78** NAVD		
Overflow Weir Elevation:	13.00 NAVD	<---	Proposed Weir Elevation
Water Quality Detention Volume Provided:	**0.77** ac-ft		
Total Water Quality Volume Provided:	**3.48** ac-ft		

Permanent Pool Volume

Depth (ft)	Stage (NAVD)	Area (ac)	Inc Vol (acft)	Total Vol (acft)
0	12	3.36	0	0
1	11	2.94	3.15	10.16
12	0	1.75	25.795	35.955

Anoxic depth at 12 feet below SHWT.

Post Development Allowable Discharge Calculations

Sim	Node	Time (hrs)	Stage [ft]	Warning Stage (ft)	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]	Time Difference (hrs)	Vol Difference in a 24 hr period
10 Year - 3 Day	Post Development	0	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	1	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	2	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	3	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	4	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	5	12.01	18.00	0.02	0		
10 Year - 3 Day	Post Development	6	12.01	18.00	0.04	0		
10 Year - 3 Day	Post Development	7	12.02	18.00	0.06	0		
10 Year - 3 Day	Post Development	8	12.03	18.00	0.1	0		
10 Year - 3 Day	Post Development	9	12.04	18.00	0.13	0		
10 Year - 3 Day	Post Development	10	12.05	18.00	0.18	0		
10 Year - 3 Day	Post Development	11	12.07	18.00	0.22	0		
10 Year - 3 Day	Post Development	12	12.08	18.00	0.27	0		
10 Year - 3 Day	Post Development	13	12.09	18.00	0.31	0		
10 Year - 3 Day	Post Development	14	12.11	18.00	0.37	0		
10 Year - 3 Day	Post Development	15	12.12	18.00	0.42	0		
10 Year - 3 Day	Post Development	16	12.14	18.00	0.47	0		
10 Year - 3 Day	Post Development	17	12.16	18.00	0.53	0		
10 Year - 3 Day	Post Development	18	12.17	18.00	0.59	0		
10 Year - 3 Day	Post Development	19	12.19	18.00	0.64	0		
10 Year - 3 Day	Post Development	20	12.21	18.00	0.7	0		
10 Year - 3 Day	Post Development	21	12.23	18.00	0.76	0		
10 Year - 3 Day	Post Development	22	12.24	18.00	0.83	0		
10 Year - 3 Day	Post Development	23	12.26	18.00	0.89	0		
10 Year - 3 Day	Post Development	24	12.28	18.00	0.95	0	24	0.00
10 Year - 3 Day	Post Development	25	12.30	18.00	1.02	0	24	0.00
10 Year - 3 Day	Post Development	26	12.33	18.00	1.11	0	24	0.00
10 Year - 3 Day	Post Development	27	12.35	18.00	1.2	0	24	0.00
10 Year - 3 Day	Post Development	28	12.38	18.00	1.3	0	24	0.00
10 Year - 3 Day	Post Development	29	12.41	18.00	1.39	0	24	0.00
10 Year - 3 Day	Post Development	30	12.44	18.00	1.49	0	24	0.00
10 Year - 3 Day	Post Development	31	12.46	18.00	1.59	0	24	0.00
10 Year - 3 Day	Post Development	32	12.49	18.00	1.69	0	24	0.00
10 Year - 3 Day	Post Development	33	12.52	18.00	1.78	0	24	0.00
10 Year - 3 Day	Post Development	34	12.55	18.00	1.88	0	24	0.00
10 Year - 3 Day	Post Development	35	12.58	18.00	1.98	0	24	0.00
10 Year - 3 Day	Post Development	36	12.61	18.00	2.08	0	24	0.00
10 Year - 3 Day	Post Development	37	12.63	18.00	2.18	0	24	0.00
10 Year - 3 Day	Post Development	38	12.66	18.00	2.28	0	24	0.00
10 Year - 3 Day	Post Development	39	12.69	18.00	2.38	0	24	0.00
10 Year - 3 Day	Post Development	40	12.72	18.00	2.48	0	24	0.00
10 Year - 3 Day	Post Development	41	12.75	18.00	2.58	0	24	0.00
10 Year - 3 Day	Post Development	42	12.77	18.00	2.69	0	24	0.00
10 Year - 3 Day	Post Development	43	12.80	18.00	2.79	0	24	0.00
10 Year - 3 Day	Post Development	44	12.83	18.00	2.89	0	24	0.00
10 Year - 3 Day	Post Development	45	12.86	18.00	2.99	0	24	0.00
10 Year - 3 Day	Post Development	46	12.89	18.00	3.1	0	24	0.00

10 Year - 3 Day	Post Development	47	12.91	18.00	3.2	0	24	0.00
10 Year - 3 Day	Post Development	48	12.94	18.00	3.3	0	24	0.00
10 Year - 3 Day	Post Development	49	12.97	18.00	3.41	0	24	0.00
10 Year - 3 Day	Post Development	50	13.00	18.00	3.53	0	24	0.00
10 Year - 3 Day	Post Development	51	13.03	18.00	3.65	0	24	0.00
10 Year - 3 Day	Post Development	52	13.07	18.00	3.79	0	24	0.00
10 Year - 3 Day	Post Development	53	13.11	18.00	3.96	0	24	0.00
10 Year - 3 Day	Post Development	54	13.16	18.00	4.17	0.01	24	0.01
10 Year - 3 Day	Post Development	55	13.23	18.00	4.42	0.01	24	0.01
10 Year - 3 Day	Post Development	56	13.30	18.00	4.73	0.02	24	0.02
10 Year - 3 Day	Post Development	57	13.38	18.00	5.08	0.03	24	0.03
10 Year - 3 Day	Post Development	58	13.48	18.00	5.5	0.05	24	0.05
10 Year - 3 Day	Post Development	59	13.60	18.00	6.03	0.06	24	0.06
10 Year - 3 Day	Post Development	60	13.91	18.00	7.4	0.08	24	0.08
10 Year - 3 Day	Post Development	61	14.63	18.00	10.88	0.11	24	0.11
10 Year - 3 Day	Post Development	62	14.92	18.00	12.44	0.14	24	0.14
10 Year - 3 Day	Post Development	63	15.05	18.00	13.12	0.18	24	0.18
10 Year - 3 Day	Post Development	64	15.10	18.00	13.53	0.29	24	0.29
10 Year - 3 Day	Post Development	65	15.12	18.00	13.84	0.48	24	0.48
10 Year - 3 Day	Post Development	66	15.13	18.00	14.07	0.68	24	0.68
10 Year - 3 Day	Post Development	67	15.13	18.00	14.29	0.89	24	0.89
10 Year - 3 Day	Post Development	68	15.13	18.00	14.51	1.1	24	1.10
10 Year - 3 Day	Post Development	69	15.13	18.00	14.69	1.31	24	1.31
10 Year - 3 Day	Post Development	70	15.12	18.00	14.85	1.51	24	1.51
10 Year - 3 Day	Post Development	71	15.11	18.00	14.99	1.69	24	1.69
10 Year - 3 Day	Post Development	72	15.11	18.00	15.13	1.86	24	1.86
10 Year - 3 Day	Post Development	73	15.09	18.00	15.22	2.02	24	2.02
10 Year - 3 Day	Post Development	74	15.07	18.00	15.24	2.15	24	2.15
10 Year - 3 Day	Post Development	75	15.06	18.00	15.25	2.25	24	2.25
10 Year - 3 Day	Post Development	76	15.04	18.00	15.25	2.32	24	2.32
10 Year - 3 Day	Post Development	77	15.03	18.00	15.25	2.38	24	2.38
10 Year - 3 Day	Post Development	78	15.02	18.00	15.25	2.43	24	2.42
10 Year - 3 Day	Post Development	79	15.01	18.00	15.25	2.48	24	2.47
10 Year - 3 Day	Post Development	80	15.01	18.00	15.25	2.51	24	2.49
10 Year - 3 Day	Post Development	81	15.00	18.00	15.25	2.55	24	2.52
10 Year - 3 Day	Post Development	82	14.99	18.00	15.25	2.58	24	2.53
10 Year - 3 Day	Post Development	83	14.99	18.00	15.25	2.62	24	2.56
10 Year - 3 Day	Post Development	84	14.98	18.00	15.25	2.65	24	2.57
10 Year - 3 Day	Post Development	85	14.97	18.00	15.25	2.68	24	2.57
10 Year - 3 Day	Post Development	86	14.97	18.00	15.25	2.72	24	2.58
10 Year - 3 Day	Post Development	87	14.96	18.00	15.25	2.75	24	2.57
10 Year - 3 Day	Post Development	88	14.95	18.00	15.25	2.79	24	2.50
10 Year - 3 Day	Post Development	89	14.95	18.00	15.25	2.82	24	2.34
10 Year - 3 Day	Post Development	90	14.94	18.00	15.25	2.85	24	2.17
10 Year - 3 Day	Post Development	91	14.94	18.00	15.25	2.89	24	2.00
10 Year - 3 Day	Post Development	92	14.93	18.00	15.25	2.92	24	1.82
10 Year - 3 Day	Post Development	93	14.92	18.00	15.25	2.95	24	1.64
10 Year - 3 Day	Post Development	94	14.92	18.00	15.25	2.99	24	1.48
10 Year - 3 Day	Post Development	95	14.91	18.00	15.25	3.02	24	1.33
10 Year - 3 Day	Post Development	96	14.90	18.00	15.25	3.05	24	1.19
10 Year - 3 Day	Post Development	97	14.90	18.00	15.25	3.09	24	1.07
10 Year - 3 Day	Post Development	98	14.89	18.00	15.25	3.12	24	0.97

10 Year - 3 Day	Post Development	99	14.88	18.00	15.25	3.15	24	0.90
10 Year - 3 Day	Post Development	100	14.88	18.00	15.25	3.18	24	0.86
10 Year - 3 Day	Post Development	101	14.87	18.00	15.25	3.22	24	0.84
10 Year - 3 Day	Post Development	102	14.87	18.00	15.25	3.25	24	0.82
10 Year - 3 Day	Post Development	103	14.86	18.00	15.25	3.28	24	0.80
10 Year - 3 Day	Post Development	104	14.85	18.00	15.25	3.32	24	0.81
10 Year - 3 Day	Post Development	105	14.85	18.00	15.25	3.35	24	0.80
10 Year - 3 Day	Post Development	106	14.84	18.00	15.25	3.38	24	0.80
10 Year - 3 Day	Post Development	107	14.83	18.00	15.25	3.41	24	0.79
10 Year - 3 Day	Post Development	108	14.83	18.00	15.25	3.45	24	0.80
10 Year - 3 Day	Post Development	109	14.82	18.00	15.25	3.48	24	0.80
10 Year - 3 Day	Post Development	110	14.82	18.00	15.25	3.51	24	0.79
10 Year - 3 Day	Post Development	111	14.81	18.00	15.25	3.54	24	0.79
10 Year - 3 Day	Post Development	112	14.80	18.00	15.25	3.58	24	0.79
10 Year - 3 Day	Post Development	113	14.80	18.00	15.25	3.61	24	0.79
10 Year - 3 Day	Post Development	114	14.79	18.00	15.25	3.64	24	0.79
10 Year - 3 Day	Post Development	115	14.78	18.00	15.25	3.67	24	0.78
10 Year - 3 Day	Post Development	116	14.78	18.00	15.25	3.7	24	0.78
10 Year - 3 Day	Post Development	117	14.77	18.00	15.25	3.74	24	0.79
10 Year - 3 Day	Post Development	118	14.77	18.00	15.25	3.77	24	0.78
10 Year - 3 Day	Post Development	119	14.76	18.00	15.25	3.8	24	0.78
10 Year - 3 Day	Post Development	120	14.75	18.00	15.25	3.83	24	0.78
10 Year - 3 Day	Post Development	121	14.75	18.00	15.25	3.86	24	0.77
10 Year - 3 Day	Post Development	122	14.74	18.00	15.25	3.89	24	0.77
10 Year - 3 Day	Post Development	123	14.73	18.00	15.25	3.93	24	0.78
10 Year - 3 Day	Post Development	124	14.73	18.00	15.25	3.96	24	0.78
10 Year - 3 Day	Post Development	125	14.72	18.00	15.25	3.99	24	0.77
10 Year - 3 Day	Post Development	126	14.72	18.00	15.25	4.02	24	0.77
10 Year - 3 Day	Post Development	127	14.71	18.00	15.25	4.05	24	0.77
10 Year - 3 Day	Post Development	128	14.70	18.00	15.25	4.08	24	0.76
10 Year - 3 Day	Post Development	129	14.70	18.00	15.25	4.11	24	0.76
10 Year - 3 Day	Post Development	130	14.69	18.00	15.25	4.15	24	0.77
10 Year - 3 Day	Post Development	131	14.69	18.00	15.25	4.18	24	0.77
10 Year - 3 Day	Post Development	132	14.68	18.00	15.25	4.21	24	0.76
10 Year - 3 Day	Post Development	133	14.67	18.00	15.25	4.24	24	0.76
10 Year - 3 Day	Post Development	134	14.67	18.00	15.25	4.27	24	0.76
10 Year - 3 Day	Post Development	135	14.66	18.00	15.25	4.3	24	0.76
10 Year - 3 Day	Post Development	136	14.66	18.00	15.25	4.33	24	0.75
10 Year - 3 Day	Post Development	137	14.65	18.00	15.25	4.36	24	0.75
10 Year - 3 Day	Post Development	138	14.64	18.00	15.25	4.39	24	0.75
10 Year - 3 Day	Post Development	139	14.64	18.00	15.25	4.42	24	0.75
10 Year - 3 Day	Post Development	140	14.63	18.00	15.25	4.45	24	0.75
10 Year - 3 Day	Post Development	141	14.63	18.00	15.25	4.48	24	0.74
10 Year - 3 Day	Post Development	142	14.62	18.00	15.25	4.51	24	0.74
10 Year - 3 Day	Post Development	143	14.61	18.00	15.25	4.54	24	0.74
10 Year - 3 Day	Post Development	144	14.61	18.00	15.25	4.57	24	0.74
10 Year - 3 Day	Post Development	145	14.60	18.00	15.25	4.6	24	0.74
10 Year - 3 Day	Post Development	146	14.59	18.00	15.25	4.64	24	0.75
10 Year - 3 Day	Post Development	147	14.59	18.00	15.25	4.67	24	0.74
10 Year - 3 Day	Post Development	148	14.58	18.00	15.25	4.7	24	0.74
10 Year - 3 Day	Post Development	149	14.58	18.00	15.25	4.73	24	0.74
10 Year - 3 Day	Post Development	150	14.57	18.00	15.25	4.76	24	0.74

10 Year - 3 Day	Post Development	151	14.57	18.00	15.25	4.79	24	0.74
10 Year - 3 Day	Post Development	152	14.56	18.00	15.25	4.81	24	0.73
10 Year - 3 Day	Post Development	153	14.55	18.00	15.25	4.84	24	0.73
10 Year - 3 Day	Post Development	154	14.55	18.00	15.25	4.87	24	0.72
10 Year - 3 Day	Post Development	155	14.54	18.00	15.25	4.9	24	0.72
10 Year - 3 Day	Post Development	156	14.54	18.00	15.25	4.93	24	0.72
10 Year - 3 Day	Post Development	157	14.53	18.00	15.25	4.96	24	0.72
10 Year - 3 Day	Post Development	158	14.52	18.00	15.25	4.99	24	0.72
10 Year - 3 Day	Post Development	159	14.52	18.00	15.25	5.02	24	0.72
10 Year - 3 Day	Post Development	160	14.51	18.00	15.25	5.05	24	0.72
10 Year - 3 Day	Post Development	161	14.51	18.00	15.25	5.08	24	0.72
10 Year - 3 Day	Post Development	162	14.50	18.00	15.25	5.11	24	0.72
10 Year - 3 Day	Post Development	163	14.49	18.00	15.25	5.14	24	0.72
10 Year - 3 Day	Post Development	164	14.49	18.00	15.25	5.17	24	0.72
10 Year - 3 Day	Post Development	165	14.48	18.00	15.25	5.2	24	0.72
10 Year - 3 Day	Post Development	166	14.48	18.00	15.25	5.23	24	0.72
10 Year - 3 Day	Post Development	167	14.47	18.00	15.25	5.25	24	0.71
10 Year - 3 Day	Post Development	168	14.47	18.00	15.25	5.28	24	0.71
10 Year - 3 Day	Post Development	169	14.46	18.00	15.25	5.31	24	0.71
10 Year - 3 Day	Post Development	170	14.45	18.00	15.25	5.34	24	0.70
10 Year - 3 Day	Post Development	171	14.45	18.00	15.25	5.37	24	0.70
10 Year - 3 Day	Post Development	172	14.44	18.00	15.25	5.4	24	0.70
10 Year - 3 Day	Post Development	173	14.44	18.00	15.25	5.43	24	0.70
10 Year - 3 Day	Post Development	174	14.43	18.00	15.25	5.45	24	0.69
10 Year - 3 Day	Post Development	175	14.42	18.00	15.25	5.48	24	0.69
10 Year - 3 Day	Post Development	176	14.42	18.00	15.25	5.51	24	0.70
10 Year - 3 Day	Post Development	177	14.41	18.00	15.25	5.54	24	0.70
10 Year - 3 Day	Post Development	178	14.41	18.00	15.25	5.57	24	0.70
10 Year - 3 Day	Post Development	179	14.40	18.00	15.25	5.6	24	0.70
10 Year - 3 Day	Post Development	180	14.40	18.00	15.25	5.62	24	0.69
10 Year - 3 Day	Post Development	181	14.39	18.00	15.25	5.65	24	0.69
10 Year - 3 Day	Post Development	182	14.38	18.00	15.25	5.68	24	0.69
10 Year - 3 Day	Post Development	183	14.38	18.00	15.25	5.71	24	0.69
10 Year - 3 Day	Post Development	184	14.37	18.00	15.25	5.74	24	0.69
10 Year - 3 Day	Post Development	185	14.37	18.00	15.25	5.76	24	0.68
10 Year - 3 Day	Post Development	186	14.36	18.00	15.25	5.79	24	0.68
10 Year - 3 Day	Post Development	187	14.36	18.00	15.25	5.82	24	0.68
10 Year - 3 Day	Post Development	188	14.35	18.00	15.25	5.85	24	0.68
10 Year - 3 Day	Post Development	189	14.34	18.00	15.25	5.87	24	0.67
10 Year - 3 Day	Post Development	190	14.34	18.00	15.25	5.9	24	0.67
10 Year - 3 Day	Post Development	191	14.33	18.00	15.25	5.93	24	0.68
10 Year - 3 Day	Post Development	192	14.33	18.00	15.25	5.96	24	0.68
10 Year - 3 Day	Post Development	193	14.32	18.00	15.25	5.98	24	0.67
10 Year - 3 Day	Post Development	194	14.32	18.00	15.25	6.01	24	0.67
10 Year - 3 Day	Post Development	195	14.31	18.00	15.25	6.04	24	0.67
10 Year - 3 Day	Post Development	196	14.31	18.00	15.25	6.06	24	0.66
10 Year - 3 Day	Post Development	197	14.30	18.00	15.25	6.09	24	0.66
10 Year - 3 Day	Post Development	198	14.29	18.00	15.25	6.12	24	0.67
10 Year - 3 Day	Post Development	199	14.29	18.00	15.25	6.14	24	0.66
10 Year - 3 Day	Post Development	200	14.28	18.00	15.25	6.17	24	0.66

10 Year - 3 Day	Post Development	201	14.28	18.00	15.25	6.2	24	0.66
10 Year - 3 Day	Post Development	202	14.27	18.00	15.25	6.22	24	0.65
10 Year - 3 Day	Post Development	203	14.27	18.00	15.25	6.25	24	0.65
10 Year - 3 Day	Post Development	204	14.26	18.00	15.25	6.28	24	0.66
10 Year - 3 Day	Post Development	205	14.26	18.00	15.25	6.3	24	0.65
10 Year - 3 Day	Post Development	206	14.25	18.00	15.25	6.33	24	0.65
10 Year - 3 Day	Post Development	207	14.24	18.00	15.25	6.36	24	0.65
10 Year - 3 Day	Post Development	208	14.24	18.00	15.25	6.38	24	0.64
10 Year - 3 Day	Post Development	209	14.23	18.00	15.25	6.41	24	0.65
10 Year - 3 Day	Post Development	210	14.23	18.00	15.25	6.44	24	0.65
10 Year - 3 Day	Post Development	211	14.22	18.00	15.25	6.46	24	0.64
10 Year - 3 Day	Post Development	212	14.22	18.00	15.25	6.49	24	0.64
10 Year - 3 Day	Post Development	213	14.21	18.00	15.25	6.51	24	0.64
10 Year - 3 Day	Post Development	214	14.21	18.00	15.25	6.54	24	0.64
10 Year - 3 Day	Post Development	215	14.20	18.00	15.25	6.57	24	0.64
10 Year - 3 Day	Post Development	216	14.20	18.00	15.25	6.59	24	0.63
10 Year - 3 Day	Post Development	217	14.19	18.00	15.25	6.62	24	0.64
10 Year - 3 Day	Post Development	218	14.18	18.00	15.25	6.64	24	0.63
10 Year - 3 Day	Post Development	219	14.18	18.00	15.25	6.67	24	0.63
10 Year - 3 Day	Post Development	220	14.17	18.00	15.25	6.69	24	0.63
10 Year - 3 Day	Post Development	221	14.17	18.00	15.25	6.72	24	0.63
10 Year - 3 Day	Post Development	222	14.16	18.00	15.25	6.74	24	0.62
10 Year - 3 Day	Post Development	223	14.16	18.00	15.25	6.77	24	0.63
10 Year - 3 Day	Post Development	224	14.15	18.00	15.25	6.79	24	0.62
10 Year - 3 Day	Post Development	225	14.15	18.00	15.25	6.82	24	0.62
10 Year - 3 Day	Post Development	226	14.14	18.00	15.25	6.85	24	0.63
10 Year - 3 Day	Post Development	227	14.14	18.00	15.25	6.87	24	0.62
10 Year - 3 Day	Post Development	228	14.13	18.00	15.25	6.9	24	0.62
10 Year - 3 Day	Post Development	229	14.13	18.00	15.25	6.92	24	0.62
10 Year - 3 Day	Post Development	230	14.12	18.00	15.25	6.94	24	0.61
10 Year - 3 Day	Post Development	231	14.12	18.00	15.25	6.97	24	0.61
10 Year - 3 Day	Post Development	232	14.11	18.00	15.25	6.99	24	0.61
10 Year - 3 Day	Post Development	233	14.10	18.00	15.25	7.02	24	0.61
10 Year - 3 Day	Post Development	234	14.10	18.00	15.25	7.04	24	0.60
10 Year - 3 Day	Post Development	235	14.09	18.00	15.25	7.07	24	0.61
10 Year - 3 Day	Post Development	236	14.09	18.00	15.25	7.09	24	0.60
10 Year - 3 Day	Post Development	237	14.08	18.00	15.25	7.12	24	0.61
10 Year - 3 Day	Post Development	238	14.08	18.00	15.25	7.14	24	0.60
10 Year - 3 Day	Post Development	239	14.07	18.00	15.25	7.17	24	0.60
10 Year - 3 Day	Post Development	240	14.07	18.00	15.25	7.19	24	0.60
10 Year - 3 Day	Post Development	241	14.06	18.00	15.25	7.21	24	0.59
10 Year - 3 Day	Post Development	242	14.06	18.00	15.25	7.24	24	0.60
10 Year - 3 Day	Post Development	243	14.05	18.00	15.25	7.26	24	0.59
10 Year - 3 Day	Post Development	244	14.05	18.00	15.25	7.29	24	0.60
10 Year - 3 Day	Post Development	245	14.04	18.00	15.25	7.31	24	0.59
10 Year - 3 Day	Post Development	246	14.04	18.00	15.25	7.33	24	0.59
10 Year - 3 Day	Post Development	247	14.03	18.00	15.25	7.36	24	0.59
10 Year - 3 Day	Post Development	248	14.03	18.00	15.25	7.38	24	0.59
10 Year - 3 Day	Post Development	249	14.02	18.00	15.25	7.4	24	0.58
10 Year - 3 Day	Post Development	250	14.02	18.00	15.25	7.43	24	0.58

10 Year - 3 Day	Post Development	251	14.01	18.00	15.25	7.45	24	0.58
10 Year - 3 Day	Post Development	252	14.01	18.00	15.25	7.47	24	0.57
10 Year - 3 Day	Post Development	253	14.00	18.00	15.25	7.5	24	0.58
10 Year - 3 Day	Post Development	254	14.00	18.00	15.25	7.52	24	0.58
10 Year - 3 Day	Post Development	255	13.99	18.00	15.25	7.54	24	0.57
10 Year - 3 Day	Post Development	256	13.99	18.00	15.25	7.57	24	0.58
10 Year - 3 Day	Post Development	257	13.98	18.00	15.25	7.59	24	0.57
10 Year - 3 Day	Post Development	258	13.98	18.00	15.25	7.61	24	0.57
10 Year - 3 Day	Post Development	259	13.97	18.00	15.25	7.64	24	0.57
10 Year - 3 Day	Post Development	260	13.97	18.00	15.25	7.66	24	0.57
10 Year - 3 Day	Post Development	261	13.96	18.00	15.25	7.68	24	0.56
10 Year - 3 Day	Post Development	262	13.96	18.00	15.25	7.7	24	0.56
10 Year - 3 Day	Post Development	263	13.95	18.00	15.25	7.73	24	0.56
10 Year - 3 Day	Post Development	264	13.95	18.00	15.25	7.75	24	0.56
10 Year - 3 Day	Post Development	265	13.94	18.00	15.25	7.77	24	0.56
10 Year - 3 Day	Post Development	266	13.94	18.00	15.25	7.79	24	0.55
10 Year - 3 Day	Post Development	267	13.93	18.00	15.25	7.82	24	0.56
10 Year - 3 Day	Post Development	268	13.93	18.00	15.25	7.84	24	0.55
10 Year - 3 Day	Post Development	269	13.92	18.00	15.25	7.86	24	0.55
10 Year - 3 Day	Post Development	270	13.92	18.00	15.25	7.88	24	0.55
10 Year - 3 Day	Post Development	271	13.91	18.00	15.25	7.91	24	0.55
10 Year - 3 Day	Post Development	272	13.91	18.00	15.25	7.93	24	0.55
10 Year - 3 Day	Post Development	273	13.90	18.00	15.25	7.95	24	0.55
10 Year - 3 Day	Post Development	274	13.90	18.00	15.25	7.97	24	0.54
10 Year - 3 Day	Post Development	275	13.89	18.00	15.25	7.99	24	0.54
10 Year - 3 Day	Post Development	276	13.89	18.00	15.25	8.02	24	0.55
10 Year - 3 Day	Post Development	277	13.88	18.00	15.25	8.04	24	0.54
10 Year - 3 Day	Post Development	278	13.88	18.00	15.25	8.06	24	0.54
10 Year - 3 Day	Post Development	279	13.87	18.00	15.25	8.08	24	0.54
10 Year - 3 Day	Post Development	280	13.87	18.00	15.25	8.1	24	0.53
10 Year - 3 Day	Post Development	281	13.86	18.00	15.25	8.12	24	0.53
10 Year - 3 Day	Post Development	282	13.86	18.00	15.25	8.14	24	0.53
10 Year - 3 Day	Post Development	283	13.85	18.00	15.25	8.17	24	0.53
10 Year - 3 Day	Post Development	284	13.85	18.00	15.25	8.19	24	0.53
10 Year - 3 Day	Post Development	285	13.85	18.00	15.25	8.21	24	0.53
10 Year - 3 Day	Post Development	286	13.84	18.00	15.25	8.23	24	0.53
10 Year - 3 Day	Post Development	287	13.84	18.00	15.25	8.25	24	0.52
10 Year - 3 Day	Post Development	288	13.83	18.00	15.25	8.27	24	0.52
10 Year - 3 Day	Post Development	289	13.83	18.00	15.25	8.29	24	0.52
10 Year - 3 Day	Post Development	290	13.82	18.00	15.25	8.31	24	0.52
10 Year - 3 Day	Post Development	291	13.82	18.00	15.25	8.33	24	0.51
10 Year - 3 Day	Post Development	292	13.81	18.00	15.25	8.35	24	0.51
10 Year - 3 Day	Post Development	293	13.81	18.00	15.25	8.37	24	0.51
10 Year - 3 Day	Post Development	294	13.80	18.00	15.25	8.39	24	0.51
10 Year - 3 Day	Post Development	295	13.80	18.00	15.25	8.42	24	0.51
10 Year - 3 Day	Post Development	296	13.79	18.00	15.25	8.44	24	0.51
10 Year - 3 Day	Post Development	297	13.79	18.00	15.25	8.46	24	0.51
10 Year - 3 Day	Post Development	298	13.79	18.00	15.25	8.48	24	0.51
10 Year - 3 Day	Post Development	299	13.78	18.00	15.25	8.5	24	0.51
10 Year - 3 Day	Post Development	300	13.78	18.00	15.25	8.52	24	0.50

10 Year - 3 Day	Post Development	301	13.77	18.00	15.25	8.54	24	0.50
10 Year - 3 Day	Post Development	302	13.77	18.00	15.25	8.56	24	0.50
10 Year - 3 Day	Post Development	303	13.76	18.00	15.25	8.58	24	0.50
10 Year - 3 Day	Post Development	304	13.76	18.00	15.25	8.6	24	0.50
10 Year - 3 Day	Post Development	305	13.75	18.00	15.25	8.62	24	0.50
10 Year - 3 Day	Post Development	306	13.75	18.00	15.25	8.64	24	0.50
10 Year - 3 Day	Post Development	307	13.75	18.00	15.25	8.66	24	0.49
10 Year - 3 Day	Post Development	308	13.74	18.00	15.25	8.67	24	0.48
10 Year - 3 Day	Post Development	309	13.74	18.00	15.25	8.69	24	0.48
10 Year - 3 Day	Post Development	310	13.73	18.00	15.25	8.71	24	0.48
10 Year - 3 Day	Post Development	311	13.73	18.00	15.25	8.73	24	0.48
10 Year - 3 Day	Post Development	312	13.72	18.00	15.25	8.75	24	0.48
10 Year - 3 Day	Post Development	313	13.72	18.00	15.25	8.77	24	0.48
10 Year - 3 Day	Post Development	314	13.71	18.00	15.25	8.79	24	0.48
10 Year - 3 Day	Post Development	315	13.71	18.00	15.25	8.81	24	0.48
10 Year - 3 Day	Post Development	316	13.71	18.00	15.25	8.83	24	0.48
10 Year - 3 Day	Post Development	317	13.70	18.00	15.25	8.85	24	0.48
10 Year - 3 Day	Post Development	318	13.70	18.00	15.25	8.87	24	0.48
10 Year - 3 Day	Post Development	319	13.69	18.00	15.25	8.89	24	0.47
10 Year - 3 Day	Post Development	320	13.69	18.00	15.25	8.9	24	0.46
10 Year - 3 Day	Post Development	321	13.68	18.00	15.25	8.92	24	0.46
10 Year - 3 Day	Post Development	322	13.68	18.00	15.25	8.94	24	0.46
10 Year - 3 Day	Post Development	323	13.68	18.00	15.25	8.96	24	0.46
10 Year - 3 Day	Post Development	324	13.67	18.00	15.25	8.98	24	0.46
10 Year - 3 Day	Post Development	325	13.67	18.00	15.25	9	24	0.46
10 Year - 3 Day	Post Development	326	13.66	18.00	15.25	9.01	24	0.45
10 Year - 3 Day	Post Development	327	13.66	18.00	15.25	9.03	24	0.45
10 Year - 3 Day	Post Development	328	13.65	18.00	15.25	9.05	24	0.45
10 Year - 3 Day	Post Development	329	13.65	18.00	15.25	9.07	24	0.45
10 Year - 3 Day	Post Development	330	13.65	18.00	15.25	9.09	24	0.45
10 Year - 3 Day	Post Development	331	13.64	18.00	15.25	9.1	24	0.44
10 Year - 3 Day	Post Development	332	13.64	18.00	15.25	9.12	24	0.45
10 Year - 3 Day	Post Development	333	13.63	18.00	15.25	9.14	24	0.45
10 Year - 3 Day	Post Development	334	13.63	18.00	15.25	9.16	24	0.45
10 Year - 3 Day	Post Development	335	13.63	18.00	15.25	9.18	24	0.45
10 Year - 3 Day	Post Development	336	13.62	18.00	15.25	9.19	24	0.44
10 Year - 3 Day	Post Development	337	13.62	18.00	15.25	9.21	24	0.44
10 Year - 3 Day	Post Development	338	13.61	18.00	15.25	9.23	24	0.44
10 Year - 3 Day	Post Development	339	13.61	18.00	15.25	9.25	24	0.44
10 Year - 3 Day	Post Development	340	13.61	18.00	15.25	9.26	24	0.43
10 Year - 3 Day	Post Development	341	13.60	18.00	15.25	9.28	24	0.43
10 Year - 3 Day	Post Development	342	13.60	18.00	15.25	9.3	24	0.43
10 Year - 3 Day	Post Development	343	13.59	18.00	15.25	9.31	24	0.42
10 Year - 3 Day	Post Development	344	13.59	18.00	15.25	9.33	24	0.43
10 Year - 3 Day	Post Development	345	13.59	18.00	15.25	9.35	24	0.43
10 Year - 3 Day	Post Development	346	13.58	18.00	15.25	9.36	24	0.42
10 Year - 3 Day	Post Development	347	13.58	18.00	15.25	9.38	24	0.42
10 Year - 3 Day	Post Development	348	13.57	18.00	15.25	9.4	24	0.42
10 Year - 3 Day	Post Development	349	13.57	18.00	15.25	9.41	24	0.41
10 Year - 3 Day	Post Development	350	13.57	18.00	15.25	9.43	24	0.42

10 Year - 3 Day	Post Development	351	13.56	18.00	15.25	9.45	24	0.42
10 Year - 3 Day	Post Development	352	13.56	18.00	15.25	9.46	24	0.41
10 Year - 3 Day	Post Development	353	13.56	18.00	15.25	9.48	24	0.41
10 Year - 3 Day	Post Development	354	13.55	18.00	15.25	9.5	24	0.41
10 Year - 3 Day	Post Development	355	13.55	18.00	15.25	9.51	24	0.41
10 Year - 3 Day	Post Development	356	13.54	18.00	15.25	9.53	24	0.41
10 Year - 3 Day	Post Development	357	13.54	18.00	15.25	9.55	24	0.41
10 Year - 3 Day	Post Development	358	13.54	18.00	15.25	9.56	24	0.40
10 Year - 3 Day	Post Development	359	13.53	18.00	15.25	9.58	24	0.40
10 Year - 3 Day	Post Development	360	13.41	18.00	15.11	10.1	24	0.91
Total			**15.13**					**2.58 ac-ft Peak Vol Discharge in 24 Period**

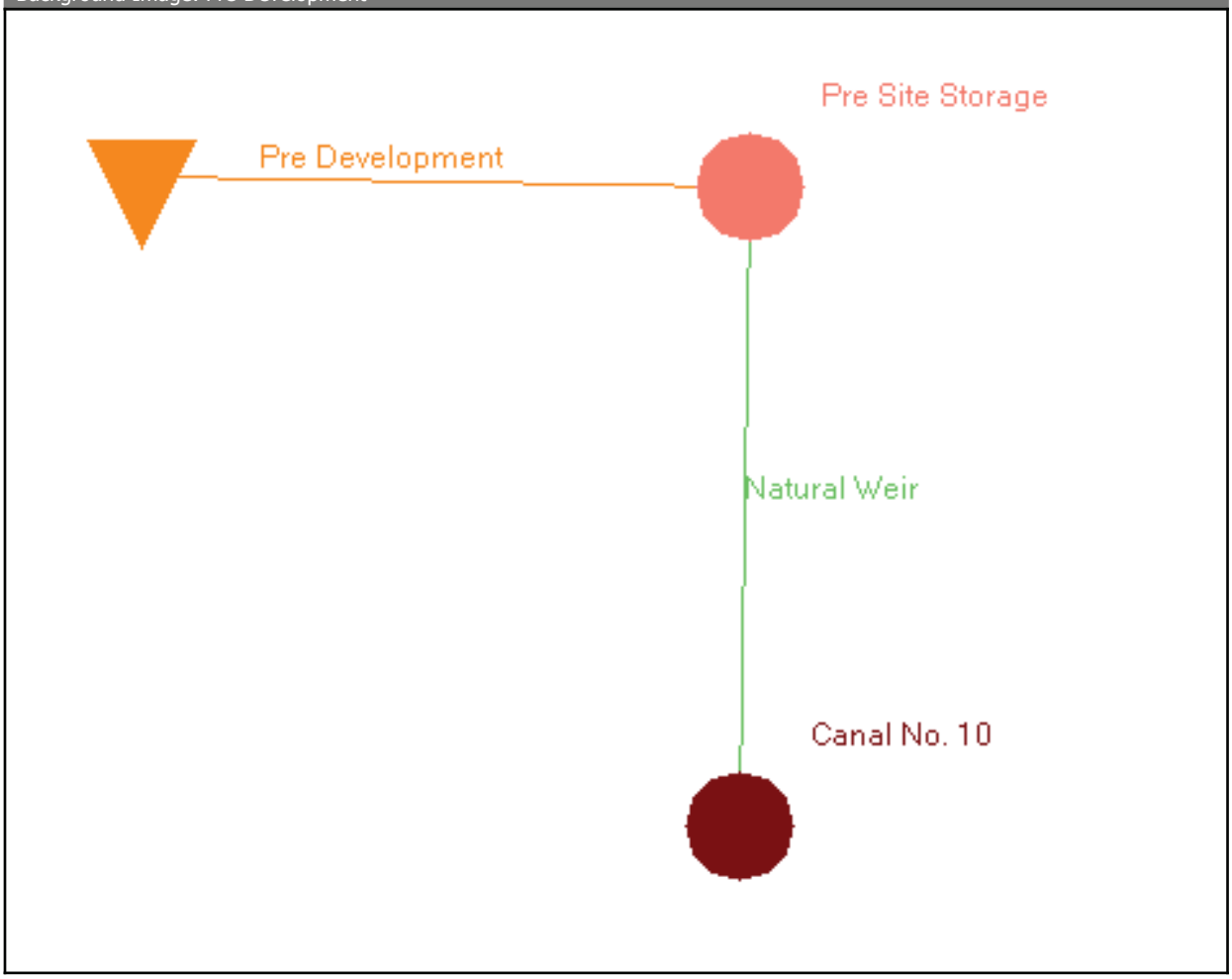
Allowable Volumetric Discharge: 2 in/ac * 1 ft/12 in * 21.71 = **3.62 ac-ft Peak Vol Allowed in 24 Hrs**

Volume **PROJECT AREA (Ac)**

Allowed Discharge Exceeded? **No**

APPENDIX C: Storm Routing Results

Background Image: Pre-Development



Simulation: 25-3

Scenario: Pre Development
Run Date/Time: 3/27/2025 12:29:53 PM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simple Basin: Pre Development

Scenario:	Pre Development
Node:	Pre Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	41.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7400 ac
Curve Number:	80.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Pre Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft
Alert Stage:	0.00 ft
Boundary Stage:	

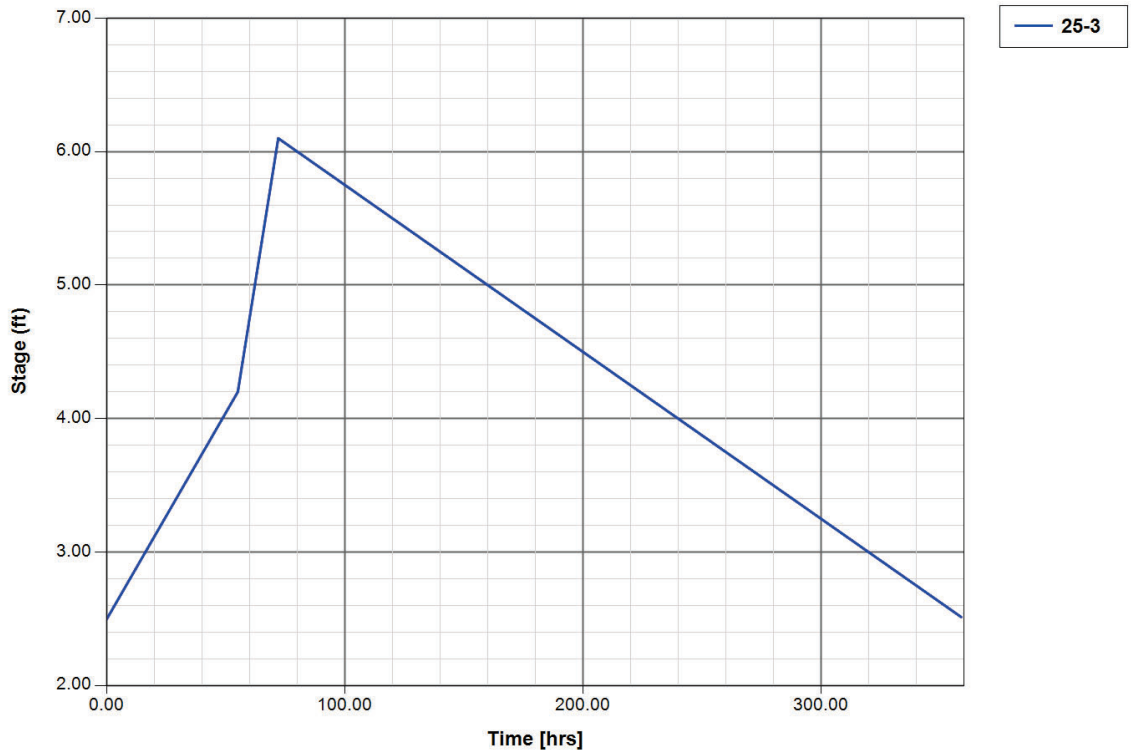
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Pre Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	36.67	0.00	0

Stage [Node: Canal No. 10]



Node: Pre Site Storage

Scenario: Pre Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 10.50 ft
Warning Stage: 0.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
10.50	0.00	0

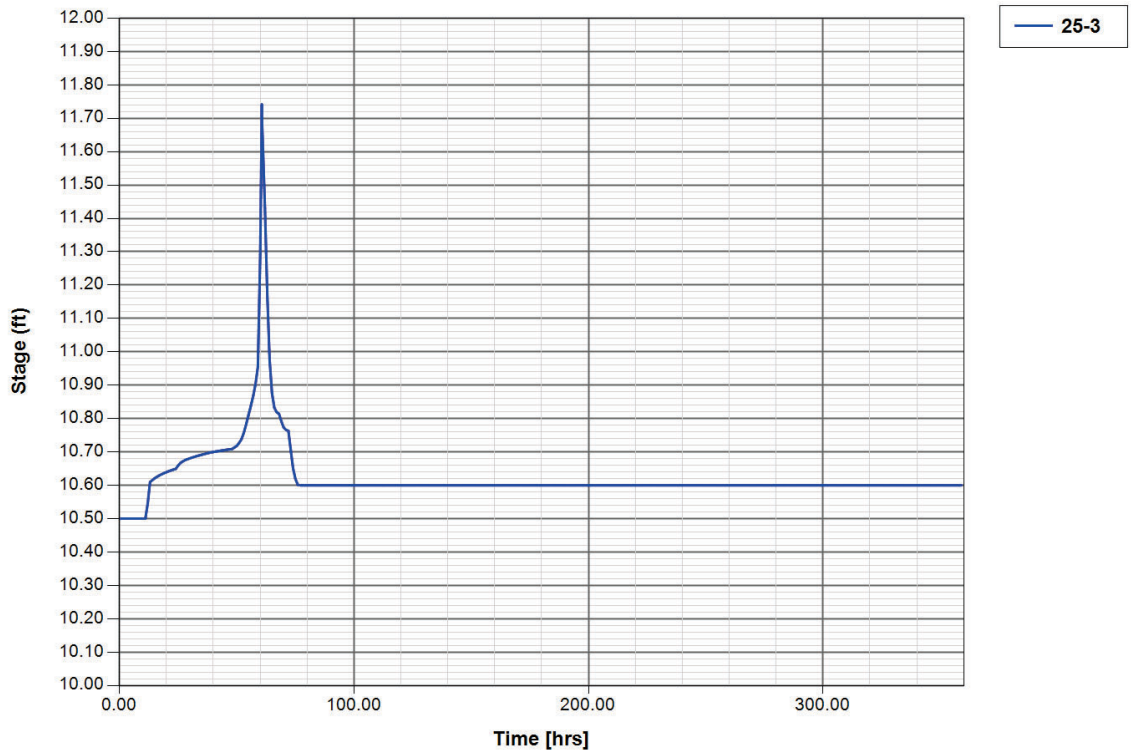
Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.00	0.13	5663
11.50	0.68	29621
12.00	1.64	71438
12.50	3.02	131551
13.00	4.82	209959
13.50	7.03	306227
14.00	9.67	421225
14.50	12.72	554083
15.00	16.19	705236
15.50	20.08	874685
16.00	24.38	1061993
17.00	34.25	1491930
18.00	45.79	1994612
19.00	59.00	2570040
20.00	73.88	3218213

Comment:

Node Max Conditions [Pre Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Pre Site Storage	25-3	0.00	0.00	11.74	0.0010	45.12	36.67	83236

Stage [Node: Pre Site Storage]



Weir Link: Natural Weir

Scenario:	Pre Development
From Node:	Pre Site Storage
To Node:	Canal No. 10
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	10.60 ft
Control Elevation:	10.60 ft
Max Depth:	1.00 ft
Max Width:	10.00 ft
Fillet:	0.00 ft

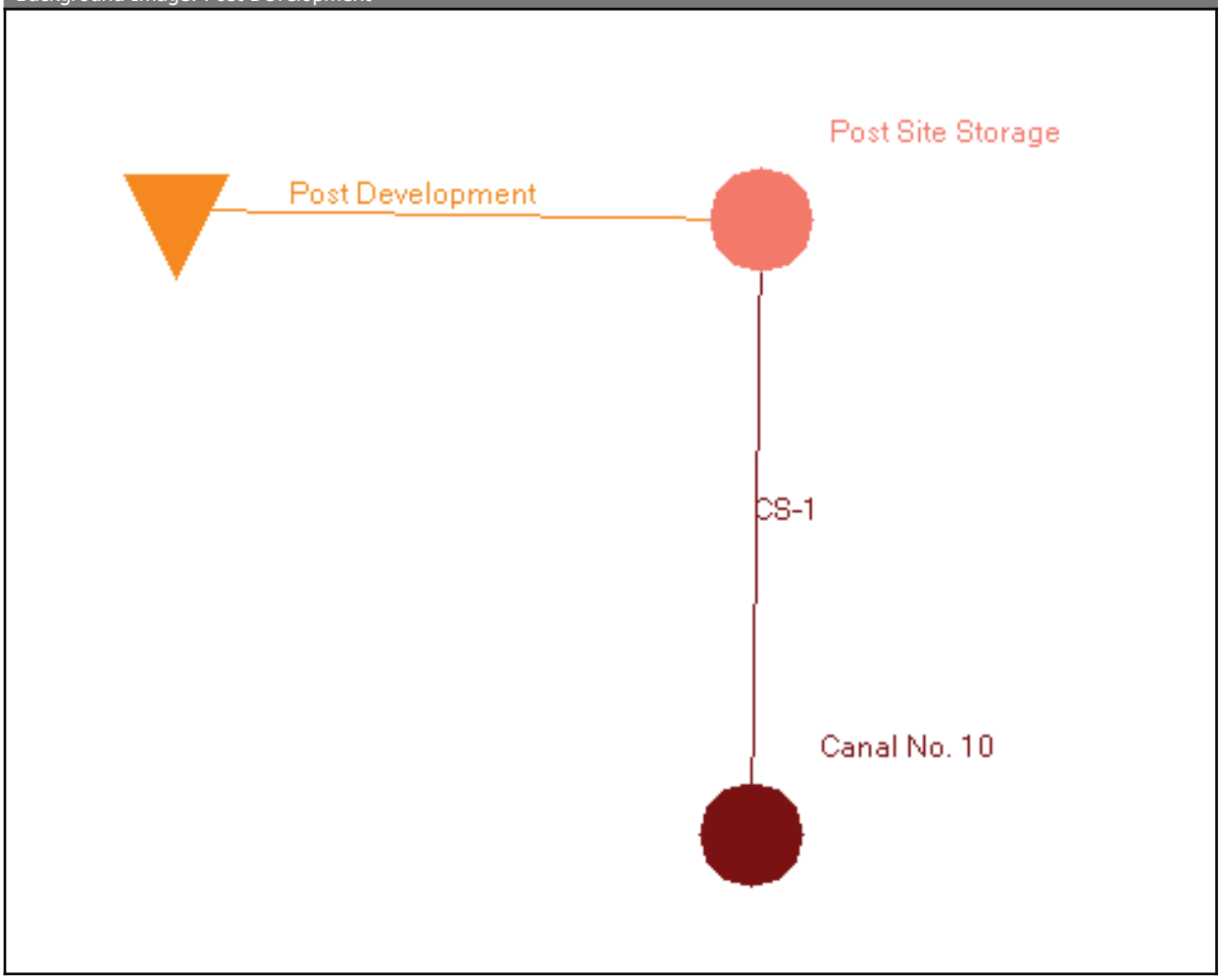
Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Background Image: Post Development



Simulation: 10-1

Scenario: Post Development
Run Date/Time: 5/6/2025 9:43:23 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	6.00 in
		Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 10-3

Scenario: Post Development
Run Date/Time: 5/6/2025 9:45:20 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100-3

Scenario:	Post Development
Run Date/Time:	5/6/2025 9:41:40 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25-3

Scenario: Post Development
Run Date/Time: 5/6/2025 9:46:31 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simple Basin: Post Development

Scenario:	Post Development
Node:	Post Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	29.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7100 ac
Curve Number:	92.0
Ia/S:	0.00
% Impervious:	43.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Post Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft

Alert Stage: 0.00 ft
Boundary Stage:

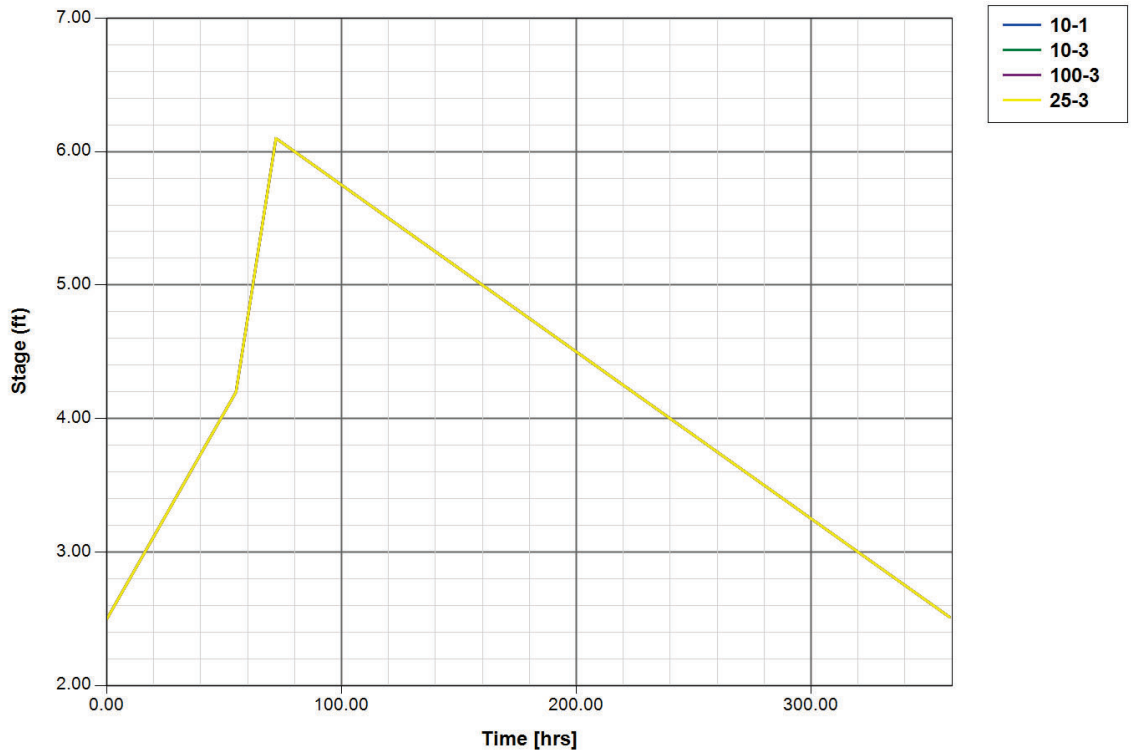
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	10-1	19.00	0.00	6.10	0.0009	0.34	0.00	0
Canal No. 10	10-3	19.00	0.00	6.10	0.0009	2.58	0.00	0
Canal No. 10	100-3	19.00	0.00	6.10	0.0009	0.00	0.00	0
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	5.74	0.00	0

Stage [Node: Canal No. 10]



Node: Post Site Storage

Scenario: Post Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.00 ft
Warning Stage: 18.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.00	0.00	0
12.50	1.71	74488
13.00	3.48	151589
13.50	5.50	239580
14.00	7.71	335848
14.50	10.11	440392
15.00	12.68	552341
15.50	15.39	670388
16.00	18.53	807167
16.50	22.65	986634

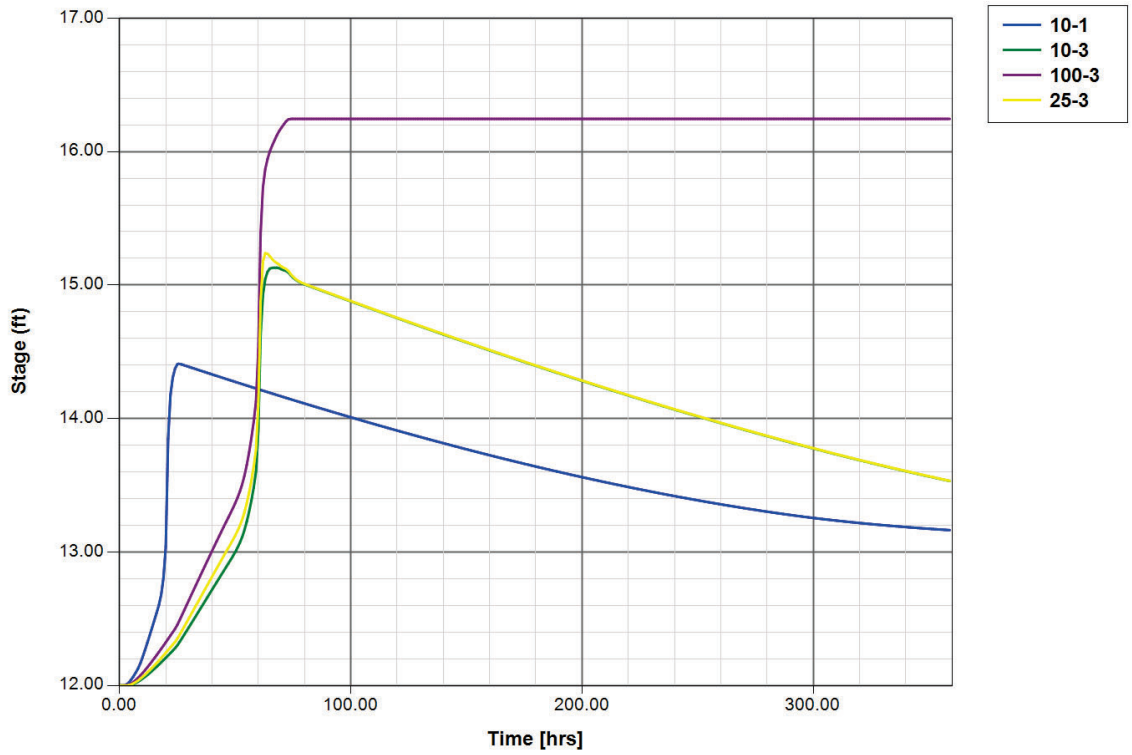
Stage [ft]	Volume [ac-ft]	Volume [ft3]
17.00	27.79	1210532
17.50	33.94	1478426
18.00	41.08	1789445
18.50	49.21	2143588

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Post Site Storage	10-1	18.00	0.00	14.41	0.0010	54.22	0.34	213689
Post Site Storage	10-3	18.00	0.00	15.13	0.0010	54.56	2.58	236513
Post Site Storage	100-3	18.00	0.00	16.25	0.0010	72.98	0.00	358990
Post Site Storage	25-3	18.00	0.00	15.24	0.0010	60.71	5.74	241872

Stage [Node: Post Site Storage]



Drop Structure Link: CS-1		Upstream Pipe		Downstream Pipe	
Scenario:	Post Development	Invert:	6.00 ft	Invert:	6.00 ft
From Node:	Post Site Storage	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Canal No. 10	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	640.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	13.00 ft
Control Elevation:	13.00 ft
Max Depth:	0.25 ft
Max Width:	0.25 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Weir

Weir Component	
Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	15.00 ft
Control Elevation:	15.00 ft
Max Depth:	3.08 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

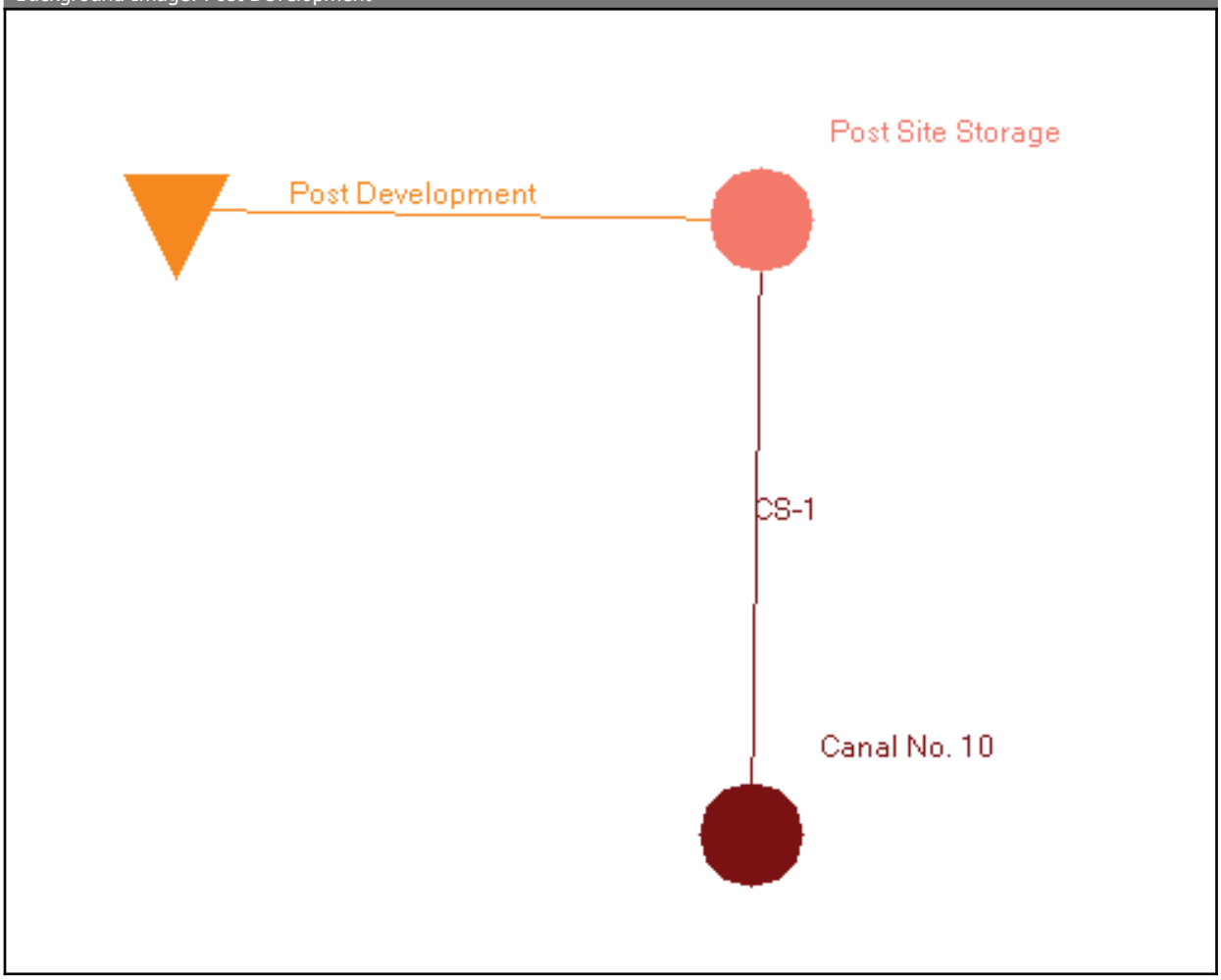
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Rim

Drop Structure Comment:

Background Image: Post Development



Simulation: 10-1

Scenario: Post Development
Run Date/Time: 5/6/2025 9:59:56 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	6.00 in
		Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 10-3

Scenario: Post Development
Run Date/Time: 5/6/2025 10:01:05 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100-3

Scenario:	Post Development
Run Date/Time:	5/6/2025 10:04:27 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25-3

Scenario: Post Development
Run Date/Time: 5/6/2025 10:02:19 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simple Basin: Post Development

Scenario:	Post Development
Node:	Post Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	29.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7100 ac
Curve Number:	92.0
Ia/S:	0.00
% Impervious:	43.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Post Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft

Alert Stage: 0.00 ft
Boundary Stage:

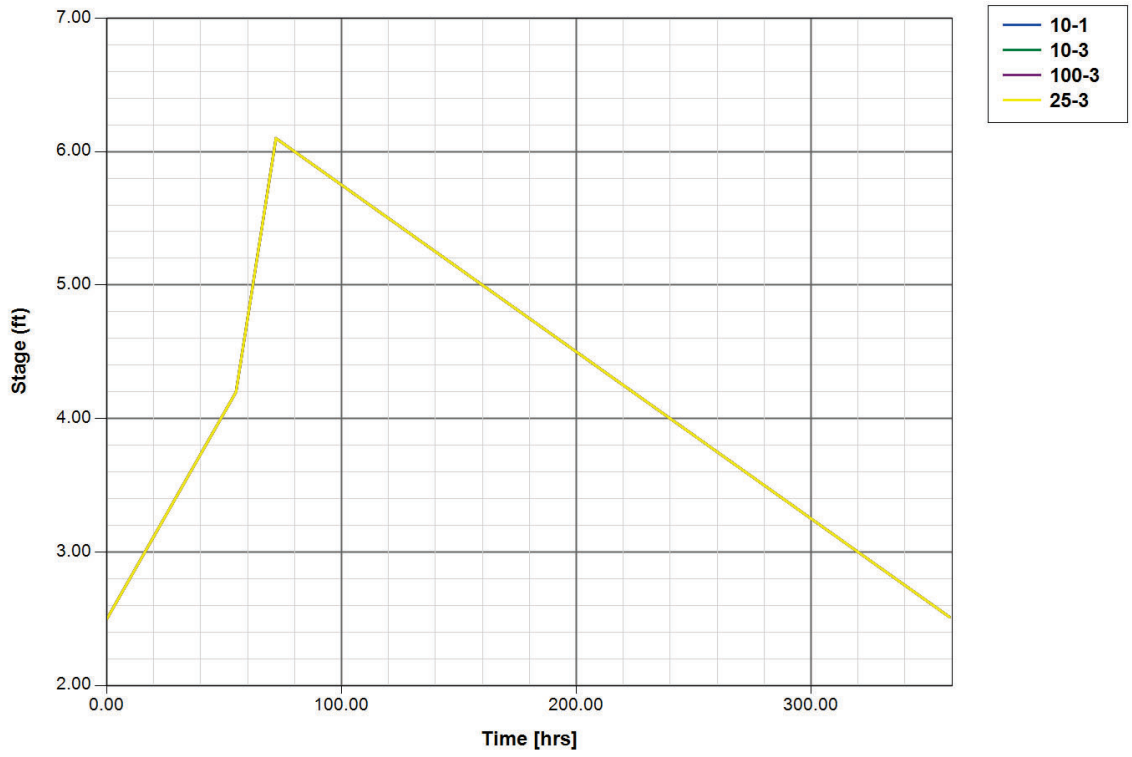
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	10-1	19.00	0.00	6.10	0.0009	5.43	0.00	0
Canal No. 10	10-3	19.00	0.00	6.10	0.0009	15.01	0.00	0
Canal No. 10	100-3	19.00	0.00	6.10	0.0009	0.00	0.00	0
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	20.34	0.00	0

Stage [Node: Canal No. 10]



Node: Post Site Storage

Scenario: Post Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 13.53 ft
Warning Stage: 18.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.00	0.00	0
12.50	1.71	74488
13.00	3.48	151589
13.50	5.50	239580
14.00	7.71	335848
14.50	10.11	440392
15.00	12.68	552341
15.50	15.39	670388
16.00	18.53	807167
16.50	22.65	986634

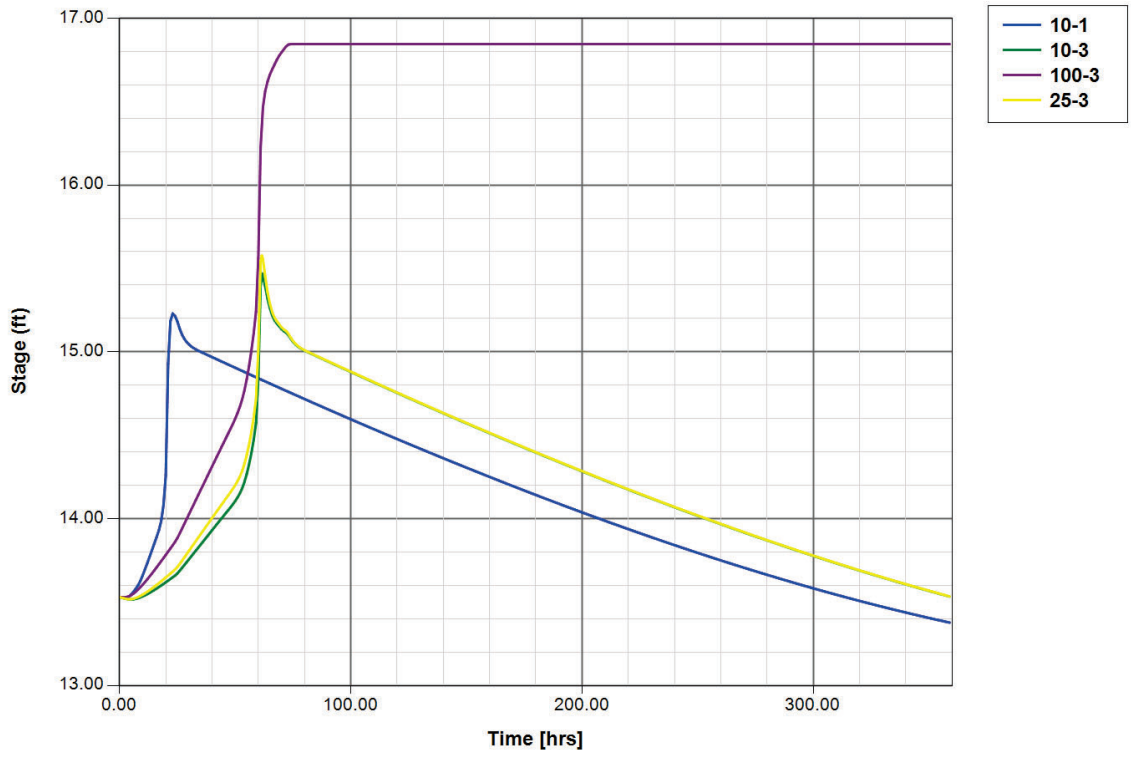
Stage [ft]	Volume [ac-ft]	Volume [ft3]
17.00	27.79	1210532
17.50	33.94	1478426
18.00	41.08	1789445
18.50	49.21	2143588

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Post Site Storage	10-1	18.00	0.00	15.23	0.0010	54.22	5.43	241405
Post Site Storage	10-3	18.00	0.00	15.47	0.0010	54.57	15.01	253287
Post Site Storage	100-3	18.00	0.00	16.84	0.0010	72.98	0.00	464299
Post Site Storage	25-3	18.00	0.00	15.58	0.0010	60.71	20.34	264320

Stage [Node: Post Site Storage]



Drop Structure Link: CS-1		Upstream Pipe		Downstream Pipe	
Scenario:	Post Development	Invert:	6.00 ft	Invert:	6.00 ft
From Node:	Post Site Storage	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Canal No. 10	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe Flow Direction:	None	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	640.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	13.00 ft
Control Elevation:	13.00 ft
Max Depth:	0.25 ft
Max Width:	0.25 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Weir

Weir Component	
Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	15.00 ft
Control Elevation:	15.00 ft
Max Depth:	3.08 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Rim

Drop Structure Comment:

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	0.0000	12.00	0.00	0.00
Post Development	10-3	1.0027	12.00	0.00	0.00
Post Development	10-3	2.0027	12.00	0.00	0.00
Post Development	10-3	3.0027	12.00	0.00	0.00
Post Development	10-3	4.0027	12.00	0.00	0.00
Post Development	10-3	5.0027	12.01	0.02	0.00
Post Development	10-3	6.0027	12.01	0.04	0.00
Post Development	10-3	7.0027	12.02	0.06	0.00
Post Development	10-3	8.0027	12.03	0.10	0.00
Post Development	10-3	9.0027	12.04	0.13	0.00
Post Development	10-3	10.0027	12.05	0.18	0.00
Post Development	10-3	11.0027	12.07	0.22	0.00
Post Development	10-3	12.0027	12.08	0.27	0.00
Post Development	10-3	13.0027	12.09	0.31	0.00
Post Development	10-3	14.0027	12.11	0.37	0.00
Post Development	10-3	15.0027	12.12	0.42	0.00
Post Development	10-3	16.0027	12.14	0.47	0.00
Post Development	10-3	17.0027	12.16	0.53	0.00
Post Development	10-3	18.0027	12.17	0.59	0.00
Post Development	10-3	19.0027	12.19	0.64	0.00
Post Development	10-3	20.0027	12.21	0.70	0.00
Post Development	10-3	21.0027	12.23	0.76	0.00
Post Development	10-3	22.0027	12.24	0.83	0.00
Post Development	10-3	23.0027	12.26	0.89	0.00
Post Development	10-3	24.0027	12.28	0.95	0.00
Post Development	10-3	25.0027	12.30	1.02	0.00
Post Development	10-3	26.0027	12.33	1.11	0.00
Post Development	10-3	27.0027	12.35	1.20	0.00
Post Development	10-3	28.0027	12.38	1.30	0.00

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	29.0027	12.41	1.39	0.00
Post Development	10-3	30.0027	12.44	1.49	0.00
Post Development	10-3	31.0027	12.46	1.59	0.00
Post Development	10-3	32.0027	12.49	1.69	0.00
Post Development	10-3	33.0027	12.52	1.78	0.00
Post Development	10-3	34.0027	12.55	1.88	0.00
Post Development	10-3	35.0027	12.58	1.98	0.00
Post Development	10-3	36.0027	12.61	2.08	0.00
Post Development	10-3	37.0027	12.63	2.18	0.00
Post Development	10-3	38.0027	12.66	2.28	0.00
Post Development	10-3	39.0027	12.69	2.38	0.00
Post Development	10-3	40.0027	12.72	2.48	0.00
Post Development	10-3	41.0027	12.75	2.58	0.00
Post Development	10-3	42.0027	12.77	2.69	0.00
Post Development	10-3	43.0027	12.80	2.79	0.00
Post Development	10-3	44.0027	12.83	2.89	0.00
Post Development	10-3	45.0027	12.86	2.99	0.00
Post Development	10-3	46.0027	12.89	3.10	0.00
Post Development	10-3	47.0027	12.91	3.20	0.00
Post Development	10-3	48.0027	12.94	3.30	0.00
Post Development	10-3	49.0027	12.97	3.41	0.00
Post Development	10-3	50.0027	13.00	3.53	0.00
Post Development	10-3	51.0027	13.03	3.65	0.00
Post Development	10-3	52.0027	13.07	3.79	0.00
Post Development	10-3	53.0027	13.11	3.96	0.00
Post Development	10-3	54.0027	13.16	4.17	0.01
Post Development	10-3	55.0027	13.23	4.42	0.01
Post Development	10-3	56.0027	13.30	4.73	0.02
Post Development	10-3	57.0027	13.38	5.08	0.03

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	58.0027	13.48	5.50	0.05
Post Development	10-3	59.0032	13.60	6.03	0.06
Post Development	10-3	60.0004	13.91	7.40	0.08
Post Development	10-3	61.0010	14.63	10.88	0.11
Post Development	10-3	62.0047	14.92	12.44	0.14
Post Development	10-3	63.0001	15.05	13.12	0.18
Post Development	10-3	64.0001	15.10	13.53	0.29
Post Development	10-3	65.0001	15.12	13.84	0.48
Post Development	10-3	66.0001	15.13	14.07	0.68
Post Development	10-3	67.0001	15.13	14.29	0.89
Post Development	10-3	68.0001	15.13	14.51	1.10
Post Development	10-3	69.0001	15.13	14.69	1.31
Post Development	10-3	70.0001	15.12	14.85	1.51
Post Development	10-3	71.0001	15.11	14.99	1.69
Post Development	10-3	72.0001	15.11	15.13	1.86
Post Development	10-3	73.0001	15.09	15.22	2.02
Post Development	10-3	74.0001	15.07	15.24	2.15
Post Development	10-3	75.0001	15.06	15.25	2.25
Post Development	10-3	76.0001	15.04	15.25	2.32
Post Development	10-3	77.0001	15.03	15.25	2.38
Post Development	10-3	78.0001	15.02	15.25	2.43
Post Development	10-3	79.0001	15.01	15.25	2.48
Post Development	10-3	80.0001	15.01	15.25	2.51
Post Development	10-3	81.0001	15.00	15.25	2.55
Post Development	10-3	82.0001	14.99	15.25	2.58
Post Development	10-3	83.0001	14.99	15.25	2.62
Post Development	10-3	84.0001	14.98	15.25	2.65
Post Development	10-3	85.0001	14.97	15.25	2.68
Post Development	10-3	86.0001	14.97	15.25	2.72

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	87.0001	14.96	15.25	2.75
Post Development	10-3	88.0001	14.95	15.25	2.79
Post Development	10-3	89.0001	14.95	15.25	2.82
Post Development	10-3	90.0001	14.94	15.25	2.85
Post Development	10-3	91.0001	14.94	15.25	2.89
Post Development	10-3	92.0001	14.93	15.25	2.92
Post Development	10-3	93.0001	14.92	15.25	2.95
Post Development	10-3	94.0001	14.92	15.25	2.99
Post Development	10-3	95.0001	14.91	15.25	3.02
Post Development	10-3	96.0001	14.90	15.25	3.05
Post Development	10-3	97.0001	14.90	15.25	3.09
Post Development	10-3	98.0001	14.89	15.25	3.12
Post Development	10-3	99.0001	14.88	15.25	3.15
Post Development	10-3	100.0001	14.88	15.25	3.18
Post Development	10-3	101.0001	14.87	15.25	3.22
Post Development	10-3	102.0001	14.87	15.25	3.25
Post Development	10-3	103.0001	14.86	15.25	3.28
Post Development	10-3	104.0001	14.85	15.25	3.32
Post Development	10-3	105.0001	14.85	15.25	3.35
Post Development	10-3	106.0001	14.84	15.25	3.38
Post Development	10-3	107.0001	14.83	15.25	3.41
Post Development	10-3	108.0001	14.83	15.25	3.45
Post Development	10-3	109.0001	14.82	15.25	3.48
Post Development	10-3	110.0001	14.82	15.25	3.51
Post Development	10-3	111.0001	14.81	15.25	3.54
Post Development	10-3	112.0001	14.80	15.25	3.58
Post Development	10-3	113.0001	14.80	15.25	3.61
Post Development	10-3	114.0001	14.79	15.25	3.64
Post Development	10-3	115.0001	14.78	15.25	3.67

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	116.0001	14.78	15.25	3.70
Post Development	10-3	117.0001	14.77	15.25	3.74
Post Development	10-3	118.0001	14.77	15.25	3.77
Post Development	10-3	119.0001	14.76	15.25	3.80
Post Development	10-3	120.0001	14.75	15.25	3.83
Post Development	10-3	121.0001	14.75	15.25	3.86
Post Development	10-3	122.0001	14.74	15.25	3.89
Post Development	10-3	123.0001	14.73	15.25	3.93
Post Development	10-3	124.0001	14.73	15.25	3.96
Post Development	10-3	125.0001	14.72	15.25	3.99
Post Development	10-3	126.0001	14.72	15.25	4.02
Post Development	10-3	127.0001	14.71	15.25	4.05
Post Development	10-3	128.0001	14.70	15.25	4.08
Post Development	10-3	129.0001	14.70	15.25	4.11
Post Development	10-3	130.0001	14.69	15.25	4.15
Post Development	10-3	131.0001	14.69	15.25	4.18
Post Development	10-3	132.0001	14.68	15.25	4.21
Post Development	10-3	133.0001	14.67	15.25	4.24
Post Development	10-3	134.0001	14.67	15.25	4.27
Post Development	10-3	135.0001	14.66	15.25	4.30
Post Development	10-3	136.0001	14.66	15.25	4.33
Post Development	10-3	137.0001	14.65	15.25	4.36
Post Development	10-3	138.0001	14.64	15.25	4.39
Post Development	10-3	139.0001	14.64	15.25	4.42
Post Development	10-3	140.0001	14.63	15.25	4.45
Post Development	10-3	141.0001	14.63	15.25	4.48
Post Development	10-3	142.0001	14.62	15.25	4.51
Post Development	10-3	143.0001	14.61	15.25	4.54
Post Development	10-3	144.0001	14.61	15.25	4.57

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	145.0001	14.60	15.25	4.60
Post Development	10-3	146.0001	14.59	15.25	4.64
Post Development	10-3	147.0001	14.59	15.25	4.67
Post Development	10-3	148.0001	14.58	15.25	4.70
Post Development	10-3	149.0001	14.58	15.25	4.73
Post Development	10-3	150.0001	14.57	15.25	4.76
Post Development	10-3	151.0001	14.57	15.25	4.79
Post Development	10-3	152.0001	14.56	15.25	4.81
Post Development	10-3	153.0001	14.55	15.25	4.84
Post Development	10-3	154.0001	14.55	15.25	4.87
Post Development	10-3	155.0001	14.54	15.25	4.90
Post Development	10-3	156.0001	14.54	15.25	4.93
Post Development	10-3	157.0001	14.53	15.25	4.96
Post Development	10-3	158.0001	14.52	15.25	4.99
Post Development	10-3	159.0001	14.52	15.25	5.02
Post Development	10-3	160.0001	14.51	15.25	5.05
Post Development	10-3	161.0001	14.51	15.25	5.08
Post Development	10-3	162.0001	14.50	15.25	5.11
Post Development	10-3	163.0001	14.49	15.25	5.14
Post Development	10-3	164.0001	14.49	15.25	5.17
Post Development	10-3	165.0001	14.48	15.25	5.20
Post Development	10-3	166.0001	14.48	15.25	5.23
Post Development	10-3	167.0001	14.47	15.25	5.25
Post Development	10-3	168.0001	14.47	15.25	5.28
Post Development	10-3	169.0001	14.46	15.25	5.31
Post Development	10-3	170.0001	14.45	15.25	5.34
Post Development	10-3	171.0001	14.45	15.25	5.37
Post Development	10-3	172.0001	14.44	15.25	5.40
Post Development	10-3	173.0001	14.44	15.25	5.43

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	174.0001	14.43	15.25	5.45
Post Development	10-3	175.0001	14.42	15.25	5.48
Post Development	10-3	176.0001	14.42	15.25	5.51
Post Development	10-3	177.0001	14.41	15.25	5.54
Post Development	10-3	178.0001	14.41	15.25	5.57
Post Development	10-3	179.0001	14.40	15.25	5.60
Post Development	10-3	180.0001	14.40	15.25	5.62
Post Development	10-3	181.0001	14.39	15.25	5.65
Post Development	10-3	182.0001	14.38	15.25	5.68
Post Development	10-3	183.0001	14.38	15.25	5.71
Post Development	10-3	184.0001	14.37	15.25	5.74
Post Development	10-3	185.0001	14.37	15.25	5.76
Post Development	10-3	186.0001	14.36	15.25	5.79
Post Development	10-3	187.0001	14.36	15.25	5.82
Post Development	10-3	188.0001	14.35	15.25	5.85
Post Development	10-3	189.0001	14.34	15.25	5.87
Post Development	10-3	190.0001	14.34	15.25	5.90
Post Development	10-3	191.0001	14.33	15.25	5.93
Post Development	10-3	192.0001	14.33	15.25	5.96
Post Development	10-3	193.0001	14.32	15.25	5.98
Post Development	10-3	194.0001	14.32	15.25	6.01
Post Development	10-3	195.0001	14.31	15.25	6.04
Post Development	10-3	196.0001	14.31	15.25	6.06
Post Development	10-3	197.0001	14.30	15.25	6.09
Post Development	10-3	198.0001	14.29	15.25	6.12
Post Development	10-3	199.0001	14.29	15.25	6.14
Post Development	10-3	200.0001	14.28	15.25	6.17
Post Development	10-3	201.0001	14.28	15.25	6.20
Post Development	10-3	202.0001	14.27	15.25	6.22

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	203.0001	14.27	15.25	6.25
Post Development	10-3	204.0001	14.26	15.25	6.28
Post Development	10-3	205.0001	14.26	15.25	6.30
Post Development	10-3	206.0001	14.25	15.25	6.33
Post Development	10-3	207.0001	14.24	15.25	6.36
Post Development	10-3	208.0001	14.24	15.25	6.38
Post Development	10-3	209.0001	14.23	15.25	6.41
Post Development	10-3	210.0001	14.23	15.25	6.44
Post Development	10-3	211.0001	14.22	15.25	6.46
Post Development	10-3	212.0001	14.22	15.25	6.49
Post Development	10-3	213.0001	14.21	15.25	6.51
Post Development	10-3	214.0001	14.21	15.25	6.54
Post Development	10-3	215.0001	14.20	15.25	6.57
Post Development	10-3	216.0001	14.20	15.25	6.59
Post Development	10-3	217.0001	14.19	15.25	6.62
Post Development	10-3	218.0001	14.18	15.25	6.64
Post Development	10-3	219.0001	14.18	15.25	6.67
Post Development	10-3	220.0001	14.17	15.25	6.69
Post Development	10-3	221.0001	14.17	15.25	6.72
Post Development	10-3	222.0001	14.16	15.25	6.74
Post Development	10-3	223.0001	14.16	15.25	6.77
Post Development	10-3	224.0001	14.15	15.25	6.79
Post Development	10-3	225.0001	14.15	15.25	6.82
Post Development	10-3	226.0001	14.14	15.25	6.85
Post Development	10-3	227.0001	14.14	15.25	6.87
Post Development	10-3	228.0001	14.13	15.25	6.90
Post Development	10-3	229.0001	14.13	15.25	6.92
Post Development	10-3	230.0001	14.12	15.25	6.94
Post Development	10-3	231.0001	14.12	15.25	6.97

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	232.0001	14.11	15.25	6.99
Post Development	10-3	233.0001	14.10	15.25	7.02
Post Development	10-3	234.0001	14.10	15.25	7.04
Post Development	10-3	235.0001	14.09	15.25	7.07
Post Development	10-3	236.0001	14.09	15.25	7.09
Post Development	10-3	237.0001	14.08	15.25	7.12
Post Development	10-3	238.0001	14.08	15.25	7.14
Post Development	10-3	239.0001	14.07	15.25	7.17
Post Development	10-3	240.0001	14.07	15.25	7.19
Post Development	10-3	241.0001	14.06	15.25	7.21
Post Development	10-3	242.0001	14.06	15.25	7.24
Post Development	10-3	243.0001	14.05	15.25	7.26
Post Development	10-3	244.0001	14.05	15.25	7.29
Post Development	10-3	245.0001	14.04	15.25	7.31
Post Development	10-3	246.0001	14.04	15.25	7.33
Post Development	10-3	247.0001	14.03	15.25	7.36
Post Development	10-3	248.0001	14.03	15.25	7.38
Post Development	10-3	249.0001	14.02	15.25	7.40
Post Development	10-3	250.0001	14.02	15.25	7.43
Post Development	10-3	251.0001	14.01	15.25	7.45
Post Development	10-3	252.0001	14.01	15.25	7.47
Post Development	10-3	253.0001	14.00	15.25	7.50
Post Development	10-3	254.0001	14.00	15.25	7.52
Post Development	10-3	255.0001	13.99	15.25	7.54
Post Development	10-3	256.0001	13.99	15.25	7.57
Post Development	10-3	257.0001	13.98	15.25	7.59
Post Development	10-3	258.0001	13.98	15.25	7.61
Post Development	10-3	259.0001	13.97	15.25	7.64
Post Development	10-3	260.0001	13.97	15.25	7.66

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	261.0001	13.96	15.25	7.68
Post Development	10-3	262.0001	13.96	15.25	7.70
Post Development	10-3	263.0001	13.95	15.25	7.73
Post Development	10-3	264.0001	13.95	15.25	7.75
Post Development	10-3	265.0001	13.94	15.25	7.77
Post Development	10-3	266.0001	13.94	15.25	7.79
Post Development	10-3	267.0001	13.93	15.25	7.82
Post Development	10-3	268.0001	13.93	15.25	7.84
Post Development	10-3	269.0001	13.92	15.25	7.86
Post Development	10-3	270.0001	13.92	15.25	7.88
Post Development	10-3	271.0001	13.91	15.25	7.91
Post Development	10-3	272.0001	13.91	15.25	7.93
Post Development	10-3	273.0001	13.90	15.25	7.95
Post Development	10-3	274.0001	13.90	15.25	7.97
Post Development	10-3	275.0001	13.89	15.25	7.99
Post Development	10-3	276.0001	13.89	15.25	8.02
Post Development	10-3	277.0001	13.88	15.25	8.04
Post Development	10-3	278.0001	13.88	15.25	8.06
Post Development	10-3	279.0001	13.87	15.25	8.08
Post Development	10-3	280.0001	13.87	15.25	8.10
Post Development	10-3	281.0001	13.86	15.25	8.12
Post Development	10-3	282.0001	13.86	15.25	8.14
Post Development	10-3	283.0001	13.85	15.25	8.17
Post Development	10-3	284.0001	13.85	15.25	8.19
Post Development	10-3	285.0001	13.85	15.25	8.21
Post Development	10-3	286.0001	13.84	15.25	8.23
Post Development	10-3	287.0001	13.84	15.25	8.25
Post Development	10-3	288.0001	13.83	15.25	8.27
Post Development	10-3	289.0001	13.83	15.25	8.29

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	290.0001	13.82	15.25	8.31
Post Development	10-3	291.0001	13.82	15.25	8.33
Post Development	10-3	292.0001	13.81	15.25	8.35
Post Development	10-3	293.0001	13.81	15.25	8.37
Post Development	10-3	294.0001	13.80	15.25	8.39
Post Development	10-3	295.0001	13.80	15.25	8.42
Post Development	10-3	296.0001	13.79	15.25	8.44
Post Development	10-3	297.0001	13.79	15.25	8.46
Post Development	10-3	298.0001	13.79	15.25	8.48
Post Development	10-3	299.0001	13.78	15.25	8.50
Post Development	10-3	300.0001	13.78	15.25	8.52
Post Development	10-3	301.0001	13.77	15.25	8.54
Post Development	10-3	302.0001	13.77	15.25	8.56
Post Development	10-3	303.0001	13.76	15.25	8.58
Post Development	10-3	304.0001	13.76	15.25	8.60
Post Development	10-3	305.0001	13.75	15.25	8.62
Post Development	10-3	306.0001	13.75	15.25	8.64
Post Development	10-3	307.0001	13.75	15.25	8.66
Post Development	10-3	308.0001	13.74	15.25	8.67
Post Development	10-3	309.0001	13.74	15.25	8.69
Post Development	10-3	310.0001	13.73	15.25	8.71
Post Development	10-3	311.0001	13.73	15.25	8.73
Post Development	10-3	312.0001	13.72	15.25	8.75
Post Development	10-3	313.0001	13.72	15.25	8.77
Post Development	10-3	314.0001	13.71	15.25	8.79
Post Development	10-3	315.0001	13.71	15.25	8.81
Post Development	10-3	316.0001	13.71	15.25	8.83
Post Development	10-3	317.0001	13.70	15.25	8.85
Post Development	10-3	318.0001	13.70	15.25	8.87

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	319.0001	13.69	15.25	8.89
Post Development	10-3	320.0001	13.69	15.25	8.90
Post Development	10-3	321.0001	13.68	15.25	8.92
Post Development	10-3	322.0001	13.68	15.25	8.94
Post Development	10-3	323.0001	13.68	15.25	8.96
Post Development	10-3	324.0001	13.67	15.25	8.98
Post Development	10-3	325.0001	13.67	15.25	9.00
Post Development	10-3	326.0001	13.66	15.25	9.01
Post Development	10-3	327.0001	13.66	15.25	9.03
Post Development	10-3	328.0001	13.65	15.25	9.05
Post Development	10-3	329.0001	13.65	15.25	9.07
Post Development	10-3	330.0001	13.65	15.25	9.09
Post Development	10-3	331.0001	13.64	15.25	9.10
Post Development	10-3	332.0001	13.64	15.25	9.12
Post Development	10-3	333.0001	13.63	15.25	9.14
Post Development	10-3	334.0001	13.63	15.25	9.16
Post Development	10-3	335.0001	13.63	15.25	9.18
Post Development	10-3	336.0001	13.62	15.25	9.19
Post Development	10-3	337.0001	13.62	15.25	9.21
Post Development	10-3	338.0001	13.61	15.25	9.23
Post Development	10-3	339.0001	13.61	15.25	9.25
Post Development	10-3	340.0001	13.61	15.25	9.26
Post Development	10-3	341.0001	13.60	15.25	9.28
Post Development	10-3	342.0001	13.60	15.25	9.30
Post Development	10-3	343.0001	13.59	15.25	9.31
Post Development	10-3	344.0001	13.59	15.25	9.33
Post Development	10-3	345.0001	13.59	15.25	9.35
Post Development	10-3	346.0001	13.58	15.25	9.36
Post Development	10-3	347.0001	13.58	15.25	9.38

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	348.0001	13.57	15.25	9.40
Post Development	10-3	349.0001	13.57	15.25	9.41
Post Development	10-3	350.0001	13.57	15.25	9.43
Post Development	10-3	351.0001	13.56	15.25	9.45
Post Development	10-3	352.0001	13.56	15.25	9.46
Post Development	10-3	353.0001	13.56	15.25	9.48
Post Development	10-3	354.0001	13.55	15.25	9.50
Post Development	10-3	355.0001	13.55	15.25	9.51
Post Development	10-3	356.0001	13.54	15.25	9.53
Post Development	10-3	357.0001	13.54	15.25	9.55
Post Development	10-3	358.0001	13.54	15.25	9.56
Post Development	10-3	359.0001	13.53	15.25	9.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	0.0000	12.00
Post Development	100-3	1.0027	12.00
Post Development	100-3	2.0027	12.00
Post Development	100-3	3.0027	12.00
Post Development	100-3	4.0027	12.01
Post Development	100-3	5.0027	12.01
Post Development	100-3	6.0027	12.03
Post Development	100-3	7.0027	12.04
Post Development	100-3	8.0027	12.06
Post Development	100-3	9.0027	12.08
Post Development	100-3	10.0027	12.09
Post Development	100-3	11.0027	12.11
Post Development	100-3	12.0027	12.14
Post Development	100-3	13.0027	12.16
Post Development	100-3	14.0027	12.18
Post Development	100-3	15.0027	12.20
Post Development	100-3	16.0027	12.23
Post Development	100-3	17.0027	12.25
Post Development	100-3	18.0027	12.28
Post Development	100-3	19.0027	12.30
Post Development	100-3	20.0027	12.32
Post Development	100-3	21.0027	12.35
Post Development	100-3	22.0027	12.37
Post Development	100-3	23.0027	12.40
Post Development	100-3	24.0027	12.43
Post Development	100-3	25.0027	12.45
Post Development	100-3	26.0027	12.49
Post Development	100-3	27.0027	12.53
Post Development	100-3	28.0027	12.57
Post Development	100-3	29.0027	12.60
Post Development	100-3	30.0027	12.64
Post Development	100-3	31.0027	12.68
Post Development	100-3	32.0027	12.71
Post Development	100-3	33.0027	12.75
Post Development	100-3	34.0027	12.79
Post Development	100-3	35.0027	12.83
Post Development	100-3	36.0027	12.86
Post Development	100-3	37.0027	12.90
Post Development	100-3	38.0027	12.94
Post Development	100-3	39.0027	12.97
Post Development	100-3	40.0027	13.01
Post Development	100-3	41.0027	13.05

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	42.0027	13.08
Post Development	100-3	43.0027	13.12
Post Development	100-3	44.0027	13.15
Post Development	100-3	45.0027	13.19
Post Development	100-3	46.0027	13.22
Post Development	100-3	47.0027	13.26
Post Development	100-3	48.0027	13.29
Post Development	100-3	49.0027	13.33
Post Development	100-3	50.0027	13.37
Post Development	100-3	51.0027	13.41
Post Development	100-3	52.0027	13.45
Post Development	100-3	53.0027	13.51
Post Development	100-3	54.0027	13.57
Post Development	100-3	55.0027	13.65
Post Development	100-3	56.0027	13.74
Post Development	100-3	57.0027	13.85
Post Development	100-3	58.0012	13.98
Post Development	100-3	59.0040	14.13
Post Development	100-3	60.0004	14.51
Post Development	100-3	61.0005	15.39
Post Development	100-3	62.0002	15.73
Post Development	100-3	63.0048	15.87
Post Development	100-3	64.0048	15.95
Post Development	100-3	65.0048	16.00
Post Development	100-3	66.0048	16.05
Post Development	100-3	67.0048	16.08
Post Development	100-3	68.0048	16.12
Post Development	100-3	69.0048	16.15
Post Development	100-3	70.0048	16.18
Post Development	100-3	71.0048	16.20
Post Development	100-3	72.0048	16.23
Post Development	100-3	73.0048	16.24
Post Development	100-3	74.0048	16.25
Post Development	100-3	75.0048	16.25
Post Development	100-3	76.0048	16.25
Post Development	100-3	77.0048	16.25
Post Development	100-3	78.0048	16.25
Post Development	100-3	79.0048	16.25
Post Development	100-3	80.0048	16.25
Post Development	100-3	81.0048	16.25
Post Development	100-3	82.0048	16.25
Post Development	100-3	83.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	84.0048	16.25
Post Development	100-3	85.0048	16.25
Post Development	100-3	86.0048	16.25
Post Development	100-3	87.0048	16.25
Post Development	100-3	88.0048	16.25
Post Development	100-3	89.0048	16.25
Post Development	100-3	90.0048	16.25
Post Development	100-3	91.0048	16.25
Post Development	100-3	92.0048	16.25
Post Development	100-3	93.0048	16.25
Post Development	100-3	94.0048	16.25
Post Development	100-3	95.0048	16.25
Post Development	100-3	96.0048	16.25
Post Development	100-3	97.0048	16.25
Post Development	100-3	98.0048	16.25
Post Development	100-3	99.0048	16.25
Post Development	100-3	100.0048	16.25
Post Development	100-3	101.0048	16.25
Post Development	100-3	102.0048	16.25
Post Development	100-3	103.0048	16.25
Post Development	100-3	104.0048	16.25
Post Development	100-3	105.0048	16.25
Post Development	100-3	106.0048	16.25
Post Development	100-3	107.0048	16.25
Post Development	100-3	108.0048	16.25
Post Development	100-3	109.0048	16.25
Post Development	100-3	110.0048	16.25
Post Development	100-3	111.0048	16.25
Post Development	100-3	112.0048	16.25
Post Development	100-3	113.0048	16.25
Post Development	100-3	114.0048	16.25
Post Development	100-3	115.0048	16.25
Post Development	100-3	116.0048	16.25
Post Development	100-3	117.0048	16.25
Post Development	100-3	118.0048	16.25
Post Development	100-3	119.0048	16.25
Post Development	100-3	120.0048	16.25
Post Development	100-3	121.0048	16.25
Post Development	100-3	122.0048	16.25
Post Development	100-3	123.0048	16.25
Post Development	100-3	124.0048	16.25
Post Development	100-3	125.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	126.0048	16.25
Post Development	100-3	127.0048	16.25
Post Development	100-3	128.0048	16.25
Post Development	100-3	129.0048	16.25
Post Development	100-3	130.0048	16.25
Post Development	100-3	131.0048	16.25
Post Development	100-3	132.0048	16.25
Post Development	100-3	133.0048	16.25
Post Development	100-3	134.0048	16.25
Post Development	100-3	135.0048	16.25
Post Development	100-3	136.0048	16.25
Post Development	100-3	137.0048	16.25
Post Development	100-3	138.0048	16.25
Post Development	100-3	139.0048	16.25
Post Development	100-3	140.0048	16.25
Post Development	100-3	141.0048	16.25
Post Development	100-3	142.0048	16.25
Post Development	100-3	143.0048	16.25
Post Development	100-3	144.0048	16.25
Post Development	100-3	145.0048	16.25
Post Development	100-3	146.0048	16.25
Post Development	100-3	147.0048	16.25
Post Development	100-3	148.0048	16.25
Post Development	100-3	149.0048	16.25
Post Development	100-3	150.0048	16.25
Post Development	100-3	151.0048	16.25
Post Development	100-3	152.0048	16.25
Post Development	100-3	153.0048	16.25
Post Development	100-3	154.0048	16.25
Post Development	100-3	155.0048	16.25
Post Development	100-3	156.0048	16.25
Post Development	100-3	157.0048	16.25
Post Development	100-3	158.0048	16.25
Post Development	100-3	159.0048	16.25
Post Development	100-3	160.0048	16.25
Post Development	100-3	161.0048	16.25
Post Development	100-3	162.0048	16.25
Post Development	100-3	163.0048	16.25
Post Development	100-3	164.0048	16.25
Post Development	100-3	165.0048	16.25
Post Development	100-3	166.0048	16.25
Post Development	100-3	167.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	168.0048	16.25
Post Development	100-3	169.0048	16.25
Post Development	100-3	170.0048	16.25
Post Development	100-3	171.0048	16.25
Post Development	100-3	172.0048	16.25
Post Development	100-3	173.0048	16.25
Post Development	100-3	174.0048	16.25
Post Development	100-3	175.0048	16.25
Post Development	100-3	176.0048	16.25
Post Development	100-3	177.0048	16.25
Post Development	100-3	178.0048	16.25
Post Development	100-3	179.0048	16.25
Post Development	100-3	180.0048	16.25
Post Development	100-3	181.0048	16.25
Post Development	100-3	182.0048	16.25
Post Development	100-3	183.0048	16.25
Post Development	100-3	184.0048	16.25
Post Development	100-3	185.0048	16.25
Post Development	100-3	186.0048	16.25
Post Development	100-3	187.0048	16.25
Post Development	100-3	188.0048	16.25
Post Development	100-3	189.0048	16.25
Post Development	100-3	190.0048	16.25
Post Development	100-3	191.0048	16.25
Post Development	100-3	192.0048	16.25
Post Development	100-3	193.0048	16.25
Post Development	100-3	194.0048	16.25
Post Development	100-3	195.0048	16.25
Post Development	100-3	196.0048	16.25
Post Development	100-3	197.0048	16.25
Post Development	100-3	198.0048	16.25
Post Development	100-3	199.0048	16.25
Post Development	100-3	200.0048	16.25
Post Development	100-3	201.0048	16.25
Post Development	100-3	202.0048	16.25
Post Development	100-3	203.0048	16.25
Post Development	100-3	204.0048	16.25
Post Development	100-3	205.0048	16.25
Post Development	100-3	206.0048	16.25
Post Development	100-3	207.0048	16.25
Post Development	100-3	208.0048	16.25
Post Development	100-3	209.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	210.0048	16.25
Post Development	100-3	211.0048	16.25
Post Development	100-3	212.0048	16.25
Post Development	100-3	213.0048	16.25
Post Development	100-3	214.0048	16.25
Post Development	100-3	215.0048	16.25
Post Development	100-3	216.0048	16.25
Post Development	100-3	217.0048	16.25
Post Development	100-3	218.0048	16.25
Post Development	100-3	219.0048	16.25
Post Development	100-3	220.0048	16.25
Post Development	100-3	221.0048	16.25
Post Development	100-3	222.0048	16.25
Post Development	100-3	223.0048	16.25
Post Development	100-3	224.0048	16.25
Post Development	100-3	225.0048	16.25
Post Development	100-3	226.0048	16.25
Post Development	100-3	227.0048	16.25
Post Development	100-3	228.0048	16.25
Post Development	100-3	229.0048	16.25
Post Development	100-3	230.0048	16.25
Post Development	100-3	231.0048	16.25
Post Development	100-3	232.0048	16.25
Post Development	100-3	233.0048	16.25
Post Development	100-3	234.0048	16.25
Post Development	100-3	235.0048	16.25
Post Development	100-3	236.0048	16.25
Post Development	100-3	237.0048	16.25
Post Development	100-3	238.0048	16.25
Post Development	100-3	239.0048	16.25
Post Development	100-3	240.0048	16.25
Post Development	100-3	241.0048	16.25
Post Development	100-3	242.0048	16.25
Post Development	100-3	243.0048	16.25
Post Development	100-3	244.0048	16.25
Post Development	100-3	245.0048	16.25
Post Development	100-3	246.0048	16.25
Post Development	100-3	247.0048	16.25
Post Development	100-3	248.0048	16.25
Post Development	100-3	249.0048	16.25
Post Development	100-3	250.0048	16.25
Post Development	100-3	251.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	252.0048	16.25
Post Development	100-3	253.0048	16.25
Post Development	100-3	254.0048	16.25
Post Development	100-3	255.0048	16.25
Post Development	100-3	256.0048	16.25
Post Development	100-3	257.0048	16.25
Post Development	100-3	258.0048	16.25
Post Development	100-3	259.0048	16.25
Post Development	100-3	260.0048	16.25
Post Development	100-3	261.0048	16.25
Post Development	100-3	262.0048	16.25
Post Development	100-3	263.0048	16.25
Post Development	100-3	264.0048	16.25
Post Development	100-3	265.0048	16.25
Post Development	100-3	266.0048	16.25
Post Development	100-3	267.0048	16.25
Post Development	100-3	268.0048	16.25
Post Development	100-3	269.0048	16.25
Post Development	100-3	270.0048	16.25
Post Development	100-3	271.0048	16.25
Post Development	100-3	272.0048	16.25
Post Development	100-3	273.0048	16.25
Post Development	100-3	274.0048	16.25
Post Development	100-3	275.0048	16.25
Post Development	100-3	276.0048	16.25
Post Development	100-3	277.0048	16.25
Post Development	100-3	278.0048	16.25
Post Development	100-3	279.0048	16.25
Post Development	100-3	280.0048	16.25
Post Development	100-3	281.0048	16.25
Post Development	100-3	282.0048	16.25
Post Development	100-3	283.0048	16.25
Post Development	100-3	284.0048	16.25
Post Development	100-3	285.0048	16.25
Post Development	100-3	286.0048	16.25
Post Development	100-3	287.0048	16.25
Post Development	100-3	288.0048	16.25
Post Development	100-3	289.0048	16.25
Post Development	100-3	290.0048	16.25
Post Development	100-3	291.0048	16.25
Post Development	100-3	292.0048	16.25
Post Development	100-3	293.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	294.0048	16.25
Post Development	100-3	295.0048	16.25
Post Development	100-3	296.0048	16.25
Post Development	100-3	297.0048	16.25
Post Development	100-3	298.0048	16.25
Post Development	100-3	299.0048	16.25
Post Development	100-3	300.0048	16.25
Post Development	100-3	301.0048	16.25
Post Development	100-3	302.0048	16.25
Post Development	100-3	303.0048	16.25
Post Development	100-3	304.0048	16.25
Post Development	100-3	305.0048	16.25
Post Development	100-3	306.0048	16.25
Post Development	100-3	307.0048	16.25
Post Development	100-3	308.0048	16.25
Post Development	100-3	309.0048	16.25
Post Development	100-3	310.0048	16.25
Post Development	100-3	311.0048	16.25
Post Development	100-3	312.0048	16.25
Post Development	100-3	313.0048	16.25
Post Development	100-3	314.0048	16.25
Post Development	100-3	315.0048	16.25
Post Development	100-3	316.0048	16.25
Post Development	100-3	317.0048	16.25
Post Development	100-3	318.0048	16.25
Post Development	100-3	319.0048	16.25
Post Development	100-3	320.0048	16.25
Post Development	100-3	321.0048	16.25
Post Development	100-3	322.0048	16.25
Post Development	100-3	323.0048	16.25
Post Development	100-3	324.0048	16.25
Post Development	100-3	325.0048	16.25
Post Development	100-3	326.0048	16.25
Post Development	100-3	327.0048	16.25
Post Development	100-3	328.0048	16.25
Post Development	100-3	329.0048	16.25
Post Development	100-3	330.0048	16.25
Post Development	100-3	331.0048	16.25
Post Development	100-3	332.0048	16.25
Post Development	100-3	333.0048	16.25
Post Development	100-3	334.0048	16.25
Post Development	100-3	335.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	336.0048	16.25
Post Development	100-3	337.0048	16.25
Post Development	100-3	338.0048	16.25
Post Development	100-3	339.0048	16.25
Post Development	100-3	340.0048	16.25
Post Development	100-3	341.0048	16.25
Post Development	100-3	342.0048	16.25
Post Development	100-3	343.0048	16.25
Post Development	100-3	344.0048	16.25
Post Development	100-3	345.0048	16.25
Post Development	100-3	346.0048	16.25
Post Development	100-3	347.0048	16.25
Post Development	100-3	348.0048	16.25
Post Development	100-3	349.0048	16.25
Post Development	100-3	350.0048	16.25
Post Development	100-3	351.0048	16.25
Post Development	100-3	352.0048	16.25
Post Development	100-3	353.0048	16.25
Post Development	100-3	354.0048	16.25
Post Development	100-3	355.0048	16.25
Post Development	100-3	356.0048	16.25
Post Development	100-3	357.0048	16.25
Post Development	100-3	358.0048	16.25
Post Development	100-3	359.0048	16.25
Post Development	10-1	0.0000	12.00
Post Development	10-1	1.0027	12.00
Post Development	10-1	2.0027	12.00
Post Development	10-1	3.0027	12.01
Post Development	10-1	4.0027	12.02
Post Development	10-1	5.0027	12.04
Post Development	10-1	6.0027	12.07
Post Development	10-1	7.0027	12.10
Post Development	10-1	8.0027	12.13
Post Development	10-1	9.0027	12.17
Post Development	10-1	10.0027	12.21
Post Development	10-1	11.0027	12.27
Post Development	10-1	12.0027	12.32
Post Development	10-1	13.0027	12.37
Post Development	10-1	14.0027	12.43
Post Development	10-1	15.0027	12.49
Post Development	10-1	16.0027	12.54
Post Development	10-1	17.0027	12.60

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	18.0027	12.68
Post Development	10-1	19.0007	12.81
Post Development	10-1	20.0010	13.04
Post Development	10-1	21.0015	13.85
Post Development	10-1	22.0017	14.17
Post Development	10-1	23.0053	14.31
Post Development	10-1	24.0053	14.37
Post Development	10-1	25.0053	14.41
Post Development	10-1	26.0053	14.41
Post Development	10-1	27.0053	14.41
Post Development	10-1	28.0053	14.40
Post Development	10-1	29.0053	14.39
Post Development	10-1	30.0053	14.39
Post Development	10-1	31.0053	14.38
Post Development	10-1	32.0053	14.38
Post Development	10-1	33.0053	14.37
Post Development	10-1	34.0053	14.37
Post Development	10-1	35.0053	14.36
Post Development	10-1	36.0053	14.35
Post Development	10-1	37.0053	14.35
Post Development	10-1	38.0053	14.34
Post Development	10-1	39.0053	14.34
Post Development	10-1	40.0053	14.33
Post Development	10-1	41.0053	14.33
Post Development	10-1	42.0053	14.32
Post Development	10-1	43.0053	14.31
Post Development	10-1	44.0053	14.31
Post Development	10-1	45.0053	14.30
Post Development	10-1	46.0053	14.30
Post Development	10-1	47.0053	14.29
Post Development	10-1	48.0053	14.29
Post Development	10-1	49.0053	14.28
Post Development	10-1	50.0053	14.28
Post Development	10-1	51.0053	14.27
Post Development	10-1	52.0053	14.26
Post Development	10-1	53.0053	14.26
Post Development	10-1	54.0053	14.25
Post Development	10-1	55.0053	14.25
Post Development	10-1	56.0053	14.24
Post Development	10-1	57.0053	14.24
Post Development	10-1	58.0053	14.23
Post Development	10-1	59.0053	14.23

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	60.0053	14.22
Post Development	10-1	61.0053	14.21
Post Development	10-1	62.0053	14.21
Post Development	10-1	63.0053	14.20
Post Development	10-1	64.0053	14.20
Post Development	10-1	65.0053	14.19
Post Development	10-1	66.0053	14.19
Post Development	10-1	67.0053	14.18
Post Development	10-1	68.0053	14.18
Post Development	10-1	69.0053	14.17
Post Development	10-1	70.0053	14.17
Post Development	10-1	71.0053	14.16
Post Development	10-1	72.0053	14.16
Post Development	10-1	73.0053	14.15
Post Development	10-1	74.0053	14.14
Post Development	10-1	75.0053	14.14
Post Development	10-1	76.0053	14.13
Post Development	10-1	77.0053	14.13
Post Development	10-1	78.0053	14.12
Post Development	10-1	79.0053	14.12
Post Development	10-1	80.0053	14.11
Post Development	10-1	81.0053	14.11
Post Development	10-1	82.0053	14.10
Post Development	10-1	83.0053	14.10
Post Development	10-1	84.0053	14.09
Post Development	10-1	85.0053	14.09
Post Development	10-1	86.0053	14.08
Post Development	10-1	87.0053	14.08
Post Development	10-1	88.0053	14.07
Post Development	10-1	89.0053	14.07
Post Development	10-1	90.0053	14.06
Post Development	10-1	91.0053	14.06
Post Development	10-1	92.0053	14.05
Post Development	10-1	93.0053	14.05
Post Development	10-1	94.0053	14.04
Post Development	10-1	95.0053	14.04
Post Development	10-1	96.0053	14.03
Post Development	10-1	97.0053	14.03
Post Development	10-1	98.0053	14.02
Post Development	10-1	99.0053	14.01
Post Development	10-1	100.0053	14.01
Post Development	10-1	101.0053	14.00

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	102.0053	14.00
Post Development	10-1	103.0053	13.99
Post Development	10-1	104.0053	13.99
Post Development	10-1	105.0053	13.98
Post Development	10-1	106.0053	13.98
Post Development	10-1	107.0053	13.97
Post Development	10-1	108.0053	13.97
Post Development	10-1	109.0053	13.96
Post Development	10-1	110.0053	13.96
Post Development	10-1	111.0053	13.95
Post Development	10-1	112.0053	13.95
Post Development	10-1	113.0053	13.94
Post Development	10-1	114.0053	13.94
Post Development	10-1	115.0053	13.93
Post Development	10-1	116.0053	13.93
Post Development	10-1	117.0053	13.93
Post Development	10-1	118.0053	13.92
Post Development	10-1	119.0053	13.92
Post Development	10-1	120.0053	13.91
Post Development	10-1	121.0053	13.91
Post Development	10-1	122.0053	13.90
Post Development	10-1	123.0053	13.90
Post Development	10-1	124.0053	13.89
Post Development	10-1	125.0053	13.89
Post Development	10-1	126.0053	13.88
Post Development	10-1	127.0053	13.88
Post Development	10-1	128.0053	13.87
Post Development	10-1	129.0053	13.87
Post Development	10-1	130.0053	13.86
Post Development	10-1	131.0053	13.86
Post Development	10-1	132.0053	13.85
Post Development	10-1	133.0053	13.85
Post Development	10-1	134.0053	13.84
Post Development	10-1	135.0053	13.84
Post Development	10-1	136.0053	13.83
Post Development	10-1	137.0053	13.83
Post Development	10-1	138.0053	13.83
Post Development	10-1	139.0053	13.82
Post Development	10-1	140.0053	13.82
Post Development	10-1	141.0053	13.81
Post Development	10-1	142.0053	13.81
Post Development	10-1	143.0053	13.80

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	144.0053	13.80
Post Development	10-1	145.0053	13.79
Post Development	10-1	146.0053	13.79
Post Development	10-1	147.0053	13.78
Post Development	10-1	148.0053	13.78
Post Development	10-1	149.0053	13.77
Post Development	10-1	150.0053	13.77
Post Development	10-1	151.0053	13.77
Post Development	10-1	152.0053	13.76
Post Development	10-1	153.0053	13.76
Post Development	10-1	154.0053	13.75
Post Development	10-1	155.0053	13.75
Post Development	10-1	156.0053	13.74
Post Development	10-1	157.0053	13.74
Post Development	10-1	158.0053	13.73
Post Development	10-1	159.0053	13.73
Post Development	10-1	160.0053	13.73
Post Development	10-1	161.0053	13.72
Post Development	10-1	162.0053	13.72
Post Development	10-1	163.0053	13.71
Post Development	10-1	164.0053	13.71
Post Development	10-1	165.0053	13.70
Post Development	10-1	166.0053	13.70
Post Development	10-1	167.0053	13.70
Post Development	10-1	168.0053	13.69
Post Development	10-1	169.0053	13.69
Post Development	10-1	170.0053	13.68
Post Development	10-1	171.0053	13.68
Post Development	10-1	172.0053	13.67
Post Development	10-1	173.0053	13.67
Post Development	10-1	174.0053	13.67
Post Development	10-1	175.0053	13.66
Post Development	10-1	176.0053	13.66
Post Development	10-1	177.0053	13.65
Post Development	10-1	178.0053	13.65
Post Development	10-1	179.0053	13.64
Post Development	10-1	180.0053	13.64
Post Development	10-1	181.0053	13.64
Post Development	10-1	182.0053	13.63
Post Development	10-1	183.0053	13.63
Post Development	10-1	184.0053	13.62
Post Development	10-1	185.0053	13.62

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	186.0053	13.62
Post Development	10-1	187.0053	13.61
Post Development	10-1	188.0053	13.61
Post Development	10-1	189.0053	13.60
Post Development	10-1	190.0053	13.60
Post Development	10-1	191.0053	13.60
Post Development	10-1	192.0053	13.59
Post Development	10-1	193.0053	13.59
Post Development	10-1	194.0053	13.58
Post Development	10-1	195.0053	13.58
Post Development	10-1	196.0053	13.58
Post Development	10-1	197.0053	13.57
Post Development	10-1	198.0053	13.57
Post Development	10-1	199.0053	13.57
Post Development	10-1	200.0053	13.56
Post Development	10-1	201.0053	13.56
Post Development	10-1	202.0053	13.55
Post Development	10-1	203.0053	13.55
Post Development	10-1	204.0053	13.55
Post Development	10-1	205.0053	13.54
Post Development	10-1	206.0053	13.54
Post Development	10-1	207.0053	13.53
Post Development	10-1	208.0053	13.53
Post Development	10-1	209.0053	13.53
Post Development	10-1	210.0053	13.52
Post Development	10-1	211.0053	13.52
Post Development	10-1	212.0053	13.52
Post Development	10-1	213.0053	13.51
Post Development	10-1	214.0053	13.51
Post Development	10-1	215.0053	13.51
Post Development	10-1	216.0053	13.50
Post Development	10-1	217.0053	13.50
Post Development	10-1	218.0053	13.49
Post Development	10-1	219.0053	13.49
Post Development	10-1	220.0053	13.49
Post Development	10-1	221.0053	13.48
Post Development	10-1	222.0053	13.48
Post Development	10-1	223.0053	13.48
Post Development	10-1	224.0053	13.47
Post Development	10-1	225.0053	13.47
Post Development	10-1	226.0053	13.47
Post Development	10-1	227.0053	13.46

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	228.0053	13.46
Post Development	10-1	229.0053	13.46
Post Development	10-1	230.0053	13.45
Post Development	10-1	231.0053	13.45
Post Development	10-1	232.0053	13.45
Post Development	10-1	233.0053	13.44
Post Development	10-1	234.0053	13.44
Post Development	10-1	235.0053	13.44
Post Development	10-1	236.0053	13.43
Post Development	10-1	237.0053	13.43
Post Development	10-1	238.0053	13.43
Post Development	10-1	239.0053	13.42
Post Development	10-1	240.0053	13.42
Post Development	10-1	241.0053	13.42
Post Development	10-1	242.0053	13.41
Post Development	10-1	243.0053	13.41
Post Development	10-1	244.0053	13.41
Post Development	10-1	245.0053	13.40
Post Development	10-1	246.0053	13.40
Post Development	10-1	247.0053	13.40
Post Development	10-1	248.0053	13.39
Post Development	10-1	249.0053	13.39
Post Development	10-1	250.0053	13.39
Post Development	10-1	251.0053	13.38
Post Development	10-1	252.0053	13.38
Post Development	10-1	253.0053	13.38
Post Development	10-1	254.0053	13.38
Post Development	10-1	255.0053	13.37
Post Development	10-1	256.0053	13.37
Post Development	10-1	257.0053	13.37
Post Development	10-1	258.0053	13.36
Post Development	10-1	259.0053	13.36
Post Development	10-1	260.0053	13.36
Post Development	10-1	261.0053	13.35
Post Development	10-1	262.0053	13.35
Post Development	10-1	263.0053	13.35
Post Development	10-1	264.0053	13.35
Post Development	10-1	265.0053	13.34
Post Development	10-1	266.0053	13.34
Post Development	10-1	267.0053	13.34
Post Development	10-1	268.0053	13.33
Post Development	10-1	269.0053	13.33

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	270.0053	13.33
Post Development	10-1	271.0053	13.33
Post Development	10-1	272.0053	13.32
Post Development	10-1	273.0053	13.32
Post Development	10-1	274.0053	13.32
Post Development	10-1	275.0053	13.32
Post Development	10-1	276.0053	13.31
Post Development	10-1	277.0053	13.31
Post Development	10-1	278.0053	13.31
Post Development	10-1	279.0053	13.31
Post Development	10-1	280.0053	13.30
Post Development	10-1	281.0053	13.30
Post Development	10-1	282.0053	13.30
Post Development	10-1	283.0053	13.30
Post Development	10-1	284.0053	13.29
Post Development	10-1	285.0053	13.29
Post Development	10-1	286.0053	13.29
Post Development	10-1	287.0053	13.29
Post Development	10-1	288.0053	13.28
Post Development	10-1	289.0053	13.28
Post Development	10-1	290.0053	13.28
Post Development	10-1	291.0053	13.28
Post Development	10-1	292.0053	13.27
Post Development	10-1	293.0053	13.27
Post Development	10-1	294.0053	13.27
Post Development	10-1	295.0053	13.27
Post Development	10-1	296.0053	13.26
Post Development	10-1	297.0053	13.26
Post Development	10-1	298.0053	13.26
Post Development	10-1	299.0053	13.26
Post Development	10-1	300.0053	13.26
Post Development	10-1	301.0053	13.25
Post Development	10-1	302.0053	13.25
Post Development	10-1	303.0053	13.25
Post Development	10-1	304.0053	13.25
Post Development	10-1	305.0053	13.25
Post Development	10-1	306.0053	13.24
Post Development	10-1	307.0053	13.24
Post Development	10-1	308.0053	13.24
Post Development	10-1	309.0053	13.24
Post Development	10-1	310.0053	13.24
Post Development	10-1	311.0053	13.23

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	312.0053	13.23
Post Development	10-1	313.0053	13.23
Post Development	10-1	314.0053	13.23
Post Development	10-1	315.0053	13.23
Post Development	10-1	316.0053	13.22
Post Development	10-1	317.0053	13.22
Post Development	10-1	318.0053	13.22
Post Development	10-1	319.0053	13.22
Post Development	10-1	320.0053	13.22
Post Development	10-1	321.0053	13.22
Post Development	10-1	322.0053	13.21
Post Development	10-1	323.0053	13.21
Post Development	10-1	324.0053	13.21
Post Development	10-1	325.0053	13.21
Post Development	10-1	326.0053	13.21
Post Development	10-1	327.0053	13.21
Post Development	10-1	328.0053	13.20
Post Development	10-1	329.0053	13.20
Post Development	10-1	330.0053	13.20
Post Development	10-1	331.0053	13.20
Post Development	10-1	332.0053	13.20
Post Development	10-1	333.0053	13.20
Post Development	10-1	334.0053	13.20
Post Development	10-1	335.0053	13.19
Post Development	10-1	336.0053	13.19
Post Development	10-1	337.0053	13.19
Post Development	10-1	338.0053	13.19
Post Development	10-1	339.0053	13.19
Post Development	10-1	340.0053	13.19
Post Development	10-1	341.0053	13.19
Post Development	10-1	342.0053	13.18
Post Development	10-1	343.0053	13.18
Post Development	10-1	344.0053	13.18
Post Development	10-1	345.0053	13.18
Post Development	10-1	346.0053	13.18
Post Development	10-1	347.0053	13.18
Post Development	10-1	348.0053	13.18
Post Development	10-1	349.0053	13.18
Post Development	10-1	350.0053	13.17
Post Development	10-1	351.0053	13.17
Post Development	10-1	352.0053	13.17
Post Development	10-1	353.0053	13.17

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	354.0053	13.17
Post Development	10-1	355.0053	13.17
Post Development	10-1	356.0053	13.17
Post Development	10-1	357.0053	13.17
Post Development	10-1	358.0053	13.17
Post Development	10-1	359.0053	13.16
Post Development	10-3	0.0000	12.00
Post Development	10-3	1.0027	12.00
Post Development	10-3	2.0027	12.00
Post Development	10-3	3.0027	12.00
Post Development	10-3	4.0027	12.00
Post Development	10-3	5.0027	12.01
Post Development	10-3	6.0027	12.01
Post Development	10-3	7.0027	12.02
Post Development	10-3	8.0027	12.03
Post Development	10-3	9.0027	12.04
Post Development	10-3	10.0027	12.05
Post Development	10-3	11.0027	12.07
Post Development	10-3	12.0027	12.08
Post Development	10-3	13.0027	12.09
Post Development	10-3	14.0027	12.11
Post Development	10-3	15.0027	12.12
Post Development	10-3	16.0027	12.14
Post Development	10-3	17.0027	12.16
Post Development	10-3	18.0027	12.17
Post Development	10-3	19.0027	12.19
Post Development	10-3	20.0027	12.21
Post Development	10-3	21.0027	12.23
Post Development	10-3	22.0027	12.24
Post Development	10-3	23.0027	12.26
Post Development	10-3	24.0027	12.28
Post Development	10-3	25.0027	12.30
Post Development	10-3	26.0027	12.33
Post Development	10-3	27.0027	12.35
Post Development	10-3	28.0027	12.38
Post Development	10-3	29.0027	12.41
Post Development	10-3	30.0027	12.44
Post Development	10-3	31.0027	12.46
Post Development	10-3	32.0027	12.49
Post Development	10-3	33.0027	12.52
Post Development	10-3	34.0027	12.55
Post Development	10-3	35.0027	12.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	36.0027	12.61
Post Development	10-3	37.0027	12.63
Post Development	10-3	38.0027	12.66
Post Development	10-3	39.0027	12.69
Post Development	10-3	40.0027	12.72
Post Development	10-3	41.0027	12.75
Post Development	10-3	42.0027	12.77
Post Development	10-3	43.0027	12.80
Post Development	10-3	44.0027	12.83
Post Development	10-3	45.0027	12.86
Post Development	10-3	46.0027	12.89
Post Development	10-3	47.0027	12.91
Post Development	10-3	48.0027	12.94
Post Development	10-3	49.0027	12.97
Post Development	10-3	50.0027	13.00
Post Development	10-3	51.0027	13.03
Post Development	10-3	52.0027	13.07
Post Development	10-3	53.0027	13.11
Post Development	10-3	54.0027	13.16
Post Development	10-3	55.0027	13.23
Post Development	10-3	56.0027	13.30
Post Development	10-3	57.0027	13.38
Post Development	10-3	58.0027	13.48
Post Development	10-3	59.0032	13.60
Post Development	10-3	60.0004	13.91
Post Development	10-3	61.0010	14.63
Post Development	10-3	62.0047	14.92
Post Development	10-3	63.0001	15.05
Post Development	10-3	64.0001	15.10
Post Development	10-3	65.0001	15.12
Post Development	10-3	66.0001	15.13
Post Development	10-3	67.0001	15.13
Post Development	10-3	68.0001	15.13
Post Development	10-3	69.0001	15.13
Post Development	10-3	70.0001	15.12
Post Development	10-3	71.0001	15.11
Post Development	10-3	72.0001	15.11
Post Development	10-3	73.0001	15.09
Post Development	10-3	74.0001	15.07
Post Development	10-3	75.0001	15.06
Post Development	10-3	76.0001	15.04
Post Development	10-3	77.0001	15.03

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	78.0001	15.02
Post Development	10-3	79.0001	15.01
Post Development	10-3	80.0001	15.01
Post Development	10-3	81.0001	15.00
Post Development	10-3	82.0001	14.99
Post Development	10-3	83.0001	14.99
Post Development	10-3	84.0001	14.98
Post Development	10-3	85.0001	14.97
Post Development	10-3	86.0001	14.97
Post Development	10-3	87.0001	14.96
Post Development	10-3	88.0001	14.95
Post Development	10-3	89.0001	14.95
Post Development	10-3	90.0001	14.94
Post Development	10-3	91.0001	14.94
Post Development	10-3	92.0001	14.93
Post Development	10-3	93.0001	14.92
Post Development	10-3	94.0001	14.92
Post Development	10-3	95.0001	14.91
Post Development	10-3	96.0001	14.90
Post Development	10-3	97.0001	14.90
Post Development	10-3	98.0001	14.89
Post Development	10-3	99.0001	14.88
Post Development	10-3	100.0001	14.88
Post Development	10-3	101.0001	14.87
Post Development	10-3	102.0001	14.87
Post Development	10-3	103.0001	14.86
Post Development	10-3	104.0001	14.85
Post Development	10-3	105.0001	14.85
Post Development	10-3	106.0001	14.84
Post Development	10-3	107.0001	14.83
Post Development	10-3	108.0001	14.83
Post Development	10-3	109.0001	14.82
Post Development	10-3	110.0001	14.82
Post Development	10-3	111.0001	14.81
Post Development	10-3	112.0001	14.80
Post Development	10-3	113.0001	14.80
Post Development	10-3	114.0001	14.79
Post Development	10-3	115.0001	14.78
Post Development	10-3	116.0001	14.78
Post Development	10-3	117.0001	14.77
Post Development	10-3	118.0001	14.77
Post Development	10-3	119.0001	14.76

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	120.0001	14.75
Post Development	10-3	121.0001	14.75
Post Development	10-3	122.0001	14.74
Post Development	10-3	123.0001	14.73
Post Development	10-3	124.0001	14.73
Post Development	10-3	125.0001	14.72
Post Development	10-3	126.0001	14.72
Post Development	10-3	127.0001	14.71
Post Development	10-3	128.0001	14.70
Post Development	10-3	129.0001	14.70
Post Development	10-3	130.0001	14.69
Post Development	10-3	131.0001	14.69
Post Development	10-3	132.0001	14.68
Post Development	10-3	133.0001	14.67
Post Development	10-3	134.0001	14.67
Post Development	10-3	135.0001	14.66
Post Development	10-3	136.0001	14.66
Post Development	10-3	137.0001	14.65
Post Development	10-3	138.0001	14.64
Post Development	10-3	139.0001	14.64
Post Development	10-3	140.0001	14.63
Post Development	10-3	141.0001	14.63
Post Development	10-3	142.0001	14.62
Post Development	10-3	143.0001	14.61
Post Development	10-3	144.0001	14.61
Post Development	10-3	145.0001	14.60
Post Development	10-3	146.0001	14.59
Post Development	10-3	147.0001	14.59
Post Development	10-3	148.0001	14.58
Post Development	10-3	149.0001	14.58
Post Development	10-3	150.0001	14.57
Post Development	10-3	151.0001	14.57
Post Development	10-3	152.0001	14.56
Post Development	10-3	153.0001	14.55
Post Development	10-3	154.0001	14.55
Post Development	10-3	155.0001	14.54
Post Development	10-3	156.0001	14.54
Post Development	10-3	157.0001	14.53
Post Development	10-3	158.0001	14.52
Post Development	10-3	159.0001	14.52
Post Development	10-3	160.0001	14.51
Post Development	10-3	161.0001	14.51

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	162.0001	14.50
Post Development	10-3	163.0001	14.49
Post Development	10-3	164.0001	14.49
Post Development	10-3	165.0001	14.48
Post Development	10-3	166.0001	14.48
Post Development	10-3	167.0001	14.47
Post Development	10-3	168.0001	14.47
Post Development	10-3	169.0001	14.46
Post Development	10-3	170.0001	14.45
Post Development	10-3	171.0001	14.45
Post Development	10-3	172.0001	14.44
Post Development	10-3	173.0001	14.44
Post Development	10-3	174.0001	14.43
Post Development	10-3	175.0001	14.42
Post Development	10-3	176.0001	14.42
Post Development	10-3	177.0001	14.41
Post Development	10-3	178.0001	14.41
Post Development	10-3	179.0001	14.40
Post Development	10-3	180.0001	14.40
Post Development	10-3	181.0001	14.39
Post Development	10-3	182.0001	14.38
Post Development	10-3	183.0001	14.38
Post Development	10-3	184.0001	14.37
Post Development	10-3	185.0001	14.37
Post Development	10-3	186.0001	14.36
Post Development	10-3	187.0001	14.36
Post Development	10-3	188.0001	14.35
Post Development	10-3	189.0001	14.34
Post Development	10-3	190.0001	14.34
Post Development	10-3	191.0001	14.33
Post Development	10-3	192.0001	14.33
Post Development	10-3	193.0001	14.32
Post Development	10-3	194.0001	14.32
Post Development	10-3	195.0001	14.31
Post Development	10-3	196.0001	14.31
Post Development	10-3	197.0001	14.30
Post Development	10-3	198.0001	14.29
Post Development	10-3	199.0001	14.29
Post Development	10-3	200.0001	14.28
Post Development	10-3	201.0001	14.28
Post Development	10-3	202.0001	14.27
Post Development	10-3	203.0001	14.27

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	204.0001	14.26
Post Development	10-3	205.0001	14.26
Post Development	10-3	206.0001	14.25
Post Development	10-3	207.0001	14.24
Post Development	10-3	208.0001	14.24
Post Development	10-3	209.0001	14.23
Post Development	10-3	210.0001	14.23
Post Development	10-3	211.0001	14.22
Post Development	10-3	212.0001	14.22
Post Development	10-3	213.0001	14.21
Post Development	10-3	214.0001	14.21
Post Development	10-3	215.0001	14.20
Post Development	10-3	216.0001	14.20
Post Development	10-3	217.0001	14.19
Post Development	10-3	218.0001	14.18
Post Development	10-3	219.0001	14.18
Post Development	10-3	220.0001	14.17
Post Development	10-3	221.0001	14.17
Post Development	10-3	222.0001	14.16
Post Development	10-3	223.0001	14.16
Post Development	10-3	224.0001	14.15
Post Development	10-3	225.0001	14.15
Post Development	10-3	226.0001	14.14
Post Development	10-3	227.0001	14.14
Post Development	10-3	228.0001	14.13
Post Development	10-3	229.0001	14.13
Post Development	10-3	230.0001	14.12
Post Development	10-3	231.0001	14.12
Post Development	10-3	232.0001	14.11
Post Development	10-3	233.0001	14.10
Post Development	10-3	234.0001	14.10
Post Development	10-3	235.0001	14.09
Post Development	10-3	236.0001	14.09
Post Development	10-3	237.0001	14.08
Post Development	10-3	238.0001	14.08
Post Development	10-3	239.0001	14.07
Post Development	10-3	240.0001	14.07
Post Development	10-3	241.0001	14.06
Post Development	10-3	242.0001	14.06
Post Development	10-3	243.0001	14.05
Post Development	10-3	244.0001	14.05
Post Development	10-3	245.0001	14.04

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	246.0001	14.04
Post Development	10-3	247.0001	14.03
Post Development	10-3	248.0001	14.03
Post Development	10-3	249.0001	14.02
Post Development	10-3	250.0001	14.02
Post Development	10-3	251.0001	14.01
Post Development	10-3	252.0001	14.01
Post Development	10-3	253.0001	14.00
Post Development	10-3	254.0001	14.00
Post Development	10-3	255.0001	13.99
Post Development	10-3	256.0001	13.99
Post Development	10-3	257.0001	13.98
Post Development	10-3	258.0001	13.98
Post Development	10-3	259.0001	13.97
Post Development	10-3	260.0001	13.97
Post Development	10-3	261.0001	13.96
Post Development	10-3	262.0001	13.96
Post Development	10-3	263.0001	13.95
Post Development	10-3	264.0001	13.95
Post Development	10-3	265.0001	13.94
Post Development	10-3	266.0001	13.94
Post Development	10-3	267.0001	13.93
Post Development	10-3	268.0001	13.93
Post Development	10-3	269.0001	13.92
Post Development	10-3	270.0001	13.92
Post Development	10-3	271.0001	13.91
Post Development	10-3	272.0001	13.91
Post Development	10-3	273.0001	13.90
Post Development	10-3	274.0001	13.90
Post Development	10-3	275.0001	13.89
Post Development	10-3	276.0001	13.89
Post Development	10-3	277.0001	13.88
Post Development	10-3	278.0001	13.88
Post Development	10-3	279.0001	13.87
Post Development	10-3	280.0001	13.87
Post Development	10-3	281.0001	13.86
Post Development	10-3	282.0001	13.86
Post Development	10-3	283.0001	13.85
Post Development	10-3	284.0001	13.85
Post Development	10-3	285.0001	13.85
Post Development	10-3	286.0001	13.84
Post Development	10-3	287.0001	13.84

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	288.0001	13.83
Post Development	10-3	289.0001	13.83
Post Development	10-3	290.0001	13.82
Post Development	10-3	291.0001	13.82
Post Development	10-3	292.0001	13.81
Post Development	10-3	293.0001	13.81
Post Development	10-3	294.0001	13.80
Post Development	10-3	295.0001	13.80
Post Development	10-3	296.0001	13.79
Post Development	10-3	297.0001	13.79
Post Development	10-3	298.0001	13.79
Post Development	10-3	299.0001	13.78
Post Development	10-3	300.0001	13.78
Post Development	10-3	301.0001	13.77
Post Development	10-3	302.0001	13.77
Post Development	10-3	303.0001	13.76
Post Development	10-3	304.0001	13.76
Post Development	10-3	305.0001	13.75
Post Development	10-3	306.0001	13.75
Post Development	10-3	307.0001	13.75
Post Development	10-3	308.0001	13.74
Post Development	10-3	309.0001	13.74
Post Development	10-3	310.0001	13.73
Post Development	10-3	311.0001	13.73
Post Development	10-3	312.0001	13.72
Post Development	10-3	313.0001	13.72
Post Development	10-3	314.0001	13.71
Post Development	10-3	315.0001	13.71
Post Development	10-3	316.0001	13.71
Post Development	10-3	317.0001	13.70
Post Development	10-3	318.0001	13.70
Post Development	10-3	319.0001	13.69
Post Development	10-3	320.0001	13.69
Post Development	10-3	321.0001	13.68
Post Development	10-3	322.0001	13.68
Post Development	10-3	323.0001	13.68
Post Development	10-3	324.0001	13.67
Post Development	10-3	325.0001	13.67
Post Development	10-3	326.0001	13.66
Post Development	10-3	327.0001	13.66
Post Development	10-3	328.0001	13.65
Post Development	10-3	329.0001	13.65

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	330.0001	13.65
Post Development	10-3	331.0001	13.64
Post Development	10-3	332.0001	13.64
Post Development	10-3	333.0001	13.63
Post Development	10-3	334.0001	13.63
Post Development	10-3	335.0001	13.63
Post Development	10-3	336.0001	13.62
Post Development	10-3	337.0001	13.62
Post Development	10-3	338.0001	13.61
Post Development	10-3	339.0001	13.61
Post Development	10-3	340.0001	13.61
Post Development	10-3	341.0001	13.60
Post Development	10-3	342.0001	13.60
Post Development	10-3	343.0001	13.59
Post Development	10-3	344.0001	13.59
Post Development	10-3	345.0001	13.59
Post Development	10-3	346.0001	13.58
Post Development	10-3	347.0001	13.58
Post Development	10-3	348.0001	13.57
Post Development	10-3	349.0001	13.57
Post Development	10-3	350.0001	13.57
Post Development	10-3	351.0001	13.56
Post Development	10-3	352.0001	13.56
Post Development	10-3	353.0001	13.56
Post Development	10-3	354.0001	13.55
Post Development	10-3	355.0001	13.55
Post Development	10-3	356.0001	13.54
Post Development	10-3	357.0001	13.54
Post Development	10-3	358.0001	13.54
Post Development	10-3	359.0001	13.53
Post Development	25-3	0.0000	12.00
Post Development	25-3	1.0027	12.00
Post Development	25-3	2.0027	12.00
Post Development	25-3	3.0027	12.00
Post Development	25-3	4.0027	12.00
Post Development	25-3	5.0027	12.01
Post Development	25-3	6.0027	12.02
Post Development	25-3	7.0027	12.03
Post Development	25-3	8.0027	12.04
Post Development	25-3	9.0027	12.05
Post Development	25-3	10.0027	12.07
Post Development	25-3	11.0027	12.08

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	12.0027	12.10
Post Development	25-3	13.0027	12.11
Post Development	25-3	14.0027	12.13
Post Development	25-3	15.0027	12.15
Post Development	25-3	16.0027	12.17
Post Development	25-3	17.0027	12.19
Post Development	25-3	18.0027	12.21
Post Development	25-3	19.0027	12.23
Post Development	25-3	20.0027	12.25
Post Development	25-3	21.0027	12.27
Post Development	25-3	22.0027	12.29
Post Development	25-3	23.0027	12.31
Post Development	25-3	24.0027	12.33
Post Development	25-3	25.0027	12.35
Post Development	25-3	26.0027	12.38
Post Development	25-3	27.0027	12.41
Post Development	25-3	28.0027	12.44
Post Development	25-3	29.0027	12.47
Post Development	25-3	30.0027	12.50
Post Development	25-3	31.0027	12.54
Post Development	25-3	32.0027	12.57
Post Development	25-3	33.0027	12.60
Post Development	25-3	34.0027	12.63
Post Development	25-3	35.0027	12.66
Post Development	25-3	36.0027	12.69
Post Development	25-3	37.0027	12.72
Post Development	25-3	38.0027	12.75
Post Development	25-3	39.0027	12.78
Post Development	25-3	40.0027	12.82
Post Development	25-3	41.0027	12.85
Post Development	25-3	42.0027	12.88
Post Development	25-3	43.0027	12.91
Post Development	25-3	44.0027	12.94
Post Development	25-3	45.0027	12.97
Post Development	25-3	46.0027	13.00
Post Development	25-3	47.0027	13.03
Post Development	25-3	48.0027	13.06
Post Development	25-3	49.0027	13.09
Post Development	25-3	50.0027	13.12
Post Development	25-3	51.0027	13.16
Post Development	25-3	52.0027	13.20
Post Development	25-3	53.0027	13.24

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	54.0027	13.30
Post Development	25-3	55.0027	13.36
Post Development	25-3	56.0027	13.44
Post Development	25-3	57.0027	13.53
Post Development	25-3	58.0027	13.64
Post Development	25-3	59.0002	13.77
Post Development	25-3	60.0001	14.10
Post Development	25-3	61.0004	14.87
Post Development	25-3	62.0038	15.18
Post Development	25-3	63.0057	15.24
Post Development	25-3	64.0057	15.23
Post Development	25-3	65.0057	15.22
Post Development	25-3	66.0057	15.19
Post Development	25-3	67.0057	15.18
Post Development	25-3	68.0057	15.17
Post Development	25-3	69.0057	15.15
Post Development	25-3	70.0057	15.14
Post Development	25-3	71.0057	15.13
Post Development	25-3	72.0057	15.12
Post Development	25-3	73.0057	15.11
Post Development	25-3	74.0057	15.08
Post Development	25-3	75.0057	15.06
Post Development	25-3	76.0057	15.05
Post Development	25-3	77.0057	15.04
Post Development	25-3	78.0057	15.03
Post Development	25-3	79.0057	15.02
Post Development	25-3	80.0057	15.01
Post Development	25-3	81.0057	15.00
Post Development	25-3	82.0057	15.00
Post Development	25-3	83.0057	14.99
Post Development	25-3	84.0057	14.98
Post Development	25-3	85.0057	14.98
Post Development	25-3	86.0057	14.97
Post Development	25-3	87.0057	14.96
Post Development	25-3	88.0057	14.96
Post Development	25-3	89.0057	14.95
Post Development	25-3	90.0057	14.94
Post Development	25-3	91.0057	14.94
Post Development	25-3	92.0057	14.93
Post Development	25-3	93.0057	14.93
Post Development	25-3	94.0057	14.92
Post Development	25-3	95.0057	14.91

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	96.0057	14.91
Post Development	25-3	97.0057	14.90
Post Development	25-3	98.0057	14.89
Post Development	25-3	99.0057	14.89
Post Development	25-3	100.0057	14.88
Post Development	25-3	101.0057	14.87
Post Development	25-3	102.0057	14.87
Post Development	25-3	103.0057	14.86
Post Development	25-3	104.0057	14.86
Post Development	25-3	105.0057	14.85
Post Development	25-3	106.0057	14.84
Post Development	25-3	107.0057	14.84
Post Development	25-3	108.0057	14.83
Post Development	25-3	109.0057	14.82
Post Development	25-3	110.0057	14.82
Post Development	25-3	111.0057	14.81
Post Development	25-3	112.0057	14.81
Post Development	25-3	113.0057	14.80
Post Development	25-3	114.0057	14.79
Post Development	25-3	115.0057	14.79
Post Development	25-3	116.0057	14.78
Post Development	25-3	117.0057	14.77
Post Development	25-3	118.0057	14.77
Post Development	25-3	119.0057	14.76
Post Development	25-3	120.0057	14.76
Post Development	25-3	121.0057	14.75
Post Development	25-3	122.0057	14.74
Post Development	25-3	123.0057	14.74
Post Development	25-3	124.0057	14.73
Post Development	25-3	125.0057	14.72
Post Development	25-3	126.0057	14.72
Post Development	25-3	127.0057	14.71
Post Development	25-3	128.0057	14.71
Post Development	25-3	129.0057	14.70
Post Development	25-3	130.0057	14.69
Post Development	25-3	131.0057	14.69
Post Development	25-3	132.0057	14.68
Post Development	25-3	133.0057	14.68
Post Development	25-3	134.0057	14.67
Post Development	25-3	135.0057	14.66
Post Development	25-3	136.0057	14.66
Post Development	25-3	137.0057	14.65

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	138.0057	14.65
Post Development	25-3	139.0057	14.64
Post Development	25-3	140.0057	14.63
Post Development	25-3	141.0057	14.63
Post Development	25-3	142.0057	14.62
Post Development	25-3	143.0057	14.62
Post Development	25-3	144.0057	14.61
Post Development	25-3	145.0057	14.60
Post Development	25-3	146.0057	14.60
Post Development	25-3	147.0057	14.59
Post Development	25-3	148.0057	14.59
Post Development	25-3	149.0057	14.58
Post Development	25-3	150.0057	14.57
Post Development	25-3	151.0057	14.57
Post Development	25-3	152.0057	14.56
Post Development	25-3	153.0057	14.56
Post Development	25-3	154.0057	14.55
Post Development	25-3	155.0057	14.54
Post Development	25-3	156.0057	14.54
Post Development	25-3	157.0057	14.53
Post Development	25-3	158.0057	14.53
Post Development	25-3	159.0057	14.52
Post Development	25-3	160.0057	14.51
Post Development	25-3	161.0057	14.51
Post Development	25-3	162.0057	14.50
Post Development	25-3	163.0057	14.50
Post Development	25-3	164.0057	14.49
Post Development	25-3	165.0057	14.48
Post Development	25-3	166.0057	14.48
Post Development	25-3	167.0057	14.47
Post Development	25-3	168.0057	14.47
Post Development	25-3	169.0057	14.46
Post Development	25-3	170.0057	14.46
Post Development	25-3	171.0057	14.45
Post Development	25-3	172.0057	14.44
Post Development	25-3	173.0057	14.44
Post Development	25-3	174.0057	14.43
Post Development	25-3	175.0057	14.43
Post Development	25-3	176.0057	14.42
Post Development	25-3	177.0057	14.42
Post Development	25-3	178.0057	14.41
Post Development	25-3	179.0057	14.40

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	180.0057	14.40
Post Development	25-3	181.0057	14.39
Post Development	25-3	182.0057	14.39
Post Development	25-3	183.0057	14.38
Post Development	25-3	184.0057	14.38
Post Development	25-3	185.0057	14.37
Post Development	25-3	186.0057	14.36
Post Development	25-3	187.0057	14.36
Post Development	25-3	188.0057	14.35
Post Development	25-3	189.0057	14.35
Post Development	25-3	190.0057	14.34
Post Development	25-3	191.0057	14.34
Post Development	25-3	192.0057	14.33
Post Development	25-3	193.0057	14.32
Post Development	25-3	194.0057	14.32
Post Development	25-3	195.0057	14.31
Post Development	25-3	196.0057	14.31
Post Development	25-3	197.0057	14.30
Post Development	25-3	198.0057	14.30
Post Development	25-3	199.0057	14.29
Post Development	25-3	200.0057	14.29
Post Development	25-3	201.0057	14.28
Post Development	25-3	202.0057	14.27
Post Development	25-3	203.0057	14.27
Post Development	25-3	204.0057	14.26
Post Development	25-3	205.0057	14.26
Post Development	25-3	206.0057	14.25
Post Development	25-3	207.0057	14.25
Post Development	25-3	208.0057	14.24
Post Development	25-3	209.0057	14.24
Post Development	25-3	210.0057	14.23
Post Development	25-3	211.0057	14.22
Post Development	25-3	212.0057	14.22
Post Development	25-3	213.0057	14.21
Post Development	25-3	214.0057	14.21
Post Development	25-3	215.0057	14.20
Post Development	25-3	216.0057	14.20
Post Development	25-3	217.0057	14.19
Post Development	25-3	218.0057	14.19
Post Development	25-3	219.0057	14.18
Post Development	25-3	220.0057	14.18
Post Development	25-3	221.0057	14.17

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	222.0057	14.17
Post Development	25-3	223.0057	14.16
Post Development	25-3	224.0057	14.15
Post Development	25-3	225.0057	14.15
Post Development	25-3	226.0057	14.14
Post Development	25-3	227.0057	14.14
Post Development	25-3	228.0057	14.13
Post Development	25-3	229.0057	14.13
Post Development	25-3	230.0057	14.12
Post Development	25-3	231.0057	14.12
Post Development	25-3	232.0057	14.11
Post Development	25-3	233.0057	14.11
Post Development	25-3	234.0057	14.10
Post Development	25-3	235.0057	14.10
Post Development	25-3	236.0057	14.09
Post Development	25-3	237.0057	14.09
Post Development	25-3	238.0057	14.08
Post Development	25-3	239.0057	14.08
Post Development	25-3	240.0057	14.07
Post Development	25-3	241.0057	14.06
Post Development	25-3	242.0057	14.06
Post Development	25-3	243.0057	14.05
Post Development	25-3	244.0057	14.05
Post Development	25-3	245.0057	14.04
Post Development	25-3	246.0057	14.04
Post Development	25-3	247.0057	14.03
Post Development	25-3	248.0057	14.03
Post Development	25-3	249.0057	14.02
Post Development	25-3	250.0057	14.02
Post Development	25-3	251.0057	14.01
Post Development	25-3	252.0057	14.01
Post Development	25-3	253.0057	14.00
Post Development	25-3	254.0057	14.00
Post Development	25-3	255.0057	13.99
Post Development	25-3	256.0057	13.99
Post Development	25-3	257.0057	13.98
Post Development	25-3	258.0057	13.98
Post Development	25-3	259.0057	13.97
Post Development	25-3	260.0057	13.97
Post Development	25-3	261.0057	13.96
Post Development	25-3	262.0057	13.96
Post Development	25-3	263.0057	13.95

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	264.0057	13.95
Post Development	25-3	265.0057	13.94
Post Development	25-3	266.0057	13.94
Post Development	25-3	267.0057	13.93
Post Development	25-3	268.0057	13.93
Post Development	25-3	269.0057	13.92
Post Development	25-3	270.0057	13.92
Post Development	25-3	271.0057	13.91
Post Development	25-3	272.0057	13.91
Post Development	25-3	273.0057	13.90
Post Development	25-3	274.0057	13.90
Post Development	25-3	275.0057	13.90
Post Development	25-3	276.0057	13.89
Post Development	25-3	277.0057	13.89
Post Development	25-3	278.0057	13.88
Post Development	25-3	279.0057	13.88
Post Development	25-3	280.0057	13.87
Post Development	25-3	281.0057	13.87
Post Development	25-3	282.0057	13.86
Post Development	25-3	283.0057	13.86
Post Development	25-3	284.0057	13.85
Post Development	25-3	285.0057	13.85
Post Development	25-3	286.0057	13.84
Post Development	25-3	287.0057	13.84
Post Development	25-3	288.0057	13.83
Post Development	25-3	289.0057	13.83
Post Development	25-3	290.0057	13.82
Post Development	25-3	291.0057	13.82
Post Development	25-3	292.0057	13.81
Post Development	25-3	293.0057	13.81
Post Development	25-3	294.0057	13.81
Post Development	25-3	295.0057	13.80
Post Development	25-3	296.0057	13.80
Post Development	25-3	297.0057	13.79
Post Development	25-3	298.0057	13.79
Post Development	25-3	299.0057	13.78
Post Development	25-3	300.0057	13.78
Post Development	25-3	301.0057	13.77
Post Development	25-3	302.0057	13.77
Post Development	25-3	303.0057	13.76
Post Development	25-3	304.0057	13.76
Post Development	25-3	305.0057	13.76

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	306.0057	13.75
Post Development	25-3	307.0057	13.75
Post Development	25-3	308.0057	13.74
Post Development	25-3	309.0057	13.74
Post Development	25-3	310.0057	13.73
Post Development	25-3	311.0057	13.73
Post Development	25-3	312.0057	13.72
Post Development	25-3	313.0057	13.72
Post Development	25-3	314.0057	13.72
Post Development	25-3	315.0057	13.71
Post Development	25-3	316.0057	13.71
Post Development	25-3	317.0057	13.70
Post Development	25-3	318.0057	13.70
Post Development	25-3	319.0057	13.69
Post Development	25-3	320.0057	13.69
Post Development	25-3	321.0057	13.69
Post Development	25-3	322.0057	13.68
Post Development	25-3	323.0057	13.68
Post Development	25-3	324.0057	13.67
Post Development	25-3	325.0057	13.67
Post Development	25-3	326.0057	13.66
Post Development	25-3	327.0057	13.66
Post Development	25-3	328.0057	13.66
Post Development	25-3	329.0057	13.65
Post Development	25-3	330.0057	13.65
Post Development	25-3	331.0057	13.64
Post Development	25-3	332.0057	13.64
Post Development	25-3	333.0057	13.64
Post Development	25-3	334.0057	13.63
Post Development	25-3	335.0057	13.63
Post Development	25-3	336.0057	13.62
Post Development	25-3	337.0057	13.62
Post Development	25-3	338.0057	13.62
Post Development	25-3	339.0057	13.61
Post Development	25-3	340.0057	13.61
Post Development	25-3	341.0057	13.60
Post Development	25-3	342.0057	13.60
Post Development	25-3	343.0057	13.60
Post Development	25-3	344.0057	13.59
Post Development	25-3	345.0057	13.59
Post Development	25-3	346.0057	13.58
Post Development	25-3	347.0057	13.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	348.0057	13.58
Post Development	25-3	349.0057	13.57
Post Development	25-3	350.0057	13.57
Post Development	25-3	351.0057	13.56
Post Development	25-3	352.0057	13.56
Post Development	25-3	353.0057	13.56
Post Development	25-3	354.0057	13.55
Post Development	25-3	355.0057	13.55
Post Development	25-3	356.0057	13.55
Post Development	25-3	357.0057	13.54
Post Development	25-3	358.0057	13.54
Post Development	25-3	359.0057	13.53

APPENDIX D: Geotechnical Report

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

January 16, 2025

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458
Phone: (561) 561-847-7533 Email: jenai.ferguson@meritagehomes.com

Subject: Report Summary: Report of Geotechnical Exploration
Sunrise Townhomes
Sunrise Blvd
Fort Pierce, Florida

Dear Ms. Ferguson:

Nutting Engineers of Florida, Inc. has performed a Geotechnical Exploration at the above referenced project in accordance with your authorization to proceed provided on December 18, 2024. Included in the report are our observations, results of our exploration, analysis, and recommendations for the proposed development.

The site covers approximately 22 acres and currently is vacant with six inches to three feet of standing water covering approximately two-thirds of the site under water and heavy vegetation. In summary, our test borings and test pits indicate that in general the development of the proposed buildings, roadways, etc. may be performed using conventional construction methods and may be supported on conventional shallow foundations. Once the site improvement has been completed as outlined herein, the proposed structures may be supported upon a shallow foundation system utilizing an allowable soil bearing pressure of 3,000 pounds per square foot. Additionally, the subsurface soils encountered on site can be utilized as fill for the project.

Thank you for providing us the opportunity to be a part of your team for this project. If you have any questions or require further assistance, please contact us at your convenience.

Respectfully submitted,
Nutting Engineers of Florida, Inc.

Stephen J. Mrachek, P.E.
Senior Engineer

REPORT OF
GEOTECHNICAL EXPLORATION

SUNRISE TOWNHOMES
SUNRISE BLVD
FORT PIERCE, FLORIDA

FOR

MERITAGE HOMES
1395 UNIVERSITY BLVD, SUITE 300
JUPITER, FLORIDA 33458

PREPARED BY

NUTTING ENGINEERS OF FLORIDA, INC.
615 SW BILTMORE STREET
PORT ST. LUCIE, FLORIDA 34983

PROJECT No. 551.12

JANUARY 2025

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

January 16, 2025

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458
Phone: (561) 561-847-7533 Email: jenai.ferguson@meritagehomes.com

Subject: Report of Geotechnical Exploration
Sunrise Townhomes
Sunrise Blvd
Fort Pierce, Florida

Dear Ms. Ferguson:

Nutting Engineers of Florida, Inc. (NE), has performed a Geotechnical Exploration for the proposed development at the above referenced site in Fort Pierce, Florida. This exploration was performed in accordance with an authorization to proceed provided by Meritage Homes on December 18, 2024. This evaluation was performed to develop information regarding subsurface soil conditions at specific test locations which along with proposed construction information provided was used to develop opinions regarding earthwork procedures and foundations for support of the proposed construction. This report presents our findings and recommendations based upon the information examined at the time of this evaluation.

PROJECT INFORMATION

We understand that preliminary plans for this project include the construction of a residential development consisting of approximately 112 townhome units (15 buildings) at the 12.5-acre referenced site. Additional improvements will include a 0.76-acre amenity area, 1.39-acre lake, asphalt paved parking and drive areas, and site utilities. We were provided with a conceptual site plan indicating the proposed improvements.

The residential structures are planned to consist of concrete block construction and be supported upon a shallow foundation system similar to surrounding neighborhoods.

NE should be notified in writing by the client of any changes in the proposed construction along with a request to amend our foundation analysis and/or recommendations within this report as appropriate.

Existing Site Conditions and Historical Aerial Photograph Review

Currently, the site is vacant with heavy vegetation along toe perimeter of the site. The vegetation includes pine trees, palm trees, Brazilian pepper trees, and Melaleucas. The interior of the site is primarily grasses with and plants commonly seen in wetlands. Additionally, approximately six inches to three feet of standing water is present on the southern two thirds of the property.

Historically, based on a limited review of available aerial photographs obtained by our office, from at least 1958 the site has low lying areas indicative of wetlands and upland areas that were vacant containing native grasses and few trees. From 1958 to present, the site has remained in the same state with the exception of continued vegetation growth.

SUBSURFACE CONDITIONS

Subsurface Exploration

In order to explore the subsurface soil conditions Nutting Engineers of Florida, Inc. proposed ten (10) Standard Penetration Test (SPT) borings (ASTM D-1586) to depths of fifteen to thirty feet below land surface, but due to the site conditions (standing water) only five (5) borings were performed.. In addition to the borings, twenty-three (23), mini-trackhoe excavated test pits were performed to depths of one to ten feet below existing grades, where the cave-in or the maximum reach of the equipment was encountered. The locations of the test borings and test pits are indicated on the boring location plan presented in the Appendix of this report. The test locations were identified in the field using approximate methods; namely, a measuring wheel and available surface controls. As such the soil boring locations should be considered to be approximate.

In addition, Nutting Engineers proposed to perform four 'Usual Open-Hole' exfiltration tests in accordance with South Florida Water Management District specifications, but due to site conditions (standing water) only two tests were performed. The exfiltration tests were completed to depths of six feet.

Test Boring Results

In general, the borings encountered a loose gray fine sand to depths of two and a half to three feet underlain by medium dense dark brown fine sand with trace silt to depths of four and a half to seven feet below grade. Thereafter brown to light brown fine sand in a medium dense condition was encountered to depths of seven to nine feet. Next, the borings encountered medium dense gray slightly clayey to clayey sand to depths of approximately thirteen to thirteen and a half feet followed by loose gray fine sand to depths of fifteen to thirty feet, the maximum depths explored. Please see the enclosed soil classification sheet in the Appendix of this report for additional important information regarding these descriptions, the field evaluation and other related information.

Test Pit Results

In general, the test pits recorded a two-to-twelve-inch layer of surficial topsoil followed by gray sand to depths of one to three feet. Next the test pits encountered brown to dark brown slightly silty to silty sand to depths of two to five and three quarters feet with a layer of sand intermixed in some of the pits. Thereafter brown to tan sand was encountered to depths of four to eight feet followed by gray sand with trace clayey to slightly clayey to depths of eight to ten feet, the maximum depths explored.

Note in test pit TP-6, what Nutting believes was an artesian spring was encountered when digging. The water stabilized at approximately six inches below grade.

Exfiltration Results

Two 'Usual Open-Hole' exfiltration tests were performed in accordance with South Florida Water Management District (SFWMD) specifications to depths of six feet below the existing ground surface. The tests were performed in order to determine the hydraulic conductivity of the in situ subsurface soils to evaluate drainage requirements for the project.

The hydraulic conductivity values were determined to range from approximately 5.32×10^{-5} to 7.72×10^{-5} cubic feet per second, per square foot, per foot of head at the specific location tested. Detailed soil descriptions and flow rates are presented in the Appendix.

Groundwater Information

The immediate groundwater level was measured at the boring locations at the time of drilling. The groundwater level was encountered at an approximate depth of two feet below the existing ground surface, at the time of the field work.

The immediate depth to groundwater measurements presented in this report may not provide a reliable indication of stabilized or a more long-term depth to groundwater at this site. Water table elevations can vary dramatically with time through rainfall, droughts, storm events, flood control activities, nearby surface water bodies, tidal activity, pumping and many other factors. For these reasons, this immediate depth to water data **should not** be relied upon alone for project design considerations.

ANALYSIS AND RECOMMENDATIONS

Review of test borings and test pits performed for this project suggests that the site is suitable for the planned residential development and may be prepared using conventional site preparation and compaction techniques as described herein. Once the site is successfully prepared in accordance with the recommendations presented in this report, the site may be developed with the proposed residential development using a shallow foundation system designed for an allowable soil bearing pressure of 3,000 pounds per square foot. All work should be completed in accordance with

applicable building codes, other regulations as appropriate, and good standard local practice. Additionally, the soils encountered can safely support the proposed lift stations.

We recommend that the bottom of footings be at least 12 inches below the lowest adjacent finished grade. It is our opinion that the floor slab system may be constructed as a slab on grade. We recommend that a vapor barrier be placed between the soil and concrete. Reinforcing for the floor slab should be in accordance with the structural engineer's requirements.

Settlement Analysis

We performed a settlement evaluation based upon an improved soil profile following completion of the general site compaction using a moderately sized vibratory compactor for the construction. This method should improve the soils to provide an allowable bearing capacity of 3,000 pounds per square foot. It was estimated that upon proper completion, long-term total settlements should be on the order of less than approximately one inch.

Differential settlements should be approximately one-half of the total settlement. Most of this settlement should occur upon the application of the dead load during construction.

In order to maintain the calculated settlement throughout the life of the structures it would be necessary to grade the site such that stormwater is directed away from the foundations. This could be maintained through the use of roof gutters and downspouts to migrate the water away from the foundations. Any ponding nearby/adjacent to walls and foundations should be avoided.

Site Preparation

The surficial organic soils (approximately one to four inches thick), debris from the clearing and demolition operations, and any unsuitable soils as determined by the Geotechnical Engineer will need to be completely removed within the construction area and to a lateral distance of at least 5 feet beyond the footprint limits, where practical.

A Nutting Engineer's representative **must be** present to observe that the stripping operations are performed as we have discussed herein. Otherwise, Nutting Engineers shall bear no liability for acceptance of work or resulting foundation performance and consequences.

Upon approval by the geotechnical engineer, the stripped surface (no fill added at this time) should be compacted until a density equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557) is achieved to a depth of at least 12 inches below the compacted surface. The coverages should be equally divided into two perpendicular directions. The soils should be at an acceptable moisture content to allow for proper compaction. The compaction operations must be observed by a representative of Nutting Engineers.

Any structural fill needed to bring the site to construction grade may then be placed in lifts not exceeding twelve inches in loose thickness. Each lift should be thoroughly compacted until densities equivalent to at least 95 percent of the modified Proctor maximum dry density are uniformly obtained. Based on the test borings and pits, the onsite soils can be utilized as fill.

Any imported fill should consist of granular soil, with less than 10% passing the No. 200 sieve, free of rubble, organics (5% or less) clay, debris and other unsuitable material. The fill should have ASTM designation (D-2487) of GP, GW, SP, or SW, with a maximum particle size of no more than 3 inches or as otherwise approved by Nutting Engineers.

Following site and building pad construction as discussed above, the foundation area should be excavated and the footings formed.

The bottom of foundation excavations should be compacted after excavation to develop a minimum density requirement of 95 percent of the maximum modified Proctor dry density, for a minimum depth of one foot below the bottom of the footing depth, as determined by field density compaction tests. The floor slab area should also be compacted in the same manner.

Pavements

At a minimum, pavement areas should be compacted to a minimum of 98 percent of the modified Proctor maximum dry density to a depth of at least 12 inches below the subgrade level. We recommend that stabilized subgrade having a minimum Limerock Bearing Ratio (LBR) of 40 be placed to a depth of approximately one foot below the base course. The base course will range from approximately 6 to 8 inches, and should have a minimum LBR of 100. Based on the soil exploration performed, material will need to be imported to the site in order to prepare the base and sub-base course. We can provide more detailed pavement design recommendations including material types and thicknesses. However, it would be necessary to provide us with the anticipated traffic loading characteristics and pavement design life.

GENERAL INFORMATION

Our client for this geotechnical evaluation was:

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458

The contents of this report are for the exclusive use of the client, the client's design & construction team and governmental authorities for this specific project exclusively. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of Nutting Engineers of Florida, Inc. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction for foundation support. Environmental issues including (but not limited to), soil and/or groundwater contamination, and other environmental considerations are beyond our scope of service for this project. As such, this report should not be used or relied upon for evaluation of environmental issues.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified immediately so that the condition or change can be evaluated and appropriate action taken.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

We appreciate the opportunity to be of service on this project. If we can be of any further assistance, or if you need additional information, please contact us at your convenience.

Sincerely,
NUTTING ENGINEERS OF FLORIDA, INC.

Richard C. Wohlfarth, P.E.
Director of Engineering

Stephen J. Mrachek, P.E. #70784
Senior Engineer

Appendix: Test Location Plan
Test Boring Results
Test Pit Results
Exfiltration Test Results
Limitations of Liability/Soil Classification Criteria

REP MERITAGE HOMES SUNRISE TOWNHOMES FT PIERCE



N

- LEGEND -

TEST BORING LOCATION

APPROX. TEST PIT LOCATION

EXFILTRATION TEST LOCATION

NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967

Meritage Homes
Sunrise Townhomes
Sunrise Blvd
Ft. Pierce, Florida

PROJECT NO. 551.12

APPROXIMATE TEST LOCATION PLAN

GEOTECHNICAL EXPLORATION

FIG. 1A

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-1

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 1.8 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND, trace root ▽	SS 1	1-2-2-2	4	▲
		Dk. brown fine SAND, trace silt	SS 2	3-5-6-7	11	▲
5		Brown fine SAND	SS 3	7-6-7-11	13	▲
		Lt. brown fine SAND	SS 4	9-9-11-12	20	▲
		Gray slightly clayey to clayey SAND	SS 5	7-8-7-7	15	▲
10			SS 6	6-6-5-5	11	▲
		Gray fine SAND	SS 7	4-4-4-4	8	▲
15		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-2

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/13/25 COMPLETED 1/13/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.0 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	2-3-3-4	6	
		Dk. brown fine SAND, trace silt	SS 2	5-7-8-8	15	
5			SS 3	7-6-6-7	12	
		Gray slightly clayey to clayey SAND	SS 4	6-7-6-6	13	
			SS 5	5-7-5-5	12	
10			SS 6	4-5-4-4	9	
		Gray fine SAND	SS 7	4-4-4-5	8	
15						
			SS 8	3-4-4-7	8	
20						
			SS 9	2-1-2-2	3	
25						
			SS 10	2-2-3-3	5	
30		Bottom of hole at 30.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-3

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.3 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	2-3-2-3	5	
		▽	SS 2	4-6-8-11	14	
5		Dk. brown fine SAND, trace silt	SS 3	8-11-8-8	19	
		Lt. brown fine SAND	SS 4	6-6-7-7	13	
		Gray slightly clayey to clayey SAND	SS 5	6-7-7-8	14	
10			SS 6	3-5-5-5	10	
		Gray fine SAND	SS 7	5-10-11-8	21	
15						
			SS 8	3-6-6-7	12	
20						
			SS 9	4-5-6-7	11	
25						
			SS 10	3-3-3-37	6	
30		Bottom of hole at 30.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-4

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.3 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	1-1-1-2	2	▲
		▽ Dk. brown fine SAND	SS 2	3-3-4-6	7	▲
5		Brown fine SAND	SS 3	6-6-5-5	11	▲
		Lt. brown fine SAND	SS 4	3-4-6-6	10	▲
10		Gray slightly clayey to clayey SAND	SS 5	5-5-6-6	11	▲
			SS 6	6-5-6-6	11	▲
15		Gray fine SAND	SS 7	4-3-3-4	6	▲
		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment
1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-5

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/13/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.0 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND, trace root	SS 1	2-3-3-2	6	▲
		▽ Dk. brown fine SAND, trace silt	SS 2	4-5-5-7	10	▲
5		Gray slightly clayey to clayey SAND	SS 3	5-7-6-5	13	▲
			SS 4	5-5-6-7	11	▲
10			SS 5	5-6-5-6	11	▲
			SS 6	4-5-5-6	10	▲
15		Gray fine SAND	SS 7	4-4-4-5	8	▲
		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-1

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1.5	Gray SAND
1.5	3	Brown slightly silty SAND
3	4.5	Gray SAND
4.5	5	Dark brown SILTY SAND (Hardpan)
5	6	Brown SAND
6	8	Tan SAND

TEST PIT TP-2

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	2	Gray SAND
2	3	Brown slightly silty SAND
3	4	Gray SAND
4	4.5	Dark brown SILTY SAND (Hardpan)
4.5	6	Brown SAND
6	6.5	Tan SAND

TEST PIT TP-3

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	3	Brown slightly silty SAND
3	4	Gray SAND
4	5	Tan SAND
5	6	Brown SAND
6	7	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-4

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	4	Gray SAND
4	4.5	Dark brown SILTY SAND (Hardpan)
4.5	6	Tan SAND

TEST PIT TP-5

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	6	Gray SAND
6	6.5	Brown SAND
3.5	8	Tan SAND

TEST PIT TP-6

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
At a depth of one foot water filled excavation to a depth of 6 inches believed to be an artesian spring.		

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-7

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2.5	Gray SAND
2.5	7	Brown SAND
7	8	Tan SAND
8	10	Gray SAND, trace to slightly clayey

TEST PIT TP-8

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3.5	Gray SAND
3.5	4	Dark brown SILTY SAND (Hardpan)
4	5.5	Gray SAND
5.5	5.75	Dark brown SILTY SAND (Hardpan)
5.75	6.5	Brown SAND
6.5	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-9

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	4	Dark brown SILTY SAND (Hardpan)
4	7	Brown SAND
7	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-10

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	6	Brown SAND
6	8	Tan SAND

TEST PIT TP-11

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	2.5	Gray SAND
2.5	3	Dark brown SILTY SAND (Hardpan)
3	7	Brown SAND
7	8	Tan SAND

TEST PIT TP-12

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	5.5	Brown SAND
5.5	8	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-13

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	2	Dark brown SILTY SAND (Hardpan)
2	5.5	Brown SAND
5.5	7	Tan SAND
7	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-14

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	4.5	Brown SAND
4.5	7	Tan SAND
7	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-15

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	2	Dark brown SILTY SAND (Hardpan)
2	3	Gray SAND
3	6	Brown SAND
6	6.5	Tan SAND
6.5	8	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-16

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	4	Tan SAND
4.5	8	Gray SAND, trace to slightly clayey

TEST PIT TP-17

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1	Gray SAND
1	2.5	Brown slighlty silty SAND
2.5	5	Brown SAND
5	5.25	Dark brown SILTY SAND (Hardpan)
5.25	6	Tan SAND
6	8	Gray SAND

TEST PIT TP-18

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2	Gray SAND
2	3	Dark brown SILTY SAND (Hardpan)
3	5.5	Brown SAND
5.5	8	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-19

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	2.5	Gray SAND
2.5	3	Dark brown SILTY SAND (Hardpan)
3	6	Brown SAND
6	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-20

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	6	Gray SAND
6	7	Gray SAND, trace to slightly clayey

TEST PIT TP-21

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1	Gray SAND
1	2	Brown slighlty silty SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	4	Brown SAND
4	5.5	Tan SAND
5.5	8	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-22

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1.5	Gray SAND
1.5	3	Brown SAND
3	8	Gray SAND, trace to slightly clayey

TEST PIT TP-23

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2	Gray SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	4	Brown SAND
4	8	Gray SAND, trace to slightly clayey

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

Report of Exfiltration Test

Client:	Meritage Homes	Order No	551.12
Project:	Sunrise Townhomes	Report No	1
Location:	Sunrise Boulevard, Fort Pierce, Florida	Date:	1/14/25
	Fort Pierce, Florida		
Test:	Usual Open Hole Exfiltration Test		
Surface Elevation:	Approx. @ Road Crown	Water table from ground surface:	1.8'
Casing Diameter:	6"		
Tube Depth:	6'		

Hydraulic Conductivity (K) = 7.72×10^{-5} cfs/ft^{2}ft.head

EXFIL NO. 1

Sample Location: As located on the approx. test location plan.

Material:

0-1.3'	Gray fine SAND
1.3'-3'	Lt. gray fine SAND
3'-5'	Dk. brown silty SAND
5'-6'	Brown fine SAND

One Minute Increment	Pump Rate in Gal/Min
1	0.5
2	0.5
3	0.5
4	0.5
5	0.5
6	0.5
7	0.5
8	0.5
9	0.5
10	0.5

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

Report of Exfiltration Test

Client:	Meritage Homes	Order No	551.12
Project:	Sunrise Townhomes	Report No	2
Location:	Sunrise Boulevard, Fort Pierce, Florida	Date:	1/13/25
	Fort Pierce, Florida		
Test:	Usual Open Hole Exfiltration Test		
Surface Elevation:	Approx. @ Road Crown	Water table from ground surface:	2.5'
Casing Diameter:	6"		
Tube Depth:	6'		

Hydraulic Conductivity (K) = 5.32×10^{-5} cfs/ft^{2}ft.head

EXFIL NO. 2	One Minute Increment	Pump Rate in Gal/Min
	1	0.5
	2	0.5
Sample Location: As located on the approx. test location plan.	3	0.5
	4	0.5
	5	0.5
Material: 0-2" Gray fine SAND	6	0.5
2"-1.8' Lt. gray fine SAND	7	0.5
1.8'-6' Dk. brown silty SAND	8	0.5
	9	0.5
	10	0.5

SOIL AND ROCK CLASSIFICATION CRITERIA

SAND/SILT

N-VALUE (bpf)	RELATIVE DENSITY
0 – 4	Very Loose
5 – 10	Loose
11 – 29	Medium
30 – 49	Dense
>50	Very dense
100	Refusal

CLAY/SILTY CLAY

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 – 4	0.25 – 0.50	Soft
5 – 8	0.50 – 1.00	Medium
9 – 15	1.00 – 2.00	Stiff
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
N≥ 100	Hard to v. hard	Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.
25≤ N ≤ 100	Medium hard to hard	
5≤ N ≤ 25	Soft to medium hard	

PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76 mm to 3 in.
Sand	0.074 mm to 4.76 mm
Silt	0.005 mm to 0.074 mm
Clay	<0.005 mm

DESCRIPTION MODIFIERS

0 – 5%	Slight trace
6 – 10%	Trace
11 – 20%	Little
21 – 35%	Some
>35%	And

Major Divisions			Group Symbols	Typical names
Coarse-grained soils (More than half of material is *larger* than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gavels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		Gravels with fines (Appreciable amount of fines)	GW* d / u	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		Sands with fines (Appreciable amount of fines)	SM* d / u	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-grained soils (More than half of material is *smaller* than No. 200 sieve size)	Silts and clays (Liquid limit less than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy, clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and clays (Liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays or high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
	Highly organic soils		PT	Peat and other highly organic soils

Laboratory classification criteria

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than five percent……GW, GP, SW, SP

More than 12 percent……GM, GC, SM, SC

5 to 12 percent……*Borderline* cases requiring dual systems**

$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3

Not meeting all gradation requirements for GW

Atterberg limits below "A" line or P.I. less than 4

Atterberg limits above "A" line with P.I. greater than 7

Above "A" line with P.I. between 4 and 7 are *borderline* cases requiring use of dual symbols.

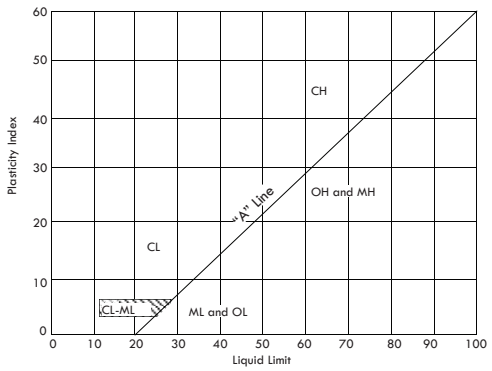
$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3

Not meeting all gradation requirements for SW

Atterberg limits below "A" line or P.I. less than 4

Atterberg limits above "A" line with P.I. more than 7

Limits plotting in hatched zone with P.I. between 4 and 7 are *borderline* cases requiring use of dual system.



Plasticity Chart

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment

LIMITATIONS OF LIABLILITY

WARRANTY

We warranty that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. ***No other warranties, expressed or implied, are made***. While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.

ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. ***Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately*** so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. ***The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.*** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.

HALEY WARD

SUNRISE BLVD DRAINAGE REPORT

TO: **SFWMD**
FOR: **SUNRISE BLVD (GPS DEVELOPMENTS LLC)**

APPLICANT:
GPS Developments LLC
10465 NW 29th Ter | Doral, FL 33172

MARK DAVID LANDSMAN LICENSE No. 98288 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Mark Landsman
Date: 2025.09.26 08:44:54 -04'00'

September 2, 2025
JN: 24-237

REPORT PREPARED BY:
Haley Ward, Inc.
10250 SW VILLAGE PKWY, STE 201, PORT ST. LUCIE, FL

Table of Contents

1.0 Executive Summary 4
2.0 History and Existing Storm Water Management System 4
3.0 Drainage Calculation Summary 5
3.1 Project Description 5
3.2 Datum 5
3.3 Proposed Stormwater Management System 5
3.4 Land Use Tables 5
3.5 Wet Season Water Table 6
3.6 Tailwater 6
3.7 Water Quality Treatment 7
3.8 Discharge Rates – SFWMD Standard 7
3.9 Discharge Volume – NSLRWCD Standard 8
3.10 Minimum Road and Parking 8
3.11 Minimum Finished Floor 8
3.12 Minimum Perimeter Berm 9
3.13 Control Structures 9
3.14 Net Improvement 9
3.15 Back-to-Back Storm Results 10
3.16 Design Storm Summary 10
4.0 Conclusion 11
APPENDIX A: Maps and Exhibits 12
APPENDIX B: Drainage Calculations 31
APPENDIX C: Storm Routing Results 51
APPENDIX D: Geotechnical Report 130

List of Tables

Table 1-Site Details 5
Table 2-Pre-Development Land Use 6
Table 3-Post Development Land Use 6
Table 4-Water Quality Treatment Volume 7
Table 5-Stormwise Results, 25-year/3-Day 7
Table 6-NSLRWCD Discharge Volume 8
Table 7-Minimum Road Elevation 8
Table 8-Minimum Finished Floor Elevation 8
Table 9-Minimum Perimeter Berm 9
Table 11-Back-to-Back Storm Results 10
Table 12-Design Storm Summary 10

1.0 Executive Summary

The project known as Sunrise Blvd proposed to develop vacant parcels into a townhome community consisting of 39 buildings and 184 units. The project is located near the intersection of Sunrise Blvd and Dade Rd in the City of Fort Pierce. A proposed lake in the center of the development will provide water quality and attenuation prior to discharging off site to the NSLRWCD Canal No. 10. Since the project is located in the NSLRWCD, discharge rates are regulated by the NSLRWCD volumetric standards. The stormwater management system for the project will meet all local and state water quality standards. The appendices provide supporting documentation for the assumptions and statements made in this report.

2.0 History and Existing Storm Water Management System

The project area is located in the NSLRWCD and SFWMD. An Environmental Resource Permit was obtained on the subject parcel under Permit # 56-02552-P, Application # 060531-18. However, this permit has since expired/cancelled. As such, a new individual ERP is required with this application. The previous permit does note a 5.3-acre wetland on site that has since been mitigated. Please see Appendix A for information on the wetland and purchased mitigation credits.

Since the site is vacant and unimproved, there is no existing stormwater management system. The site is mostly flat with a few small depressions and mounds. Stormwater currently sheet flows from the site to northwest corner discharging through a low area and into the NSLRWCD Canal No. 10.

3.0 Drainage Calculation Summary

3.1 Project Description

The following Table 1 outlines the parcels that comprise of the entire project.

Table 1-Site Details

Parcel ID	Size (acres)	Sec/Town/Range	Jurisdiction
2428-321-0001-000-3	17.88	28/35S/40E	Fort Pierce
2428-601-0252-000-6	3.84	28/35S/40E	Fort Pierce
Total:	**21.72**		

3.2 Datum

All elevations included on the project construction plans are in reference to the North American Vertical Datum 1988. The vertical datum conversion has been determined to be approximately 1.50 feet in the project area. This is used to convert NGVD to NAVD, in other words NGVD elevation minus 1.50 feet = NAVD elevation.

3.3 Proposed Stormwater Management System

The proposed stormwater management system for the site is comprised of 4.18-acre lake and 1.51 acres of bioswales/rain gardens. The lake is capable of providing up to 35.96 ac-ft of permanent pool volume and the bioswales/rain garden areas provide up to 1.38 ac-ft of retention volume to meet net improvement standards. The stormwater management system is capable of providing 3.48 ac-ft of water quality treatment volume exceeding the required minimum.

3.4 Land Use Tables

The following Table 2 outlines the pre-development land use breakdown, while Table 3 outlines the post development land use breakdown for the project.

Table 2-Pre-Development Land Use

Land Use	Area (ac)	Percentage of Basin (%)
Pervious	21.74	100%
Total:	**21.74**	**100%**

Table 3-Post Development Land Use

Land Use	Area (ac)	Percentage of Basin (%)
Buildings	4.46	20.5%
Impervious	4.73	21.8%
Lake @ CE	3.36	15.5%
Lake Banks	0.82	3.8%
Retention (bioswales and rain gardens)	1.51	6.9%
Pervious	6.83	31.5%
Basin Total:	**21.71**	**100%**

3.5 Wet Season Water Table

The wet season water table elevation for the project is derived from a geotechnical report completed by Nutting Engineers in January 2025. The borings in the report indicate that groundwater was encountered approximately 2-feet below natural grade. The seasonal high-water table was determined to be 12.00 NAVD which is comparable to the piezometer readings in application 060531-18.

3.6 Tailwater

The tailwater condition for the project is derived from the controlled elevation of the NSRLWCD Canal No 10. This canal is controlled at 2.5 NAVD year-round as there is no deviation during the dry season. The St Lucie County stormwater master plan provides maximum tailwater elevations. A copy of this master plan and the NSLRWCD map is provided in Appendix A.

3.7 Water Quality Treatment

The project proposes to treat the required water quality treatment volume based on three criteria. The three criteria are 1-inch over the project area, 2.5-inches times the percent impervious and net improvement. The following Table 4 outlines the results of the water quality treatment volume calculations. The controlling factor for water quality treatment volume is 1-inch over the project area. The calculations for 1-inch over the project area and 2.5-inches times the percent impervious are increased by 50% for an Outstanding Florida Waterbody (OFW).

Table 4-Water Quality Treatment Volume

1-inch Over the Project Area (acre-feet)	2.5-inches Times Percent Impervious (acre-feet)	Net Improvement (acre-feet)
2.71	1.95	1.38

The treatment volume for net improvement is reduced due to a portion of the treatment being provided in the permanent pool volume in the lake. The 1.38 acre-feet of remaining treatment is required in retention.

3.8 Discharge Rates – SFWMD Standard

A pre vs post discharge rate analysis was conducted on the site using the 25-year/3-day storm event simulation in the routing model. The following Table 5 outlines the results of the simulations. Please see Appendix C for further information regarding the results of the simulations.

Table 5-Stormwise Results, 25-year/3-Day

Pre-Development	Post Development	Max Stage
36.67 cfs	5.74 cfs	15.24 NAVD

3.9 Discharge Volume – NSLRWCD Standard

The project proposes to discharge to the NSLRWCD Canal No. 10. The NSLRWCD has a pre-established maximum discharge volume of no more than 2-inches across a site within a 24-hour period. The following Table 6 outlines the maximum versus proposed discharge volume for the project.

Table 6-NSLRWCD Discharge Volume

Maximum Discharge Volume (ac-ft)	Proposed Discharge Volume (ac-ft)
3.62	2.58

3.10 Minimum Road and Parking

The minimum road and parking elevation for the site was determined based on the results of the routing simulation for the 10-year/1-day storm event. The maximum stage of the 10-year/1-day storm event is provided in the following Table 7. Please see Appendix C for further details on the routing simulation inputs and results.

Table 7-Minimum Road Elevation

Stormwise Result	Proposed Minimum Road
14.41 NAVD	15.70 NAVD

3.11 Minimum Finished Floor

The minimum finished floor elevation for the project is determined by the results of the routing simulation of the 100-year/3-day storm event. The maximum stage of the 100-year/3-day storm event is provided in the following Table 8.

Table 8-Minimum Finished Floor Elevation

Stormwise Result	Minimum FFE
16.25 NAVD	17.75 NAVD

3.12 Minimum Perimeter Berm

The minimum perimeter berm is determined by the results of the routing simulation for the 25-year/3-day storm event. The perimeter berm elevations are noted in Table 9.

Table 9-Minimum Perimeter Berm

Stormwise Result	Minimum Berm
15.24 NAVD	15.25 NAVD

3.13 Control Structures

The proposed outfall control structure for the project is a FDOT Type E box. The outfall control structure does not have a bleeder. Instead, the control structure has a 3-inch by 3-inch vertical weir at 13.00 NAVD. The rim of the structure is set at 15.00 NAVD. A Please see the construction plans and routing model inputs for further information.

To provide the required retention to meet net improvement standards, catch basins, CB-26, CB-21, and drainage manhole DMH-2 require an internal weir at 14.85 NAVD. These structures directly discharge stormwater to the proposed on-site lake. The weir elevation of 14.85 NAVD is capable of providing the required 1.38 ac-ft of treatment volume.

3.14 Net Improvement

A net improvement analysis was completed on the project to demonstrate that total nitrogen and phosphorus loading is reduced in the post development condition. Net improvement for the project is attained using a combination of the permanent pool volume in the lake and the bioswales/rain gardens. Please see Appendix B for the net improvement calculations.

3.15 Back-to-Back Storm Results

To provide assurance that the site can recovery from a storm event without flooding, a back-to-back storm was simulated in the routing model. The ending stage of the 25-year/3-day storm was used as the starting stage for the second storm. The 100-year/3-day storm was routed without discharge for both the initial and secondary storm.

Table 10-Back-to-Back Storm Results

Storm	Maximum Stage Initial Storm (NAVD)	Maximum Stage Secondary Storm (NAVD)	Proposed Elevation (NAVD)	Note
10-1	14.41	15.23	15.70	Minimum Pavement
25-3	15.24	15.58	15.25	Perimeter Berm
100-3	16.25	16.84	17.75	Minimum FFE

Since the perimeter berm elevation is based on the initial storm results only, an increase in the proposed elevation is not warranted due to the results of the secondary storm.

3.16 Design Storm Summary

The following Table 11 outlines the design storm summary for the project.

Table 11-Design Storm Summary

Storm	Rainfall (inches)	Maximum Stage (NAVD)	Proposed Elevation (NAVD)	Note
10-1	6	14.41	15.70	Min. Pavement
10-3	9	15.13	--	NSLRWCD
25-3	10	15.24	15.25	Min. Perimeter Berm
100-3	12	16.25	17.75	Min. FFE

4.0 Conclusion

The project known as Sunrise Blvd proposes to develop vacant land into a townhome style product. The proposed bioswales/rain gardens and lake provides water quality and attenuation prior to discharging to the NSLRWCD Canal No. 10. The project meets all local and stormwater regulations. The following appendices provide calculations and suppporting documentation.

APPENDIX A: Maps and Exhibits

Mar 05 07 12:49p Avi Baba 3058322228 p.1

Client

Bluefield Ranch Mitigation Bank

David McIntosh, Trustee
901 North Olive Avenue
West Palm Beach, FL 33401
Phone (561) 355-3900; Fax (561) 659-9811
C (561) 346-4072
DaveMcI@bellsouth.net

Memorandum by fax

To: South Florida Water Management District
Environmental Resource Permitting (561-682-6896)

From: Dave McIntosh

Subject: Privilege Development, LLC: Sunrise Lakes
SFWMD Permit # 56-02552-P:
Mitigation at Bluefield Ranch Mitigation Bank

Date: January 24, 2007

Ladies and Gentlemen:

I hereby advise you that Privilege Development, LLC, has completed all its obligations under its contract with Bluefield Ranch Mitigation Bank for the purchase of five and three-tenths (5.3) herbaceous wetland mitigation credits. By completing its obligations, Privilege Development, LLC, has fully satisfied Special Condition 14 of the above-referenced SFWMD Permit.

As you are aware, Bluefield Ranch Mitigation Bank is permitted by SFWMD for the sale of such credits by virtue of Permit #56-00002-M.

Bluefield now requests your permanent withdrawal of those five and three-tenths (5.3) herbaceous credits from Bluefield's credit ledger and the permanent association of those credits with the Permit of Privilege Development, LLC, for its Sunrise Lakes project.

If you have any questions, please contact me directly.

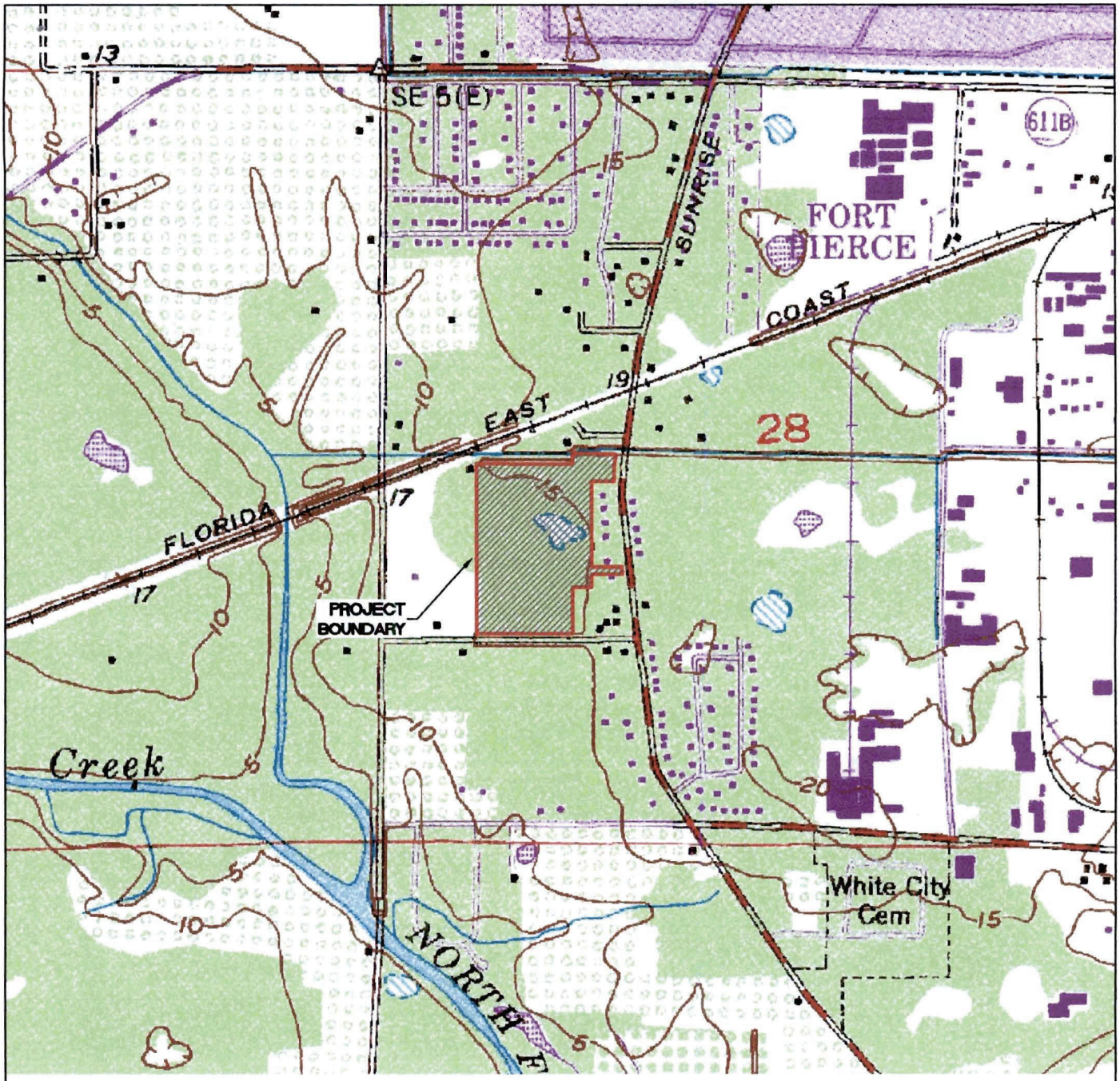
Thank you.

David McIntosh

✓ Cc: Mr. Simon Cohen ~~(305-832-2228)~~
VIA HAND DELIVERY to Avi on 1-25-07.

TOTAL PAGES TRANSMITTED – 1

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

Project Boundary (±21.66 ACRES)

0 500 1000

GRAPHIC SCALE
1 INCH = 1000 FEET

Coordinate System:

Project/File No.:	Twp/Rng/Sec:	Date Drawn:
06-00103	35-40-28	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

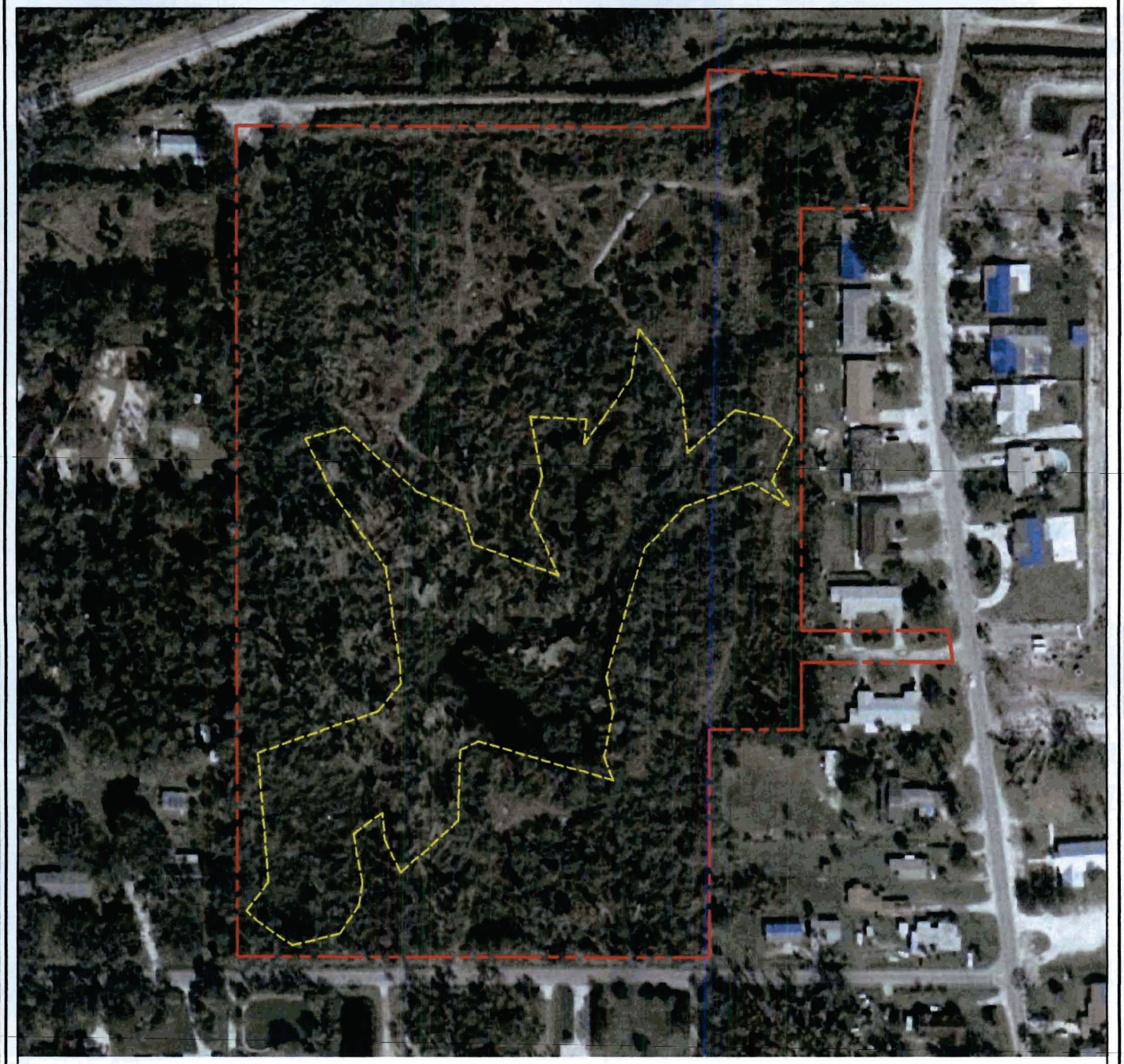
ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 2

USGS TOPO MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 ACRES)

APPROXIMATE WETLAND BOUNDARY (±5.3 ACRES)

ORIGINAL SUBMITTAL

MAY 31 2006

WPB

060531-18

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 3

WETLAND LOCATION MAP



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

		Project Boundary (±21.66 ACRES)
		SOILS BOUNDARY
2		ANKONA AND FARMTON SAND
26	–	OLDSMAR SAND
31		PEPPER AND EUAGILLE SAND

0 100 200
GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 4

SOILS LOCATION MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 ACRES)

ORIGINAL SUBMITTAL
MAY 31 2006
WPB
-060531-18

0 100 200
GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.:	06-00103
Twp/Rng/Sec:	35-40-28
Date Drawn:	5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 5

SITE AERIAL MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



LEGEND

Project Boundary (±21.66 acres)

422	Brazilian Pepper (±2.00 acres)
436	Upland Scrub (±9.26 acres)
439	Other Hardwoods (±5.13 acres)
510	Streams & Waterways
619	Exotic Wetland Hardwoods (±3.30 acres)
631	Wetland Scrub (±1.00 acres)
641	Freshwater Marsh (±0.97 acres)

ORIGINAL SUBMITTAL

MAY 31 2006

WPB

060531-18

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

Coordinate System:

Project/File No.: 06-00103

Twp/Rng/Sec: 35-40-28

Date Drawn: 5/15/06

MILLER LEGG
Palm Beach Office: 2005 Vista Parkway · Suite 100
West Palm Beach, Florida · 33411-2719
561-689-1138 · Fax: 561-689-8108
www.millerlegg.com

SUNRISE LAKES

ST. LUCIE COUNTY, FLORIDA

FOR: PRIVELEDGE DEVELOPMENT

FIGURE 6

EXISTING FLUCCS MAP

\\Pbo-main\data\PROJECTS\2006\06-00103 - Sunrise Lakes - St. Lucie\Drawings\Environmental\Permit Sketches\06-00103-Figures.dwg Mon 05/15/2006 3:09p By tmartin



ORIGINAL SUBMITTAL

MAY 3 1 2006

WPB

060531-18

LEGEND

Project Boundary (±21.66 acres)

524 Lakes (less than 10 acres)

133 Multiple Dwelling Units, Low Rise (two-stories or less)

0 100 200

GRAPHIC SCALE
1 INCH = 200 FEET

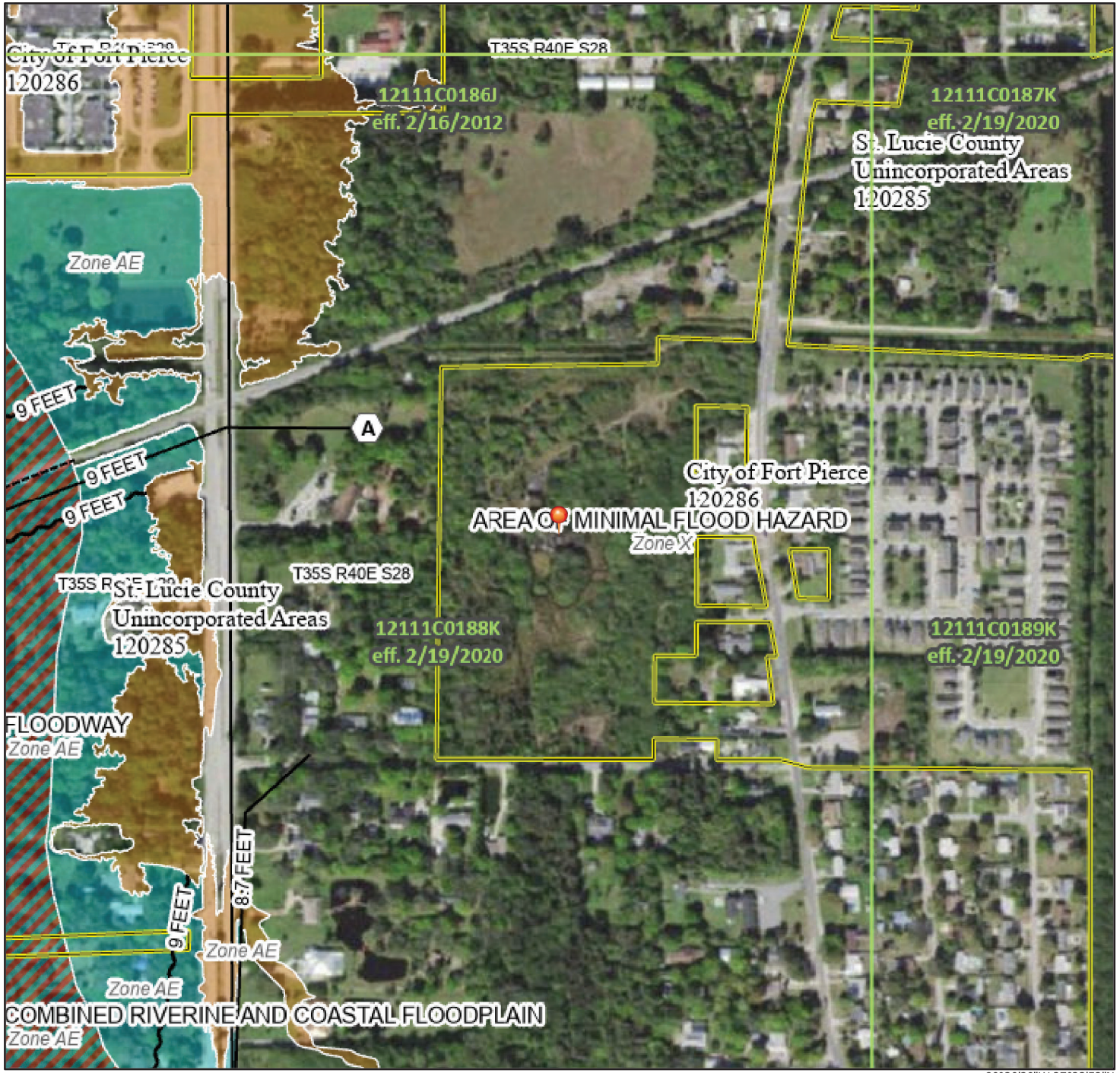
Coordinate System:

Project/File No.: 06-00103 Twp/Rng/Sec. 35-40-28 Date Drawn: 5/15/06	MILLER LEGG Palm Beach Office: 2005 Vista Parkway · Suite 100 West Palm Beach, Florida · 33411-2719 561-689-1138 · Fax: 561-689-8108 www.millerlegg.com	**SUNRISE LAKES** ST. LUCIE COUNTY, FLORIDA FOR: PRIVELEDGE DEVELOPMENT	*FIGURE 7* *PROPOSED FLUCCS MAP*

National Flood Hazard Layer FIRMette

FEMA

80°21'7"W 27°24'24"N



80°20'29"W 27°23'52"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

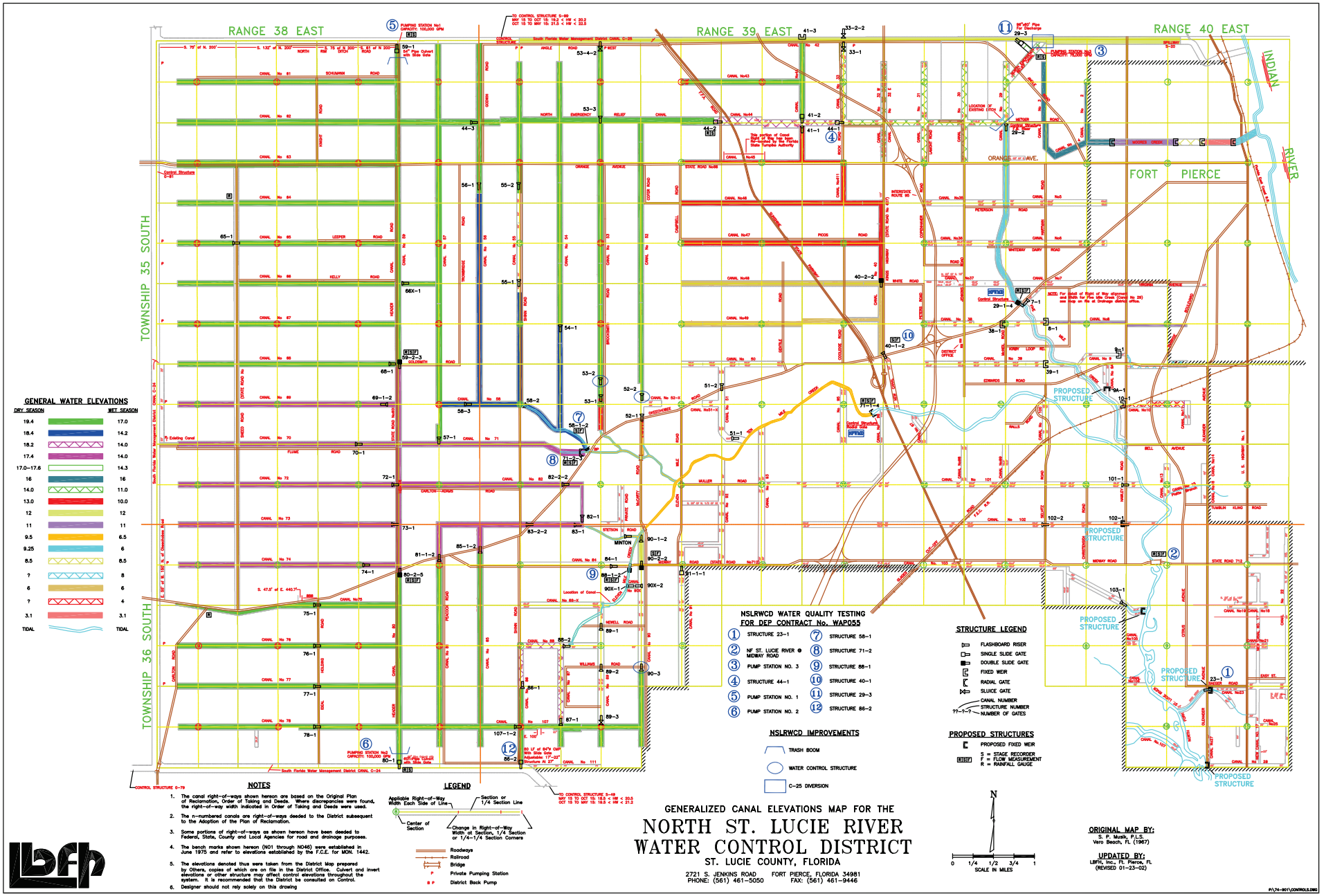
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

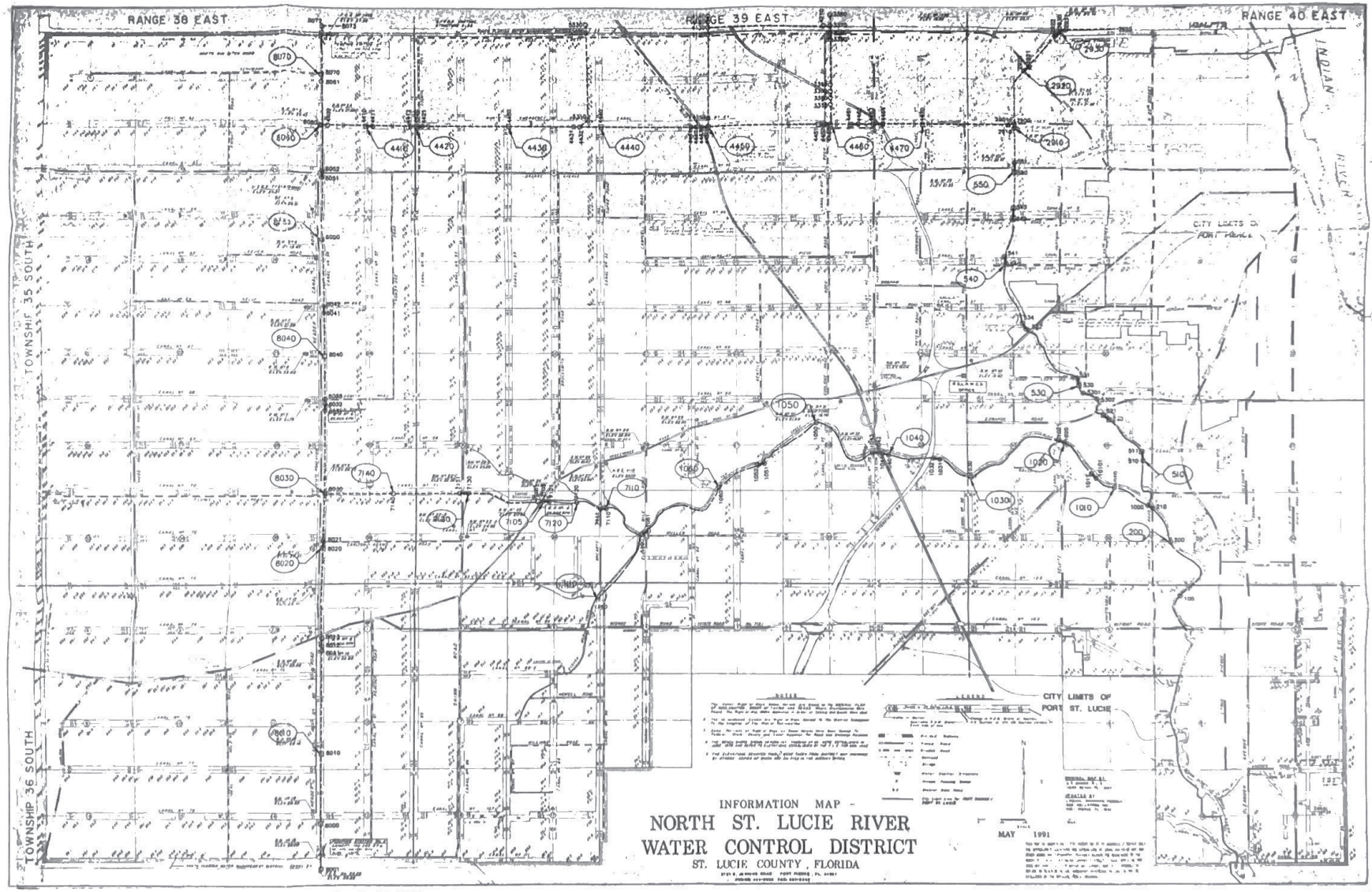
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/26/2025 at 7:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



P:\74-0901\Maps\CONTROLS\2-02-05-2004.dwg, 03/05/2004 11:08:45 AM, Russ-C, LBFH Inc.

MODELING SCHEMATIC OF THE NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT WATERSHED



ST. LUCIE COUNTY STORMWATER MASTER PLAN (3/92)

EXHIBIT 4

TABLE 4–1

FORT PIERCE FARMS WATER CONTROL DISTRICT CANAL NO. 1
Summary of Flood Stages and Problem Areas (1)

Present Land Use

Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length	Invert Elev (ft)	10–YEAR 24–HOUR Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	10YR/72HR Base Cond Max Flood Elev (ft)
1					0	0	−10.0	2.7				2.7
2	CONTROL STRUCTURE				430	430	−3.7	16.5				17.8
1000					1,320	1,750	−1.6	16.5				17.9
1005	25TH STREET				450	2,200	−1.6	16.5				17.9
1010					5,280	7,480	−0.2	16.7				18.3
1015	@ Canal No. 2				5,280	12,760	0.4	16.7				18.5
1016	KEEN ROAD BRIDGE				399	13,159	0.4	16.8				18.5
1017					1,900	15,059	2.5	16.8				18.6
1020	TAYLOR DAIRY RD BRIDGE	@ Canal 3			395	15,454	2.6	16.8				18.7
1030					2,640	18,094	3.4	16.9				18.8
1035	KINGS HWY @ Canal 4				353	18,447	3.4	16.9				18.9
1040	@ Canal 5				2,640	21,087	0.6	16.9				19.0
1050	@ Canal 20				2,640	23,727	0.8	16.9				19.0
1060					2,640	26,367	1.5	16.9				19.0
1070					2,640	29,007	3.5	17.0				19.1
1080					2,640	31,647	5.5	17.0				19.2
1090					2,640	34,287	5.8	17.1				19.3
1100	@ Canal 6				2,640	36,927	7.1	17.1				19.4
1110					2,640	39,567	8.4	17.1				19.4
1115	@ Canal 7				1,320	40,887	8.8	17.1				19.5
1116	CONTROL STRUCTURE				150	41,037	6.5	17.2				19.7
1117					1,320	42,357	9.5	17.2				19.7
1120	JOHNSTON RD CROSSING				280	42,637	8.9	17.5				20.6
1130	@ Canal 8				2,640	45,277	8.0	17.5				20.7
1140					2,920	48,197	10.4	17.6				20.8
1145	INDRIO RD CROSSING				260	48,457	10.4	17.7				21.2
1150					2,640	51,097	9.1	17.7				21.3
1160					2,640	53,737	9.4	17.8				21.3
1170					2,640	56,377	9.7	17.8				21.4
1180					2,640	59,017	10.0	17.8				21.4
1190					2,640	61,657	10.3	17.8				21.4

(1) All stages and elevations referenced to National Geodetic Vertical Datum of 1929 (FT_NGVD) unless noted otherwise.

TABLE 4–2

From North St. Lucie Fork River to Pump Station No. 3
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
10							−11.0	2.7	2.7	2.7	2.7	2.7
1					0	0	−10.8	3.6	3.6	3.6	3.6	5.0
100					3,100	3,100	−6.5	4.0	4.0	4.0	4.0	5.5
200					5,000	8,100	−5.3	5.5	5.5	5.5	5.5	7.4
210					1,400	9,500	−7.4	5.7	5.7	5.7	5.7	7.6
1000	25TH ST SPAN BRIDGE				410	9,910	−7.4	5.7	5.7	5.8	5.7	7.7
510					2,200	12,110	−2.6	7.8	7.5	7.5	7.5	8.3
511	FEC RAR SPAN BRIDGE				395	12,505	−2.6	7.8	7.5	7.5	7.5	8.3
520					2,400	14,905	−2.4	8.5	8.3	8.3	8.3	9.0
521	EDWARDS RD SPAN BRIDGE				350	15,255	−2.4	8.6	8.3	8.3	8.3	9.0
5302					1,000	16,255	−1.8	8.6	8.3	8.3	8.3	9.0
5301					1,700	17,955	−0.6	8.9	8.8	8.8	8.8	9.3
530					800	18,755	−0.1	10.8	10.8	10.8	10.8	11.1
531	KIRBY LOOP RD SPAN BRIDGE				400	19,155	−0.1	10.8	10.8	10.8	10.8	11.1
532					4,200	23,355	1.6	13.0	12.9	12.9	12.9	14.3
534					5	23,360	2.1	13.2	13.1	13.1	13.1	14.6
540					3,700	27,060	4.0	13.5	13.4	13.4	13.4	14.8
541	WHITEWAY DAIRY RD	16.6			245	27,305	4.1	13.5	13.5	13.5	13.5	15.0
542					3,000	30,305	4.6	13.6	13.6	13.6	13.6	15.1
543	PETERSON RD SPAN BRIDGE				320	30,625	4.6	13.7	13.6	13.6	13.6	15.1
550					2,600	33,225	3.1	14.0	13.9	13.9	13.9	15.3
551	ORANGE AVE SPAN BRIDGE				360	33,585	3.1	14.0	14.0	14.0	14.0	15.3
2910					2,800	36,385	7.8	14.0	14.0	14.0	14.0	15.4
2901	METZGER RD CROSSING	19.8			245	36,630	7.6	14.0	14.0	14.0	14.0	16.4
2900					325	36,955	7.3	14.0	14.0	14.0	14.0	16.7
2920	ANGLE RD CROSSING	21.1			3,080	40,035	7.2	14.0	14.0	14.0	14.0	16.7
2921					210	40,245	7.4	13.9	13.9	13.9	13.9	16.5
2922	AVENUE Q CROSSING	20.1			1,400	41,645	7.7	13.9	13.9	13.9	13.9	16.5
2930					245	41,890	7.7	13.9	13.9	13.9	13.9	16.5
2931					5	41,895	7.7	13.6	13.6	13.6	13.6	13.6
2932					500	42,395	7.7	13.5	13.5	13.5	13.5	13.5

(1) All stages and elevations referenced to National Geodetic Vertical Datum of 1929 (FT_NGVD) unless noted otherwise.

TABLE 4–3

From Ten Mile Creek to Header Canal
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
1000					0	0	−7.4	5.7	5.7	5.8	5.7	7.7
1010					2,500	2,500	−6.3	6.2	6.2	6.2	6.2	8.4
10101					1,400	3,900	−5.2	6.4	6.4	6.4	6.4	8.7
1011	FEC RR SPAN BRIDGE				415	4,315	−5.2	6.4	6.4	6.4	6.4	8.7
1020					2,800	7,115	−4.2	7.3	7.1	7.2	7.1	9.9
1021	SELVITZ RD SPAN BRIDGE				380	7,495	−4.2	7.3	7.2	7.2	7.2	10.0
1030					5,320	12,815	−1.5	9.2	8.9	9.0	8.9	12.0
1031					2,800	15,615	−0.8	9.7	9.3	9.4	9.4	12.5
1032	I–95 SPAN BRIDGE				500	16,115	−0.8	9.7	9.4	9.5	9.5	12.6
1040	@ C-40				3,080	19,195	−0.2	10.6	10.5	10.5	10.5	13.7
1041					445	19,640	−0.2	10.6	10.5	10.6	10.5	13.7
1042	GORDY RD STRUCTURE	14			200	19,840	−1.8	10.8	10.6	10.7	10.7	14.3
1043	GORDY RD SPAN BRIDGE				400	20,240	−1.8	10.8	10.6	10.7	10.7	14.3
1050					2,800	23,040	−0.3	10.9	10.8	10.9	10.9	14.4
1051					4,200	27,240	−1.3	11.2	11.1	11.2	11.2	14.8
1052	PRIVATE CROSSING				395	27,635	−1.3	11.2	11.1	11.2	11.2	14.8
1060					3,640	31,275	3.2	11.4	11.3	11.4	11.4	14.9
1061					5,600	36,875	1.0	11.7	11.7	11.8	11.7	15.1
1100	ELEVEN MILE RD BRIDGE				395	37,270	1.0	11.7	11.7	11.8	11.8	15.2
7110					2,800	40,070	2.5	11.9	11.8	11.9	11.9	15.3
7111	McCARTY RD SPAN BRIDGE				390	40,460	2.5	11.9	11.8	12.0	11.9	15.4
7120					1,400	41,860	6.1	12.0	11.9	12.1	12.0	15.4
7121					4,900	46,760	6.2	12.8	12.9	13.0	13.0	16.2
7105	SR 70 SPAN BRIDGE				405	47,165	6.2	12.9	12.9	13.1	13.0	16.2
7101					300	47,465	6.3	14.8	14.8	14.9	14.8	16.2
7130					5,040	52,505	6.4	15.2	15.2	15.3	15.2	17.1
7131	SHIN RD SPAN BRIDGE				375	52,880	6.4	15.2	15.2	15.3	15.2	17.1
7140					3,640	56,520	9.6	15.3	15.4	15.5	15.4	17.5
8030					3,920	60,440	9.6	15.7	15.8	15.9	15.9	18.2

TABLE 4–4

Header Canal from Pump St. No 1 to Pump St. No 2
Summary of Flood Stages and Problem Areas (1)

Present Land Use

								10–YEAR 24–HOUR				10YR/72HR
Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	Base Cond Max Flood Elev (ft)
8003					0	0	13.8	14.5	14.5	14.5	14.5	14.5
8002					500	500	13.8	15.6	15.6	15.6	15.6	16.0
8001					5	505	13.8	17.8	17.8	17.8	17.8	18.8
8000					1,960	2,465	10.4	17.8	17.8	17.8	17.8	18.8
8010					4,200	6,665	11.7	17.8	17.8	17.8	17.8	18.8
8011					5,600	12,265	10.8	17.8	17.8	17.8	17.8	18.8
8012	SR 70 SPAN BRIDGE				5	12,270	7.5	15.9	15.9	16.0	16.0	18.5
8013					370	12,640	7.5	15.9	15.9	16.0	16.0	18.5
8020	CARLTON ADAMS CROSSING				4,200	16,840	10.6	15.8	15.9	16.0	16.0	18.5
8021					275	17,115	10.2	15.8	15.9	16.0	15.9	18.3
8030					4,200	21,315	9.6	15.7	15.8	15.9	15.9	18.2
8031					6,440	27,755	10.3	16.1	16.2	16.4	16.3	18.5
8032	GOLDSMITH RD CROSSING				240	27,995	10.4	16.1	16.2	16.5	16.4	18.7
8033					2,800	30,795	10.4	18.8	18.8	19.0	19.0	19.5
8040					340	31,135	13.1	19.2	18.9	19.1	19.5	20.5
8041					2,800	33,935	11.9	19.2	19.0	19.2	19.2	20.5
8042	KELLY RD CROSSING	25			150	34,085	11.9	19.6	19.5	19.3	19.3	22.2
8050					2,240	36,325	13.4	19.6	19.5	19.3	19.4	22.2
8051					3,920	40,245	13.4	19.6	19.5	19.3	19.4	22.2
8052	ORANGE AVE SPAN BRIDGE				335	40,580	13.4	19.6	19.5	19.3	19.4	22.2
8060					2,800	43,380	14.5	19.6	19.5	19.3	19.4	22.2
8061	SCHUMANN RD CROSSING				2,520	45,900	12.8	19.5	19.4	19.3	19.3	22.1
8070					210	46,110	12.6	19.3	19.3	19.2	19.3	22.0
8071					2,240	48,350	14.2	19.3	19.3	19.2	19.2	21.9
8072					5	48,355	14.2	16.5	16.4	16.2	16.2	16.8
8073					500	48,855	14.2	14.9	14.9	14.7	14.7	15.1

TABLE 4–5

North Emergency Relief Canal from Header Canal to Five Mile Creek
Summary of Flood Stages and Problem Areas (1)

Present Land Use

Junction No.	Street Name	Top of Road Elev (ft)	Low Chord ft)	Floor Elev. (ft)	Length (ft)	Total Length (ft)	Invert Elev (ft)	10–YEAR 24 HOUR Base Cond Max Flood Elev (ft)	Alt 1 Max Flood Elev (ft)	Alt 2 Max Flood Elev (ft)	Alt 3 Max Flood Elev (ft)	10YR/72HR Base Cond Max Flood Elev (ft)
8060					0	0	14.5	19.6	19.5	19.3	19.3	22.2
4409					210	210	15.4	19.8	19.8	19.6	19.5	22.5
4410					2,800	3,010	16.2	20.5	20.4	20.4	20.2	22.6
4411					210	3,220	15.5	20.6	20.5	20.5	20.3	22.7
4412					2,800	6,020	14.8	20.6	20.6	20.6	20.4	22.7
4420	GODWIN RD CROSSING	24.9			210	6,230	13.9	20.7	20.7	20.6	20.4	22.8
4421					210	6,440	15.4	20.7	20.7	20.6	20.4	22.8
4430					3,920	10,360	13.7	20.7	20.7	20.7	20.4	22.8
4431					3,920	14,280	13.9	20.7	20.7	20.6	20.4	22.7
4432					210	14,490	14.0	20.6	20.6	20.5	20.3	22.7
4440					1,400	15,890	13.0	20.6	20.6	20.5	20.3	22.7
4441	FFA RD CROSSING				4,760	20,650	13.9	20.4	20.4	20.4	20.1	22.6
4442					210	20,860	14.4	20.1	20.1	20.1	19.9	22.4
4443					2,520	23,380	14.3	19.8	19.8	19.7	19.6	22.3
4450					5	23,385	14.1	19.7	19.7	19.6	19.5	22.1
4451					4,730	28,115	11.6	18.0	18.0	17.4	17.2	21.4
4452	ROCK RD CROSSING	22.6			330	28,445	11.6	17.8	17.8	17.2	17.0	21.2
4460					245	28,690	11.4	16.7	16.7	16.7	16.5	19.2
4461	PRIVATE CROSSING				1,400	30,090	10.0	16.4	16.4	16.4	16.2	19.0
4462					245	30,335	10.0	15.9	15.9	15.9	15.8	18.1
4463	KINGS HWY/I–95				1,400	31,735	10.0	15.5	15.5	15.5	15.4	17.8
4464					450	32,185	10.0	15.3	15.3	15.3	15.2	17.7
4470	Canal 31				2,800	34,985	8.1	15.1	15.1	15.1	15.0	17.6
2920	C-31/44 Junction				2,800	37,785	7.2	14.0	14.0	14.0	14.0	16.7



Map Scale: 1:2,370 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 18, Aug 23, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ankona and Farmton sands	16.3	57.0%
26	Oldsmar sand, depressional	7.8	27.1%
31	Pepper and EauGallie sands	4.6	15.9%
Totals for Area of Interest		**28.7**	**100.0%**

APPENDIX B: Drainage Calculations

Complete Report (not including cost) Ver 5.3.2

Project: Sunrise Blvd
Date: 5/5/2025 2:56:46 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Sunrise Blvd Lake
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	55.00

Pre-Condition Landuse Information

Landuse	Undeveloped - Ruderal/Upland Pine: TN=1.694 TP=0.162
Area (acres)	21.97
Rational Coefficient (0-1)	0.11
Non DCIA Curve Number	80.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.694
Phosphorus EMC (mg/l)	0.162
Runoff Volume (ac-ft/yr)	11.177
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	23.346
Phosphorus Loading (kg/yr)	2.233

Post-Condition Landuse Information

Landuse	Multi-Family: TN=2.320 TP=0.520
Area (acres)	21.71
Rational Coefficient (0-1)	0.52
Non DCIA Curve Number	92.00
DCIA Percent (0-100)	42.00
Wet Pond Area (ac)	3.36
Nitrogen EMC (mg/l)	2.320
Phosphorus EMC (mg/l)	0.520
Runoff Volume (ac-ft/yr)	43.542
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000

Nitrogen Loading (kg/yr)	124.556
Phosphorus Loading (kg/yr)	27.918

Catchment Number: 1 Name: Sunrise Blvd Lake

Project: Sunrise Blvd
Date: 5/5/2025

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	0.900
Retention Volume (ac-ft)	1.376

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	23.500
Permanent Pool Volume (ac-ft) for 31 days residence	3.698
Annual Residence Time (days)	197
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

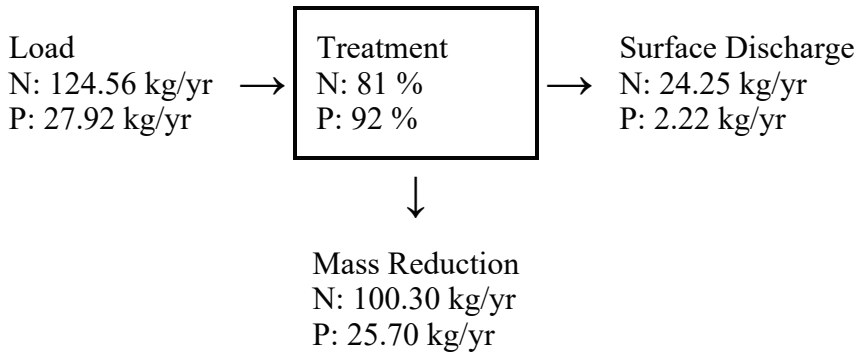
Watershed Characteristics

Catchment Area (acres)	21.71
Contributing Area (acres)	18.350
Non-DCIA Curve Number	92.00
DCIA Percent	42.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	55.00

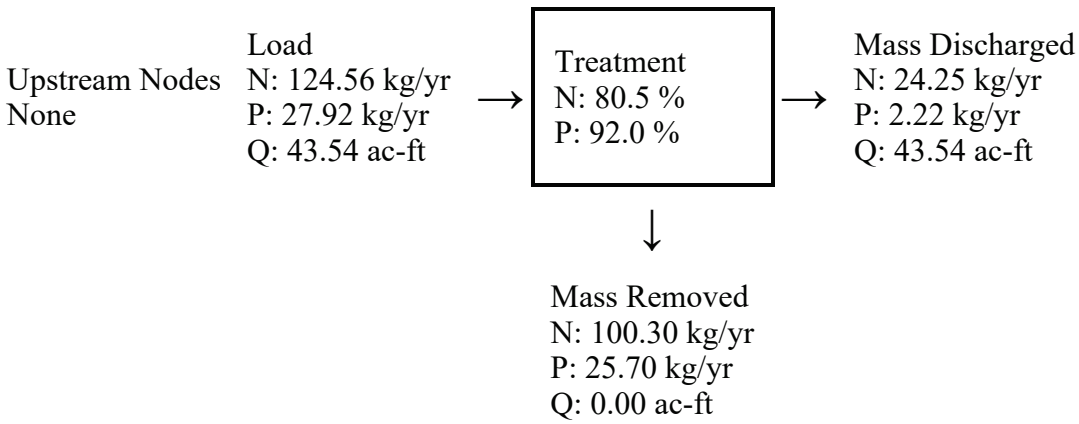
Surface Water Discharge

Required TN Treatment Efficiency (%)	81
Provided TN Treatment Efficiency (%)	81
Required TP Treatment Efficiency (%)	92
Provided TP Treatment Efficiency (%)	92

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Summary Treatment Report Version: 5.3.2

Project: Sunrise Blvd

Analysis Type: Net Improvement
Date:5/5/2025

BMP Types:
Catchment 1 - (Sunrise Blvd Lake)
Multiple BMP
Based on discharge load to 2 decimal places

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	23.35 kg/yr	
Total N post load	124.56 kg/yr	
Target N load reduction	81.26 %	
Target N discharge load	23.35 kg/yr	
Percent N load reduction	80.53 %	
Provided N discharge load	24.25 kg/yr	53.48 lb/yr
Provided N load removed	100.3 kg/yr	221.17 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	2.233 kg/yr	
Total P post load	27.918 kg/yr	
Target P load reduction	92 %	
Target P discharge load	2.233 kg/yr	
Percent P load reduction	92.04 %	
Provided P discharge load	2.222 kg/yr	4.9 lb/yr
Provided P load removed	25.696 kg/yr	56.659 lb/yr

Pre Development Stormwater Calculations

Project: Sunrise Blvd
Project #: 24-237
Engineer: MDL
Date: 3/26/2025
Revised:

Land Use Table

Use	Imp. (ac)	Pervious (ac)	Total (ac)
Undeveloped =	0.000	21.970	21.97
TOTAL =	0.00	21.97	21.97

Find Curve Number:

Avg. Pervious Ground El. =	15.00
Avg. Seasonal High Water Table =	12.00
Control Elevation =	12.00
Distance to Water Table =	3.00

Land Use and CN Calcs

Land Use	Area	Soil Grp	CN	Product	NRCS Cover
Undeveloped	21.74	D	80	1739	Open - Good
TOTAL =	21.74			1739	
			Weighted CN =	80	

* Stormwater BMP Area considered impervious with CN = 98, per SFWMD ERP Manual 5.7.8
**Wetlands CN Based on reccomended design value from SJRWMD Technical Publication 85-5 "A Guide to SCS Runoff Procedures"

Pre-Development Time of Concentration

The following formulas are per the SCS "Urban Hydrology for Small Watersheds" Technical Publication-55.

Sheet flow occurs over plane surfaces.

$$T_{sf} = \frac{.007 * (n * L)^{.8}}{(P_2)^{.5} * (s)^{.4}}$$

T_{sf} = Time of Sheet Flow (hour)
n = Mannings Roughness Coefficient
P_2 = 2-year 24-hour Rainfall (inches)
s = Slope of Hydraulic Grade (feet/feet)
L = Flow Length (feet)

After 300-feet sheet flow usually becomes shallow concentrated flow.

(Unpaved) $V = 16.1345 * (s)^{.5}$
(Paved) $V = 20.3282 * (s)^{.5}$

s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)

Use the velocity to solve for travel time.

$$T_t = \frac{L}{3600 * V}$$

T_t = Travel Time (hour)
L = Flow Length (feet)
V = Average Velocity (feet/second)

When determining flows in open channels use Manning's equation.

$$V = \frac{1.49 * r^{.67} * s^{.5}}{n}$$

r = Hydraulic Radius (feet) equal to a/p_w
s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)
n = Mannings Roughness Coefficient
a = cross sectional area (sq.ft.)
p_w = wetted perimeter (feet)

* Use the velocity to solve for travel time with the formula above.

This following calculations for the project have a segmented travel flow line.

T_1 = On site (sheet flow).

Parameters for T_{1A} :	n =	0.011	coefficient
	P_2 =	5.00	inches
	s =	0.001	foot/foot
	L =	300	feet

T_{1A} =	0.1290	hour	=	7.74 minutes
T_t =	0.1290	hour	=	8.0

Parameters for T_{1b} :	n =	0.400	coefficient
	P_2 =	5.00	inches
	s =	0.003	foot/foot
	L =	0	feet

T_{1B} =	0.0000	hour	=	0.00 minutes
T_t =	0.0000	hour	=	0.0

Parameter for T2:

V= 0.51021769

V=	0.51	
s =	0.001	foot/foot
L =	1000	feet

T_1 =	0.5447	hour	=	32.68 minutes
T_t =	0.5447	hour	=	33.0

TC= total T1A+T1B+T2 41.0

Pre Development -Stage Storage Calculations

Land use Category	Storage Type	Area (ac.)	From Elev.	To Elev.	Cumulative Stage-Storage (ac-ft)																		
					10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00
Existing Grades	Vertical	21.97	10.60	23.60	0.00	0.14	0.68	1.66	3.05	4.87	7.11	9.77	12.85	16.36	20.29	24.64	29.41	34.61	40.23	46.27	52.74	59.62	66.93	74.66
Total WQTV Volume					**0.00**	**0.14**	**0.68**	**1.66**	**3.05**	**4.87**	**7.11**	**9.77**	**12.85**	**16.36**	**20.29**	**24.64**	**29.41**	**34.61**	**40.23**	**46.27**	**52.74**	**59.62**	**66.93**	**74.66**
Sub-Total:		21.97		**Totals:**	**0.00**	**0.14**	**0.68**	**1.66**	**3.05**	**4.87**	**7.11**	**9.77**	**12.85**	**16.36**	**20.29**	**24.64**	**29.41**	**34.61**	**40.23**	**46.27**	**52.74**	**59.62**	**66.93**	**74.66**
Building Pads		0.00	*Not included in Stage-storage calculations																					
	Total:	21.97																						

ICPR Volume to Area Conversion

$A_2 = 2((V_2-V_1)/(S_2-S_1)) - A1$

Stage	Volume
Basin Storage (Does not include exfil)	
10.50	**0.00**
11.00	**0.14**
11.50	**0.68**
12.00	**1.66**
12.50	**3.05**
13.00	**4.87**
13.50	**7.11**
14.00	**9.77**
14.50	**12.85**
15.00	**16.36**
15.50	**20.29**
16.00	**24.64**
17.00	**34.61**
18.00	**46.27**
19.00	**59.62**
20.00	**74.66**

Post Development Stormwater Calculations

Project: Sunrise Blvd
Project #: 24-237

Engineer: MDL
Date: 3/26/2025
Revised:

Land Use Table

Use	Imp. (ac)	Pervious (ac)	Total (ac)
Buildings =	4.46	0.00	4.46
Impervious =	4.73	0.00	4.73
Lakes =	3.36	0.82	4.18
Dry Detention =	0.00	1.51	1.51
Pervious =	0.00	6.83	6.83
TOTAL =	12.55	9.16	21.71

Find Curve Number:

Avg. Pervious Ground El. =	18.00
Avg. Seasonal High Water Table =	12.00
Control Elevation =	12.00
Distance to Water Table =	6.00

Land Use and CN Calcs

Land Use	Area	Soil Grp	CN	Product	NRCS Cover
Buildings =	4.46	N/A	98	437	Impervious
Impervious =	4.73	N/A	98	464	Impervious
Lakes @ CE =	3.36	N/A	98	329	Impervious
Dry Retention =	1.51	N/A	98	148	Impervious
Total Pervious =	7.65	D	80	612	Open - Good
TOTAL =	21.71			1990	
			Weighted CN =	92	

* Stormwater BMP Area considered impervious with CN = 98, per SFWMD ERP Manual 5.7.8
**Wetlands CN Based on reccomended design value from SJRWMD Technical Publication 85-5 "A Guide to SCS Runoff Procedures"

Post Development - Time of Concentration

The following formulas are per the SCS "Urban Hydrology for Small Watersheds" Technical Publication-55.

Sheet flow occurs over plane surfaces.

$$T_{sf} = \frac{.007 * (n * L)^{.8}}{(P_2)^{.5} * (s)^{.4}}$$

T_{sf} = Time of Sheet Flow (hour)
n = Mannings Roughness Coefficient
P_2 = 2-year 24-hour Rainfall (inches)
s = Slope of Hydraulic Grade (feet/feet)
L = Flow Length (feet)

After 300-feet sheet flow usually becomes shallow concentrated flow.

(Unpaved) $V = 16.1345 * (s)^{.5}$
(Paved) $V = 20.3282 * (s)^{.5}$

s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)

Use the velocity to solve for travel time.

$$T_t = \frac{L}{3600 * V}$$

T_t = Travel Time (hour)
L = Flow Length (feet)
V = Average Velocity (feet/second)

When determining flows in open channels use Manning's equation.

$$V = \frac{1.49 * r^{.67} * s^{.5}}{n}$$

r = Hydraulic Radius (feet) equal to a/p_w
s = Slope of Hydraulic Grade (feet/feet)
V = Average Velocity (feet/second)
n = Mannings Roughness Coefficient
a = cross sectional area (sq.ft.)
p_w = wetted perimeter (feet)

* Use the velocity to solve for travel time with the formula above.

This following calculations for the project have a segmented travel flow line.

T_1 = On site (sheet flow).

Parameters for T_{1A} :	n =	0.011	coefficient
	P_2 =	5.00	inches
	s =	0.001	foot/foot
	L =	300	feet

T_{1A} =	0.1290	hour	=	7.74	minutes
T_t =	0.1290	hour	=	8.0	

Parameters for T_{1b} :	n =	0.400	coefficient
	P_2 =	5.00	inches
	s =	0.003	foot/foot
	L =	0	feet

T_{1B} =	0.0000	hour	=	0.00	minutes
T_t =	0.0000	hour	=	0.0	

Parameter for T2:

V= 0.51021769

V=	0.64	
s =	0.001	foot/foot
L =	800	feet

T_1 =	0.3456	hour	=	20.74	minutes
T_t =	0.3456	hour	=	21.0	

TC= total T1A+T1B+T2 29.0 minutes

Post Development Water Quality Calculations

Project: Sunrise Blvd
Project #: 24-237

Engineer MDL
Date 3/26/2025
Revised:

1-inch Over the Project Area - per SFWMD

(Treated Volume) 1-inch * 1-ft/12-in * **21.71** = 1.81 ac-ft

21.71 — PROJECT AREA (EXCLUDES UNDEV/WETLANDS)
1.81 — TREATED VOLUME

2.5-inches Times the Percent Impervious - per SFWMD

(Site Area) 21.71 - (3.36 + 4.46) = 13.89 ac

21.71 — PROJECT AREA (AC)
3.36 — LAKES (AC)
4.46 — ROOFS (AC)
13.89 — SITE AREA

(Impervious Area) 13.89 - 9.16 = 4.73 ac

13.89 — SITE AREA (AC)
9.16 — PERVIOUS AREA (AC)
4.73 — IMPERVIOUS AREA

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 34.05%

(2.5-in * % Imp.) 2.5-inches * 34.05% = 0.85

34.05% — PERCENT IMPERVIOUS
0.85 — INCHES TO BE TREATED

(Treated Volume) 0.85 * 1-ft/12-in * 18.35 = 1.30

0.85 — TREATED (IN)
18.35 — PROJECT AREA - LAKES (AC)
1.30 — TREATED VOLUME

	SFWMD - STND	OFW - 150%	
Required Wet Detention =	**1.81**	**2.71**	
Required Dry Detention =	**1.36**	**2.04**	
Required Retention =	**0.90**	**1.36**	
	1" Governs		

* An additional 0.5-inch of pretreatment for industrial or commercial projects will be needed.
* Per SFWMD, standard water quality volume is 100% for wet detention, 75% for dry detention, and 50% for dry retention
* OFW volume is 150% of the standard SFWMD criteria

Post Development -Stage Storage Calculations

Land use Category	Storage Type	Area (ac.)	From Elev.	To Elev.	Cumulative Stage-Storage (ac-ft)																	
					12.00	12.50	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50	17.00	17.50	18.00	18.50	19.00	19.50	20.00	20.50	21.00	21.50
SE Swale Slopes	Linear	0.270	13.00	15.00	0.00	0.00	0.00	0.02	0.07	0.15	0.27	0.41	0.54	0.68	0.81	0.95	1.08	1.22	1.35	1.49	1.62	1.76	1.89	2.03
N/W Swale Slopes	Linear	0.480	13.00	15.00	0.00	0.00	0.00	0.03	0.12	0.27	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16	2.40	2.64	2.88	3.12	3.36	3.60
Dry Detention Bot	Vertical	0.278	13.00	13.00	0.00	0.00	0.00	0.14	0.28	0.42	0.56	0.69	0.83	0.97	1.11	1.25	1.39	1.53	1.67	1.81	1.95	2.08	2.22	2.36
Dry Detetention Slopes	Linear	0.486	13.00	17.00	0.00	0.00	0.00	0.02	0.06	0.14	0.24	0.38	0.55	0.74	0.97	1.22	1.46	1.70	1.94	2.19	2.43	2.67	2.92	3.16
Total Retention Volume					0.00	0.00	0.00	0.20	0.53	0.98	1.55	2.20	2.88	3.59	4.33	5.09	5.85	6.60	7.36	8.12	8.88	9.63	10.39	11.15
Pond @ CE	Vertical	3.36	12.00	12.00	0.00	1.68	3.36	5.04	6.72	8.40	10.08	11.76	13.44	15.12	16.80	18.48	20.16	21.84	23.52	25.20	26.88	28.56	30.24	31.92
Pond Slopes	Linear	0.82	12.00	15.50	0.00	0.03	0.12	0.26	0.47	0.73	1.05	1.44	1.85	2.26	2.67	3.08	3.49	3.90	4.31	4.72	5.13	5.54	5.95	6.36
Total WQTV Volume					**0.00**	**1.71**	**3.48**	**5.50**	**7.71**	**10.11**	**12.68**	**15.39**	**18.17**	**20.97**	**23.80**	**26.65**	**29.49**	**32.34**	**35.19**	**38.03**	**40.88**	**43.73**	**46.57**	**49.42**
Pavement and Concrete	Linear	4.73	15.70	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.54	1.43	2.74	4.47	6.62	8.99	11.35	13.72	16.08	18.45	20.81
Pervious	Linear	6.83	15.50	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.14	2.56	4.55	7.11	10.25	13.66	17.08	20.49	23.91	27.32	30.74
	Sub-Total:	17.25		**Totals:**	**0.00**	**1.71**	**3.48**	**5.50**	**7.71**	**10.11**	**12.68**	**15.39**	**18.53**	**22.65**	**27.79**	**33.94**	**41.08**	**49.21**	**57.83**	**66.46**	**75.09**	**83.71**	**92.34**	**100.97**
Building Pads		4.46	*Not included in Stage-storage calculations																					
	Total:	21.71																						

ICPR Volume to Area Conversion

$A_2 = 2((V_2-V_1)/(S_2-S_1)) - A1$

Stage	Volume
Basin Storage (Does not include exfil)	
12.00	**0.00**
12.50	**1.71**
13.00	**3.48**
13.50	**5.50**
14.00	**7.71**
14.50	**10.11**
15.00	**12.68**
15.50	**15.39**
16.00	**18.53**
16.50	**22.65**
17.00	**27.79**
17.50	**33.94**
18.00	**41.08**
18.50	**49.21**

Set Water Quality Elevation

Total Water Quality Volume Required:	2.71 ac-ft	<---	Based on 1" over the Project Area (See WQTV Calculations)
Permanent Pool Volume (PPV):	35.96 ac-ft		
Retention Volume Remaining for Net Improvement:	1.38 ac-ft	<--	Remaining retention volume required to meet net improvement (Exclusive of PPV)
Retention Volume Stage for Net Improvement:	**14.85** NAVD	<---	Retention Swale Rim Elevation set at 14.85 NAVD
Detention Water Quality Volume Remaining:	**1.33** ac-ft		
Required Water Quality Detention Stage:	**12.78** NAVD		
Overflow Weir Elevation:	13.00 NAVD	<---	Proposed Weir Elevation
Water Quality Detention Volume Provided:	**0.77** ac-ft		
Total Water Quality Volume Provided:	**3.48** ac-ft		

Permanent Pool Volume

Depth (ft)	Stage (NAVD)	Area (ac)	Inc Vol (acft)	Total Vol (acft)
0	12	3.36	0	0
1	11	2.94	3.15	10.16
12	0	1.75	25.795	35.955

Anoxic depth at 12 feet below SHWT.

Post Development Allowable Discharge Calculations

Sim	Node	Time (hrs)	Stage [ft]	Warning Stage (ft)	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]	Time Difference (hrs)	Vol Difference in a 24 hr period
10 Year - 3 Day	Post Development	0	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	1	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	2	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	3	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	4	12.00	18.00	0	0		
10 Year - 3 Day	Post Development	5	12.01	18.00	0.02	0		
10 Year - 3 Day	Post Development	6	12.01	18.00	0.04	0		
10 Year - 3 Day	Post Development	7	12.02	18.00	0.06	0		
10 Year - 3 Day	Post Development	8	12.03	18.00	0.1	0		
10 Year - 3 Day	Post Development	9	12.04	18.00	0.13	0		
10 Year - 3 Day	Post Development	10	12.05	18.00	0.18	0		
10 Year - 3 Day	Post Development	11	12.07	18.00	0.22	0		
10 Year - 3 Day	Post Development	12	12.08	18.00	0.27	0		
10 Year - 3 Day	Post Development	13	12.09	18.00	0.31	0		
10 Year - 3 Day	Post Development	14	12.11	18.00	0.37	0		
10 Year - 3 Day	Post Development	15	12.12	18.00	0.42	0		
10 Year - 3 Day	Post Development	16	12.14	18.00	0.47	0		
10 Year - 3 Day	Post Development	17	12.16	18.00	0.53	0		
10 Year - 3 Day	Post Development	18	12.17	18.00	0.59	0		
10 Year - 3 Day	Post Development	19	12.19	18.00	0.64	0		
10 Year - 3 Day	Post Development	20	12.21	18.00	0.7	0		
10 Year - 3 Day	Post Development	21	12.23	18.00	0.76	0		
10 Year - 3 Day	Post Development	22	12.24	18.00	0.83	0		
10 Year - 3 Day	Post Development	23	12.26	18.00	0.89	0		
10 Year - 3 Day	Post Development	24	12.28	18.00	0.95	0	24	0.00
10 Year - 3 Day	Post Development	25	12.30	18.00	1.02	0	24	0.00
10 Year - 3 Day	Post Development	26	12.33	18.00	1.11	0	24	0.00
10 Year - 3 Day	Post Development	27	12.35	18.00	1.2	0	24	0.00
10 Year - 3 Day	Post Development	28	12.38	18.00	1.3	0	24	0.00
10 Year - 3 Day	Post Development	29	12.41	18.00	1.39	0	24	0.00
10 Year - 3 Day	Post Development	30	12.44	18.00	1.49	0	24	0.00
10 Year - 3 Day	Post Development	31	12.46	18.00	1.59	0	24	0.00
10 Year - 3 Day	Post Development	32	12.49	18.00	1.69	0	24	0.00
10 Year - 3 Day	Post Development	33	12.52	18.00	1.78	0	24	0.00
10 Year - 3 Day	Post Development	34	12.55	18.00	1.88	0	24	0.00
10 Year - 3 Day	Post Development	35	12.58	18.00	1.98	0	24	0.00
10 Year - 3 Day	Post Development	36	12.61	18.00	2.08	0	24	0.00
10 Year - 3 Day	Post Development	37	12.63	18.00	2.18	0	24	0.00
10 Year - 3 Day	Post Development	38	12.66	18.00	2.28	0	24	0.00
10 Year - 3 Day	Post Development	39	12.69	18.00	2.38	0	24	0.00
10 Year - 3 Day	Post Development	40	12.72	18.00	2.48	0	24	0.00
10 Year - 3 Day	Post Development	41	12.75	18.00	2.58	0	24	0.00
10 Year - 3 Day	Post Development	42	12.77	18.00	2.69	0	24	0.00
10 Year - 3 Day	Post Development	43	12.80	18.00	2.79	0	24	0.00
10 Year - 3 Day	Post Development	44	12.83	18.00	2.89	0	24	0.00
10 Year - 3 Day	Post Development	45	12.86	18.00	2.99	0	24	0.00
10 Year - 3 Day	Post Development	46	12.89	18.00	3.1	0	24	0.00

10 Year - 3 Day	Post Development	47	12.91	18.00	3.2	0	24	0.00
10 Year - 3 Day	Post Development	48	12.94	18.00	3.3	0	24	0.00
10 Year - 3 Day	Post Development	49	12.97	18.00	3.41	0	24	0.00
10 Year - 3 Day	Post Development	50	13.00	18.00	3.53	0	24	0.00
10 Year - 3 Day	Post Development	51	13.03	18.00	3.65	0	24	0.00
10 Year - 3 Day	Post Development	52	13.07	18.00	3.79	0	24	0.00
10 Year - 3 Day	Post Development	53	13.11	18.00	3.96	0	24	0.00
10 Year - 3 Day	Post Development	54	13.16	18.00	4.17	0.01	24	0.01
10 Year - 3 Day	Post Development	55	13.23	18.00	4.42	0.01	24	0.01
10 Year - 3 Day	Post Development	56	13.30	18.00	4.73	0.02	24	0.02
10 Year - 3 Day	Post Development	57	13.38	18.00	5.08	0.03	24	0.03
10 Year - 3 Day	Post Development	58	13.48	18.00	5.5	0.05	24	0.05
10 Year - 3 Day	Post Development	59	13.60	18.00	6.03	0.06	24	0.06
10 Year - 3 Day	Post Development	60	13.91	18.00	7.4	0.08	24	0.08
10 Year - 3 Day	Post Development	61	14.63	18.00	10.88	0.11	24	0.11
10 Year - 3 Day	Post Development	62	14.92	18.00	12.44	0.14	24	0.14
10 Year - 3 Day	Post Development	63	15.05	18.00	13.12	0.18	24	0.18
10 Year - 3 Day	Post Development	64	15.10	18.00	13.53	0.29	24	0.29
10 Year - 3 Day	Post Development	65	15.12	18.00	13.84	0.48	24	0.48
10 Year - 3 Day	Post Development	66	15.13	18.00	14.07	0.68	24	0.68
10 Year - 3 Day	Post Development	67	15.13	18.00	14.29	0.89	24	0.89
10 Year - 3 Day	Post Development	68	15.13	18.00	14.51	1.1	24	1.10
10 Year - 3 Day	Post Development	69	15.13	18.00	14.69	1.31	24	1.31
10 Year - 3 Day	Post Development	70	15.12	18.00	14.85	1.51	24	1.51
10 Year - 3 Day	Post Development	71	15.11	18.00	14.99	1.69	24	1.69
10 Year - 3 Day	Post Development	72	15.11	18.00	15.13	1.86	24	1.86
10 Year - 3 Day	Post Development	73	15.09	18.00	15.22	2.02	24	2.02
10 Year - 3 Day	Post Development	74	15.07	18.00	15.24	2.15	24	2.15
10 Year - 3 Day	Post Development	75	15.06	18.00	15.25	2.25	24	2.25
10 Year - 3 Day	Post Development	76	15.04	18.00	15.25	2.32	24	2.32
10 Year - 3 Day	Post Development	77	15.03	18.00	15.25	2.38	24	2.38
10 Year - 3 Day	Post Development	78	15.02	18.00	15.25	2.43	24	2.42
10 Year - 3 Day	Post Development	79	15.01	18.00	15.25	2.48	24	2.47
10 Year - 3 Day	Post Development	80	15.01	18.00	15.25	2.51	24	2.49
10 Year - 3 Day	Post Development	81	15.00	18.00	15.25	2.55	24	2.52
10 Year - 3 Day	Post Development	82	14.99	18.00	15.25	2.58	24	2.53
10 Year - 3 Day	Post Development	83	14.99	18.00	15.25	2.62	24	2.56
10 Year - 3 Day	Post Development	84	14.98	18.00	15.25	2.65	24	2.57
10 Year - 3 Day	Post Development	85	14.97	18.00	15.25	2.68	24	2.57
10 Year - 3 Day	Post Development	86	14.97	18.00	15.25	2.72	24	2.58
10 Year - 3 Day	Post Development	87	14.96	18.00	15.25	2.75	24	2.57
10 Year - 3 Day	Post Development	88	14.95	18.00	15.25	2.79	24	2.50
10 Year - 3 Day	Post Development	89	14.95	18.00	15.25	2.82	24	2.34
10 Year - 3 Day	Post Development	90	14.94	18.00	15.25	2.85	24	2.17
10 Year - 3 Day	Post Development	91	14.94	18.00	15.25	2.89	24	2.00
10 Year - 3 Day	Post Development	92	14.93	18.00	15.25	2.92	24	1.82
10 Year - 3 Day	Post Development	93	14.92	18.00	15.25	2.95	24	1.64
10 Year - 3 Day	Post Development	94	14.92	18.00	15.25	2.99	24	1.48
10 Year - 3 Day	Post Development	95	14.91	18.00	15.25	3.02	24	1.33
10 Year - 3 Day	Post Development	96	14.90	18.00	15.25	3.05	24	1.19
10 Year - 3 Day	Post Development	97	14.90	18.00	15.25	3.09	24	1.07
10 Year - 3 Day	Post Development	98	14.89	18.00	15.25	3.12	24	0.97

10 Year - 3 Day	Post Development	99	14.88	18.00	15.25	3.15	24	0.90
10 Year - 3 Day	Post Development	100	14.88	18.00	15.25	3.18	24	0.86
10 Year - 3 Day	Post Development	101	14.87	18.00	15.25	3.22	24	0.84
10 Year - 3 Day	Post Development	102	14.87	18.00	15.25	3.25	24	0.82
10 Year - 3 Day	Post Development	103	14.86	18.00	15.25	3.28	24	0.80
10 Year - 3 Day	Post Development	104	14.85	18.00	15.25	3.32	24	0.81
10 Year - 3 Day	Post Development	105	14.85	18.00	15.25	3.35	24	0.80
10 Year - 3 Day	Post Development	106	14.84	18.00	15.25	3.38	24	0.80
10 Year - 3 Day	Post Development	107	14.83	18.00	15.25	3.41	24	0.79
10 Year - 3 Day	Post Development	108	14.83	18.00	15.25	3.45	24	0.80
10 Year - 3 Day	Post Development	109	14.82	18.00	15.25	3.48	24	0.80
10 Year - 3 Day	Post Development	110	14.82	18.00	15.25	3.51	24	0.79
10 Year - 3 Day	Post Development	111	14.81	18.00	15.25	3.54	24	0.79
10 Year - 3 Day	Post Development	112	14.80	18.00	15.25	3.58	24	0.79
10 Year - 3 Day	Post Development	113	14.80	18.00	15.25	3.61	24	0.79
10 Year - 3 Day	Post Development	114	14.79	18.00	15.25	3.64	24	0.79
10 Year - 3 Day	Post Development	115	14.78	18.00	15.25	3.67	24	0.78
10 Year - 3 Day	Post Development	116	14.78	18.00	15.25	3.7	24	0.78
10 Year - 3 Day	Post Development	117	14.77	18.00	15.25	3.74	24	0.79
10 Year - 3 Day	Post Development	118	14.77	18.00	15.25	3.77	24	0.78
10 Year - 3 Day	Post Development	119	14.76	18.00	15.25	3.8	24	0.78
10 Year - 3 Day	Post Development	120	14.75	18.00	15.25	3.83	24	0.78
10 Year - 3 Day	Post Development	121	14.75	18.00	15.25	3.86	24	0.77
10 Year - 3 Day	Post Development	122	14.74	18.00	15.25	3.89	24	0.77
10 Year - 3 Day	Post Development	123	14.73	18.00	15.25	3.93	24	0.78
10 Year - 3 Day	Post Development	124	14.73	18.00	15.25	3.96	24	0.78
10 Year - 3 Day	Post Development	125	14.72	18.00	15.25	3.99	24	0.77
10 Year - 3 Day	Post Development	126	14.72	18.00	15.25	4.02	24	0.77
10 Year - 3 Day	Post Development	127	14.71	18.00	15.25	4.05	24	0.77
10 Year - 3 Day	Post Development	128	14.70	18.00	15.25	4.08	24	0.76
10 Year - 3 Day	Post Development	129	14.70	18.00	15.25	4.11	24	0.76
10 Year - 3 Day	Post Development	130	14.69	18.00	15.25	4.15	24	0.77
10 Year - 3 Day	Post Development	131	14.69	18.00	15.25	4.18	24	0.77
10 Year - 3 Day	Post Development	132	14.68	18.00	15.25	4.21	24	0.76
10 Year - 3 Day	Post Development	133	14.67	18.00	15.25	4.24	24	0.76
10 Year - 3 Day	Post Development	134	14.67	18.00	15.25	4.27	24	0.76
10 Year - 3 Day	Post Development	135	14.66	18.00	15.25	4.3	24	0.76
10 Year - 3 Day	Post Development	136	14.66	18.00	15.25	4.33	24	0.75
10 Year - 3 Day	Post Development	137	14.65	18.00	15.25	4.36	24	0.75
10 Year - 3 Day	Post Development	138	14.64	18.00	15.25	4.39	24	0.75
10 Year - 3 Day	Post Development	139	14.64	18.00	15.25	4.42	24	0.75
10 Year - 3 Day	Post Development	140	14.63	18.00	15.25	4.45	24	0.75
10 Year - 3 Day	Post Development	141	14.63	18.00	15.25	4.48	24	0.74
10 Year - 3 Day	Post Development	142	14.62	18.00	15.25	4.51	24	0.74
10 Year - 3 Day	Post Development	143	14.61	18.00	15.25	4.54	24	0.74
10 Year - 3 Day	Post Development	144	14.61	18.00	15.25	4.57	24	0.74
10 Year - 3 Day	Post Development	145	14.60	18.00	15.25	4.6	24	0.74
10 Year - 3 Day	Post Development	146	14.59	18.00	15.25	4.64	24	0.75
10 Year - 3 Day	Post Development	147	14.59	18.00	15.25	4.67	24	0.74
10 Year - 3 Day	Post Development	148	14.58	18.00	15.25	4.7	24	0.74
10 Year - 3 Day	Post Development	149	14.58	18.00	15.25	4.73	24	0.74
10 Year - 3 Day	Post Development	150	14.57	18.00	15.25	4.76	24	0.74

10 Year - 3 Day	Post Development	151	14.57	18.00	15.25	4.79	24	0.74
10 Year - 3 Day	Post Development	152	14.56	18.00	15.25	4.81	24	0.73
10 Year - 3 Day	Post Development	153	14.55	18.00	15.25	4.84	24	0.73
10 Year - 3 Day	Post Development	154	14.55	18.00	15.25	4.87	24	0.72
10 Year - 3 Day	Post Development	155	14.54	18.00	15.25	4.9	24	0.72
10 Year - 3 Day	Post Development	156	14.54	18.00	15.25	4.93	24	0.72
10 Year - 3 Day	Post Development	157	14.53	18.00	15.25	4.96	24	0.72
10 Year - 3 Day	Post Development	158	14.52	18.00	15.25	4.99	24	0.72
10 Year - 3 Day	Post Development	159	14.52	18.00	15.25	5.02	24	0.72
10 Year - 3 Day	Post Development	160	14.51	18.00	15.25	5.05	24	0.72
10 Year - 3 Day	Post Development	161	14.51	18.00	15.25	5.08	24	0.72
10 Year - 3 Day	Post Development	162	14.50	18.00	15.25	5.11	24	0.72
10 Year - 3 Day	Post Development	163	14.49	18.00	15.25	5.14	24	0.72
10 Year - 3 Day	Post Development	164	14.49	18.00	15.25	5.17	24	0.72
10 Year - 3 Day	Post Development	165	14.48	18.00	15.25	5.2	24	0.72
10 Year - 3 Day	Post Development	166	14.48	18.00	15.25	5.23	24	0.72
10 Year - 3 Day	Post Development	167	14.47	18.00	15.25	5.25	24	0.71
10 Year - 3 Day	Post Development	168	14.47	18.00	15.25	5.28	24	0.71
10 Year - 3 Day	Post Development	169	14.46	18.00	15.25	5.31	24	0.71
10 Year - 3 Day	Post Development	170	14.45	18.00	15.25	5.34	24	0.70
10 Year - 3 Day	Post Development	171	14.45	18.00	15.25	5.37	24	0.70
10 Year - 3 Day	Post Development	172	14.44	18.00	15.25	5.4	24	0.70
10 Year - 3 Day	Post Development	173	14.44	18.00	15.25	5.43	24	0.70
10 Year - 3 Day	Post Development	174	14.43	18.00	15.25	5.45	24	0.69
10 Year - 3 Day	Post Development	175	14.42	18.00	15.25	5.48	24	0.69
10 Year - 3 Day	Post Development	176	14.42	18.00	15.25	5.51	24	0.70
10 Year - 3 Day	Post Development	177	14.41	18.00	15.25	5.54	24	0.70
10 Year - 3 Day	Post Development	178	14.41	18.00	15.25	5.57	24	0.70
10 Year - 3 Day	Post Development	179	14.40	18.00	15.25	5.6	24	0.70
10 Year - 3 Day	Post Development	180	14.40	18.00	15.25	5.62	24	0.69
10 Year - 3 Day	Post Development	181	14.39	18.00	15.25	5.65	24	0.69
10 Year - 3 Day	Post Development	182	14.38	18.00	15.25	5.68	24	0.69
10 Year - 3 Day	Post Development	183	14.38	18.00	15.25	5.71	24	0.69
10 Year - 3 Day	Post Development	184	14.37	18.00	15.25	5.74	24	0.69
10 Year - 3 Day	Post Development	185	14.37	18.00	15.25	5.76	24	0.68
10 Year - 3 Day	Post Development	186	14.36	18.00	15.25	5.79	24	0.68
10 Year - 3 Day	Post Development	187	14.36	18.00	15.25	5.82	24	0.68
10 Year - 3 Day	Post Development	188	14.35	18.00	15.25	5.85	24	0.68
10 Year - 3 Day	Post Development	189	14.34	18.00	15.25	5.87	24	0.67
10 Year - 3 Day	Post Development	190	14.34	18.00	15.25	5.9	24	0.67
10 Year - 3 Day	Post Development	191	14.33	18.00	15.25	5.93	24	0.68
10 Year - 3 Day	Post Development	192	14.33	18.00	15.25	5.96	24	0.68
10 Year - 3 Day	Post Development	193	14.32	18.00	15.25	5.98	24	0.67
10 Year - 3 Day	Post Development	194	14.32	18.00	15.25	6.01	24	0.67
10 Year - 3 Day	Post Development	195	14.31	18.00	15.25	6.04	24	0.67
10 Year - 3 Day	Post Development	196	14.31	18.00	15.25	6.06	24	0.66
10 Year - 3 Day	Post Development	197	14.30	18.00	15.25	6.09	24	0.66
10 Year - 3 Day	Post Development	198	14.29	18.00	15.25	6.12	24	0.67
10 Year - 3 Day	Post Development	199	14.29	18.00	15.25	6.14	24	0.66
10 Year - 3 Day	Post Development	200	14.28	18.00	15.25	6.17	24	0.66

10 Year - 3 Day	Post Development	201	14.28	18.00	15.25	6.2	24	0.66
10 Year - 3 Day	Post Development	202	14.27	18.00	15.25	6.22	24	0.65
10 Year - 3 Day	Post Development	203	14.27	18.00	15.25	6.25	24	0.65
10 Year - 3 Day	Post Development	204	14.26	18.00	15.25	6.28	24	0.66
10 Year - 3 Day	Post Development	205	14.26	18.00	15.25	6.3	24	0.65
10 Year - 3 Day	Post Development	206	14.25	18.00	15.25	6.33	24	0.65
10 Year - 3 Day	Post Development	207	14.24	18.00	15.25	6.36	24	0.65
10 Year - 3 Day	Post Development	208	14.24	18.00	15.25	6.38	24	0.64
10 Year - 3 Day	Post Development	209	14.23	18.00	15.25	6.41	24	0.65
10 Year - 3 Day	Post Development	210	14.23	18.00	15.25	6.44	24	0.65
10 Year - 3 Day	Post Development	211	14.22	18.00	15.25	6.46	24	0.64
10 Year - 3 Day	Post Development	212	14.22	18.00	15.25	6.49	24	0.64
10 Year - 3 Day	Post Development	213	14.21	18.00	15.25	6.51	24	0.64
10 Year - 3 Day	Post Development	214	14.21	18.00	15.25	6.54	24	0.64
10 Year - 3 Day	Post Development	215	14.20	18.00	15.25	6.57	24	0.64
10 Year - 3 Day	Post Development	216	14.20	18.00	15.25	6.59	24	0.63
10 Year - 3 Day	Post Development	217	14.19	18.00	15.25	6.62	24	0.64
10 Year - 3 Day	Post Development	218	14.18	18.00	15.25	6.64	24	0.63
10 Year - 3 Day	Post Development	219	14.18	18.00	15.25	6.67	24	0.63
10 Year - 3 Day	Post Development	220	14.17	18.00	15.25	6.69	24	0.63
10 Year - 3 Day	Post Development	221	14.17	18.00	15.25	6.72	24	0.63
10 Year - 3 Day	Post Development	222	14.16	18.00	15.25	6.74	24	0.62
10 Year - 3 Day	Post Development	223	14.16	18.00	15.25	6.77	24	0.63
10 Year - 3 Day	Post Development	224	14.15	18.00	15.25	6.79	24	0.62
10 Year - 3 Day	Post Development	225	14.15	18.00	15.25	6.82	24	0.62
10 Year - 3 Day	Post Development	226	14.14	18.00	15.25	6.85	24	0.63
10 Year - 3 Day	Post Development	227	14.14	18.00	15.25	6.87	24	0.62
10 Year - 3 Day	Post Development	228	14.13	18.00	15.25	6.9	24	0.62
10 Year - 3 Day	Post Development	229	14.13	18.00	15.25	6.92	24	0.62
10 Year - 3 Day	Post Development	230	14.12	18.00	15.25	6.94	24	0.61
10 Year - 3 Day	Post Development	231	14.12	18.00	15.25	6.97	24	0.61
10 Year - 3 Day	Post Development	232	14.11	18.00	15.25	6.99	24	0.61
10 Year - 3 Day	Post Development	233	14.10	18.00	15.25	7.02	24	0.61
10 Year - 3 Day	Post Development	234	14.10	18.00	15.25	7.04	24	0.60
10 Year - 3 Day	Post Development	235	14.09	18.00	15.25	7.07	24	0.61
10 Year - 3 Day	Post Development	236	14.09	18.00	15.25	7.09	24	0.60
10 Year - 3 Day	Post Development	237	14.08	18.00	15.25	7.12	24	0.61
10 Year - 3 Day	Post Development	238	14.08	18.00	15.25	7.14	24	0.60
10 Year - 3 Day	Post Development	239	14.07	18.00	15.25	7.17	24	0.60
10 Year - 3 Day	Post Development	240	14.07	18.00	15.25	7.19	24	0.60
10 Year - 3 Day	Post Development	241	14.06	18.00	15.25	7.21	24	0.59
10 Year - 3 Day	Post Development	242	14.06	18.00	15.25	7.24	24	0.60
10 Year - 3 Day	Post Development	243	14.05	18.00	15.25	7.26	24	0.59
10 Year - 3 Day	Post Development	244	14.05	18.00	15.25	7.29	24	0.60
10 Year - 3 Day	Post Development	245	14.04	18.00	15.25	7.31	24	0.59
10 Year - 3 Day	Post Development	246	14.04	18.00	15.25	7.33	24	0.59
10 Year - 3 Day	Post Development	247	14.03	18.00	15.25	7.36	24	0.59
10 Year - 3 Day	Post Development	248	14.03	18.00	15.25	7.38	24	0.59
10 Year - 3 Day	Post Development	249	14.02	18.00	15.25	7.4	24	0.58
10 Year - 3 Day	Post Development	250	14.02	18.00	15.25	7.43	24	0.58

10 Year - 3 Day	Post Development	251	14.01	18.00	15.25	7.45	24	0.58
10 Year - 3 Day	Post Development	252	14.01	18.00	15.25	7.47	24	0.57
10 Year - 3 Day	Post Development	253	14.00	18.00	15.25	7.5	24	0.58
10 Year - 3 Day	Post Development	254	14.00	18.00	15.25	7.52	24	0.58
10 Year - 3 Day	Post Development	255	13.99	18.00	15.25	7.54	24	0.57
10 Year - 3 Day	Post Development	256	13.99	18.00	15.25	7.57	24	0.58
10 Year - 3 Day	Post Development	257	13.98	18.00	15.25	7.59	24	0.57
10 Year - 3 Day	Post Development	258	13.98	18.00	15.25	7.61	24	0.57
10 Year - 3 Day	Post Development	259	13.97	18.00	15.25	7.64	24	0.57
10 Year - 3 Day	Post Development	260	13.97	18.00	15.25	7.66	24	0.57
10 Year - 3 Day	Post Development	261	13.96	18.00	15.25	7.68	24	0.56
10 Year - 3 Day	Post Development	262	13.96	18.00	15.25	7.7	24	0.56
10 Year - 3 Day	Post Development	263	13.95	18.00	15.25	7.73	24	0.56
10 Year - 3 Day	Post Development	264	13.95	18.00	15.25	7.75	24	0.56
10 Year - 3 Day	Post Development	265	13.94	18.00	15.25	7.77	24	0.56
10 Year - 3 Day	Post Development	266	13.94	18.00	15.25	7.79	24	0.55
10 Year - 3 Day	Post Development	267	13.93	18.00	15.25	7.82	24	0.56
10 Year - 3 Day	Post Development	268	13.93	18.00	15.25	7.84	24	0.55
10 Year - 3 Day	Post Development	269	13.92	18.00	15.25	7.86	24	0.55
10 Year - 3 Day	Post Development	270	13.92	18.00	15.25	7.88	24	0.55
10 Year - 3 Day	Post Development	271	13.91	18.00	15.25	7.91	24	0.55
10 Year - 3 Day	Post Development	272	13.91	18.00	15.25	7.93	24	0.55
10 Year - 3 Day	Post Development	273	13.90	18.00	15.25	7.95	24	0.55
10 Year - 3 Day	Post Development	274	13.90	18.00	15.25	7.97	24	0.54
10 Year - 3 Day	Post Development	275	13.89	18.00	15.25	7.99	24	0.54
10 Year - 3 Day	Post Development	276	13.89	18.00	15.25	8.02	24	0.55
10 Year - 3 Day	Post Development	277	13.88	18.00	15.25	8.04	24	0.54
10 Year - 3 Day	Post Development	278	13.88	18.00	15.25	8.06	24	0.54
10 Year - 3 Day	Post Development	279	13.87	18.00	15.25	8.08	24	0.54
10 Year - 3 Day	Post Development	280	13.87	18.00	15.25	8.1	24	0.53
10 Year - 3 Day	Post Development	281	13.86	18.00	15.25	8.12	24	0.53
10 Year - 3 Day	Post Development	282	13.86	18.00	15.25	8.14	24	0.53
10 Year - 3 Day	Post Development	283	13.85	18.00	15.25	8.17	24	0.53
10 Year - 3 Day	Post Development	284	13.85	18.00	15.25	8.19	24	0.53
10 Year - 3 Day	Post Development	285	13.85	18.00	15.25	8.21	24	0.53
10 Year - 3 Day	Post Development	286	13.84	18.00	15.25	8.23	24	0.53
10 Year - 3 Day	Post Development	287	13.84	18.00	15.25	8.25	24	0.52
10 Year - 3 Day	Post Development	288	13.83	18.00	15.25	8.27	24	0.52
10 Year - 3 Day	Post Development	289	13.83	18.00	15.25	8.29	24	0.52
10 Year - 3 Day	Post Development	290	13.82	18.00	15.25	8.31	24	0.52
10 Year - 3 Day	Post Development	291	13.82	18.00	15.25	8.33	24	0.51
10 Year - 3 Day	Post Development	292	13.81	18.00	15.25	8.35	24	0.51
10 Year - 3 Day	Post Development	293	13.81	18.00	15.25	8.37	24	0.51
10 Year - 3 Day	Post Development	294	13.80	18.00	15.25	8.39	24	0.51
10 Year - 3 Day	Post Development	295	13.80	18.00	15.25	8.42	24	0.51
10 Year - 3 Day	Post Development	296	13.79	18.00	15.25	8.44	24	0.51
10 Year - 3 Day	Post Development	297	13.79	18.00	15.25	8.46	24	0.51
10 Year - 3 Day	Post Development	298	13.79	18.00	15.25	8.48	24	0.51
10 Year - 3 Day	Post Development	299	13.78	18.00	15.25	8.5	24	0.51
10 Year - 3 Day	Post Development	300	13.78	18.00	15.25	8.52	24	0.50

10 Year - 3 Day	Post Development	301	13.77	18.00	15.25	8.54	24	0.50
10 Year - 3 Day	Post Development	302	13.77	18.00	15.25	8.56	24	0.50
10 Year - 3 Day	Post Development	303	13.76	18.00	15.25	8.58	24	0.50
10 Year - 3 Day	Post Development	304	13.76	18.00	15.25	8.6	24	0.50
10 Year - 3 Day	Post Development	305	13.75	18.00	15.25	8.62	24	0.50
10 Year - 3 Day	Post Development	306	13.75	18.00	15.25	8.64	24	0.50
10 Year - 3 Day	Post Development	307	13.75	18.00	15.25	8.66	24	0.49
10 Year - 3 Day	Post Development	308	13.74	18.00	15.25	8.67	24	0.48
10 Year - 3 Day	Post Development	309	13.74	18.00	15.25	8.69	24	0.48
10 Year - 3 Day	Post Development	310	13.73	18.00	15.25	8.71	24	0.48
10 Year - 3 Day	Post Development	311	13.73	18.00	15.25	8.73	24	0.48
10 Year - 3 Day	Post Development	312	13.72	18.00	15.25	8.75	24	0.48
10 Year - 3 Day	Post Development	313	13.72	18.00	15.25	8.77	24	0.48
10 Year - 3 Day	Post Development	314	13.71	18.00	15.25	8.79	24	0.48
10 Year - 3 Day	Post Development	315	13.71	18.00	15.25	8.81	24	0.48
10 Year - 3 Day	Post Development	316	13.71	18.00	15.25	8.83	24	0.48
10 Year - 3 Day	Post Development	317	13.70	18.00	15.25	8.85	24	0.48
10 Year - 3 Day	Post Development	318	13.70	18.00	15.25	8.87	24	0.48
10 Year - 3 Day	Post Development	319	13.69	18.00	15.25	8.89	24	0.47
10 Year - 3 Day	Post Development	320	13.69	18.00	15.25	8.9	24	0.46
10 Year - 3 Day	Post Development	321	13.68	18.00	15.25	8.92	24	0.46
10 Year - 3 Day	Post Development	322	13.68	18.00	15.25	8.94	24	0.46
10 Year - 3 Day	Post Development	323	13.68	18.00	15.25	8.96	24	0.46
10 Year - 3 Day	Post Development	324	13.67	18.00	15.25	8.98	24	0.46
10 Year - 3 Day	Post Development	325	13.67	18.00	15.25	9	24	0.46
10 Year - 3 Day	Post Development	326	13.66	18.00	15.25	9.01	24	0.45
10 Year - 3 Day	Post Development	327	13.66	18.00	15.25	9.03	24	0.45
10 Year - 3 Day	Post Development	328	13.65	18.00	15.25	9.05	24	0.45
10 Year - 3 Day	Post Development	329	13.65	18.00	15.25	9.07	24	0.45
10 Year - 3 Day	Post Development	330	13.65	18.00	15.25	9.09	24	0.45
10 Year - 3 Day	Post Development	331	13.64	18.00	15.25	9.1	24	0.44
10 Year - 3 Day	Post Development	332	13.64	18.00	15.25	9.12	24	0.45
10 Year - 3 Day	Post Development	333	13.63	18.00	15.25	9.14	24	0.45
10 Year - 3 Day	Post Development	334	13.63	18.00	15.25	9.16	24	0.45
10 Year - 3 Day	Post Development	335	13.63	18.00	15.25	9.18	24	0.45
10 Year - 3 Day	Post Development	336	13.62	18.00	15.25	9.19	24	0.44
10 Year - 3 Day	Post Development	337	13.62	18.00	15.25	9.21	24	0.44
10 Year - 3 Day	Post Development	338	13.61	18.00	15.25	9.23	24	0.44
10 Year - 3 Day	Post Development	339	13.61	18.00	15.25	9.25	24	0.44
10 Year - 3 Day	Post Development	340	13.61	18.00	15.25	9.26	24	0.43
10 Year - 3 Day	Post Development	341	13.60	18.00	15.25	9.28	24	0.43
10 Year - 3 Day	Post Development	342	13.60	18.00	15.25	9.3	24	0.43
10 Year - 3 Day	Post Development	343	13.59	18.00	15.25	9.31	24	0.42
10 Year - 3 Day	Post Development	344	13.59	18.00	15.25	9.33	24	0.43
10 Year - 3 Day	Post Development	345	13.59	18.00	15.25	9.35	24	0.43
10 Year - 3 Day	Post Development	346	13.58	18.00	15.25	9.36	24	0.42
10 Year - 3 Day	Post Development	347	13.58	18.00	15.25	9.38	24	0.42
10 Year - 3 Day	Post Development	348	13.57	18.00	15.25	9.4	24	0.42
10 Year - 3 Day	Post Development	349	13.57	18.00	15.25	9.41	24	0.41
10 Year - 3 Day	Post Development	350	13.57	18.00	15.25	9.43	24	0.42

10 Year - 3 Day	Post Development	351	13.56	18.00	15.25	9.45	24	0.42
10 Year - 3 Day	Post Development	352	13.56	18.00	15.25	9.46	24	0.41
10 Year - 3 Day	Post Development	353	13.56	18.00	15.25	9.48	24	0.41
10 Year - 3 Day	Post Development	354	13.55	18.00	15.25	9.5	24	0.41
10 Year - 3 Day	Post Development	355	13.55	18.00	15.25	9.51	24	0.41
10 Year - 3 Day	Post Development	356	13.54	18.00	15.25	9.53	24	0.41
10 Year - 3 Day	Post Development	357	13.54	18.00	15.25	9.55	24	0.41
10 Year - 3 Day	Post Development	358	13.54	18.00	15.25	9.56	24	0.40
10 Year - 3 Day	Post Development	359	13.53	18.00	15.25	9.58	24	0.40
10 Year - 3 Day	Post Development	360	13.41	18.00	15.11	10.1	24	0.91
Total			**15.13**					**2.58 ac-ft Peak Vol Discharge in 24 Period**

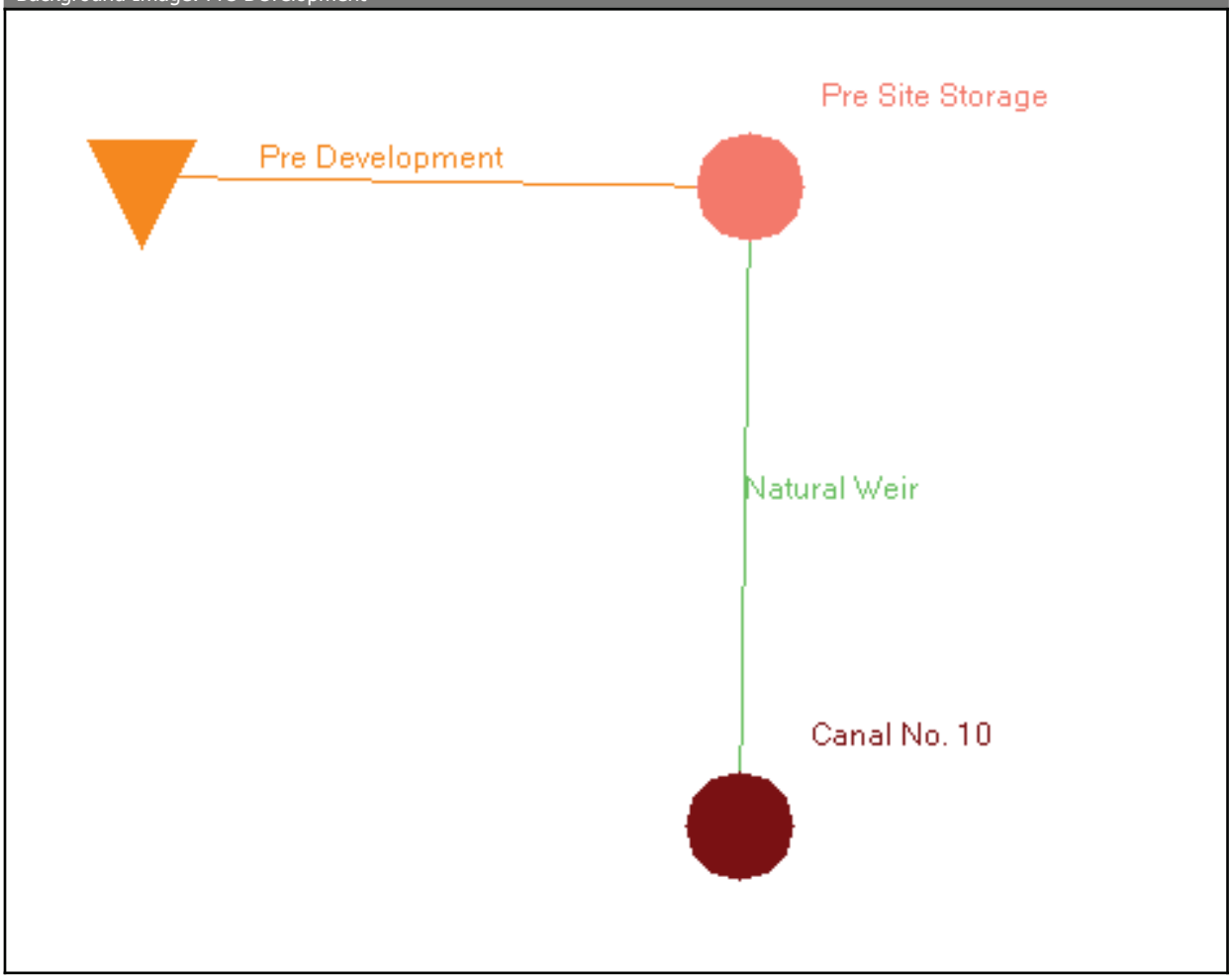
Allowable Volumetric Discharge: 2 in/ac * 1 ft/12 in * 21.71 = **3.62 ac-ft Peak Vol Allowed in 24 Hrs**

Volume **PROJECT AREA (Ac)**

Allowed Discharge Exceeded? **No**

APPENDIX C: Storm Routing Results

Background Image: Pre-Development



Simulation: 25-3

Scenario: Pre Development
Run Date/Time: 3/27/2025 12:29:53 PM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simple Basin: Pre Development

Scenario:	Pre Development
Node:	Pre Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	41.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7400 ac
Curve Number:	80.0
Ia/S:	0.00
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Pre Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft
Alert Stage:	0.00 ft
Boundary Stage:	

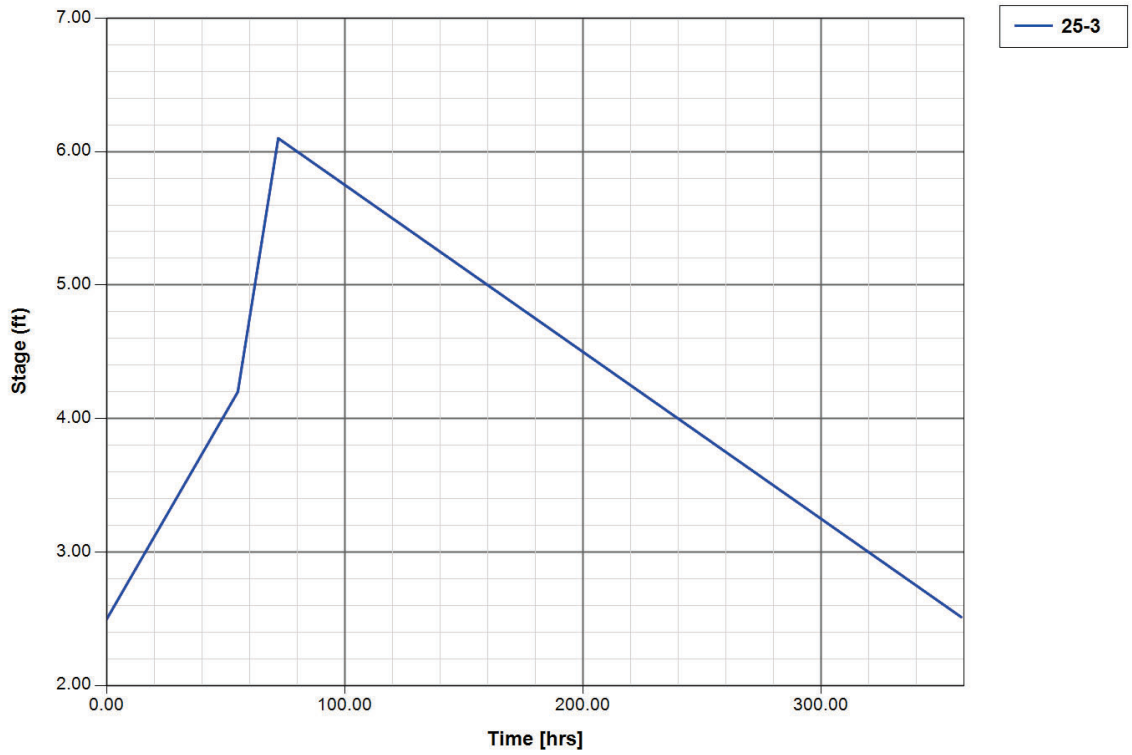
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Pre Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	36.67	0.00	0

Stage [Node: Canal No. 10]



Node: Pre Site Storage

Scenario: Pre Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 10.50 ft
Warning Stage: 0.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
10.50	0.00	0

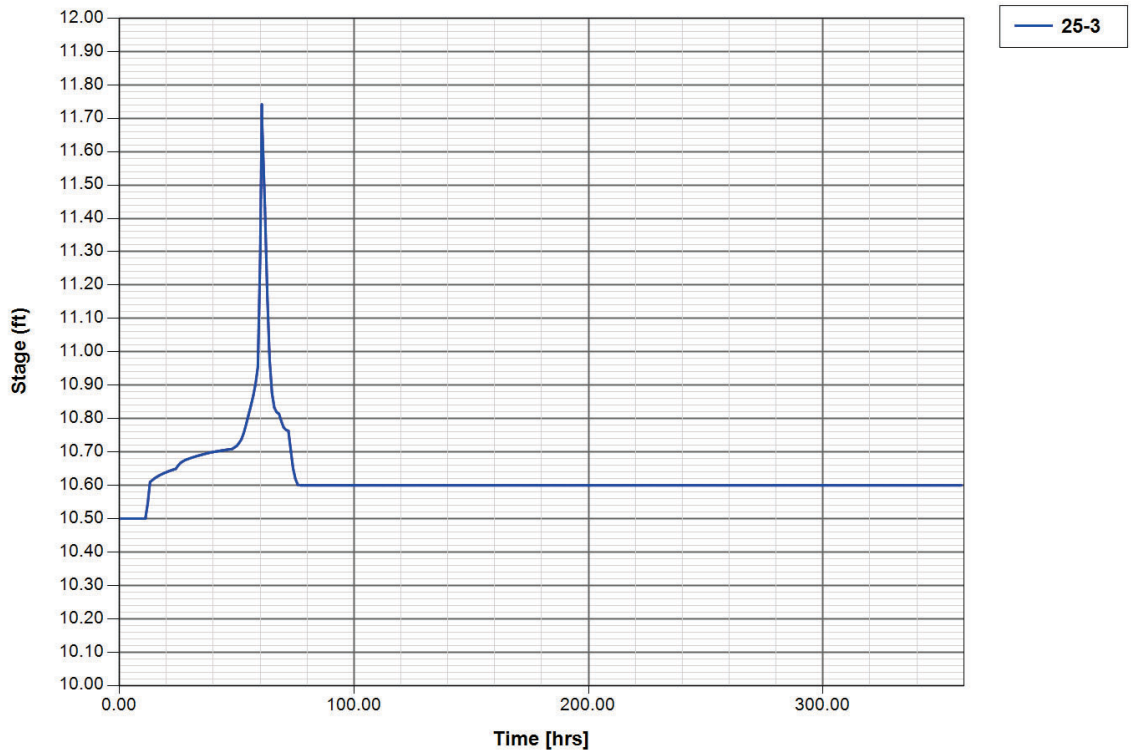
Stage [ft]	Volume [ac-ft]	Volume [ft3]
11.00	0.13	5663
11.50	0.68	29621
12.00	1.64	71438
12.50	3.02	131551
13.00	4.82	209959
13.50	7.03	306227
14.00	9.67	421225
14.50	12.72	554083
15.00	16.19	705236
15.50	20.08	874685
16.00	24.38	1061993
17.00	34.25	1491930
18.00	45.79	1994612
19.00	59.00	2570040
20.00	73.88	3218213

Comment:

Node Max Conditions [Pre Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Pre Site Storage	25-3	0.00	0.00	11.74	0.0010	45.12	36.67	83236

Stage [Node: Pre Site Storage]



Weir Link: Natural Weir

Scenario:	Pre Development
From Node:	Pre Site Storage
To Node:	Canal No. 10
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Rectangular
Invert:	10.60 ft
Control Elevation:	10.60 ft
Max Depth:	1.00 ft
Max Width:	10.00 ft
Fillet:	0.00 ft

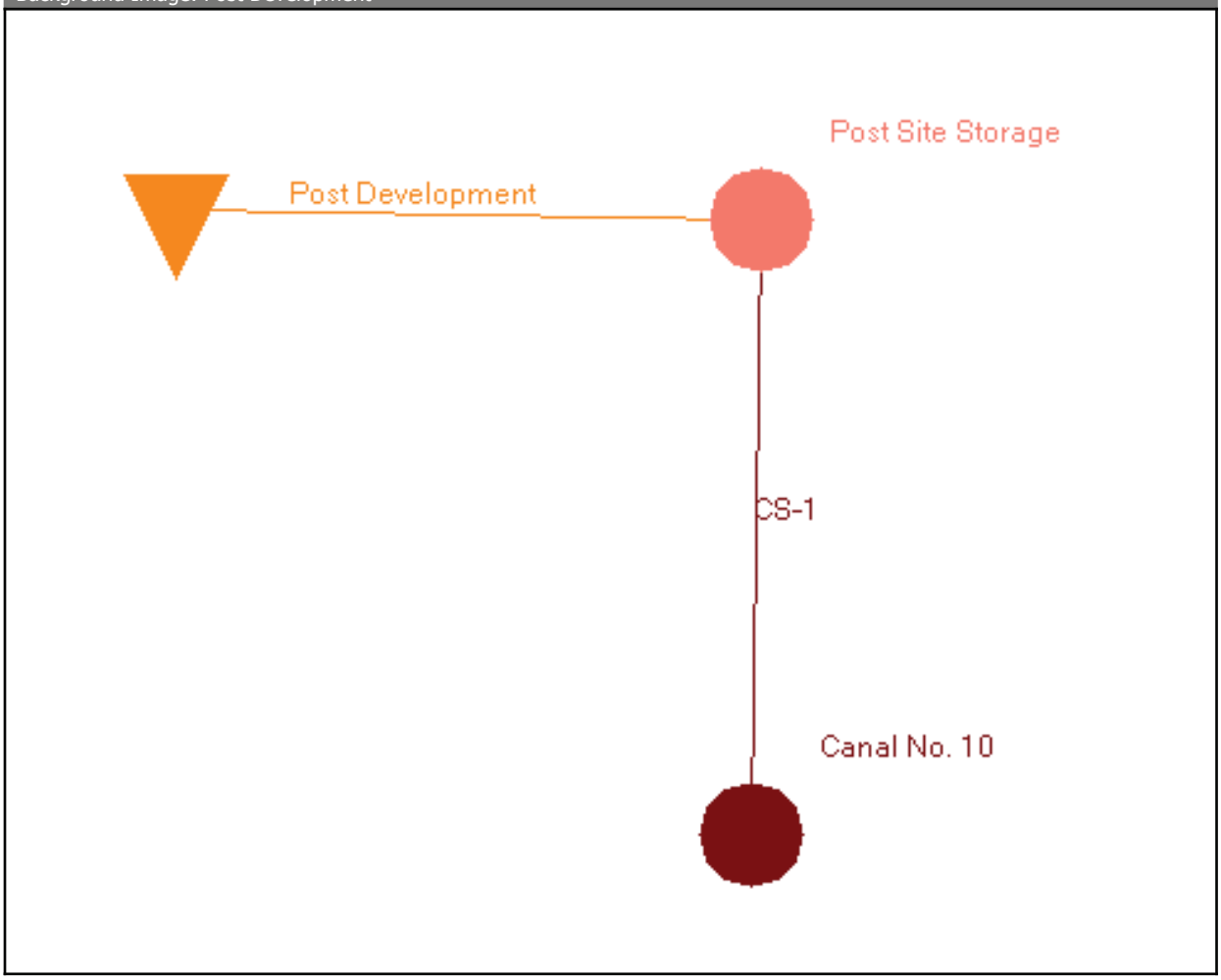
Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Background Image: Post Development



Simulation: 10-1

Scenario: Post Development
Run Date/Time: 5/6/2025 9:43:23 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	6.00 in
		Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 10-3

Scenario: Post Development
Run Date/Time: 5/6/2025 9:45:20 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100-3

Scenario:	Post Development
Run Date/Time:	5/6/2025 9:41:40 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25-3

Scenario: Post Development
Run Date/Time: 5/6/2025 9:46:31 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simple Basin: Post Development

Scenario:	Post Development
Node:	Post Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	29.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7100 ac
Curve Number:	92.0
Ia/S:	0.00
% Impervious:	43.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Post Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft

Alert Stage: 0.00 ft
Boundary Stage:

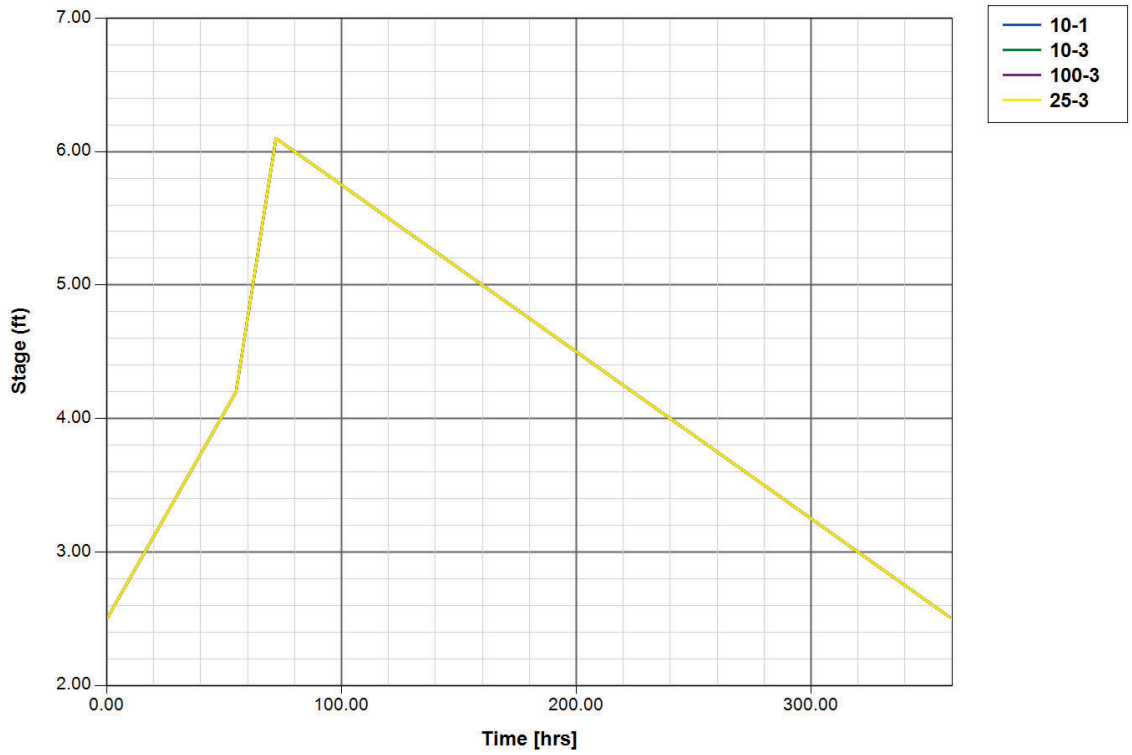
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	10-1	19.00	0.00	6.10	0.0009	0.34	0.00	0
Canal No. 10	10-3	19.00	0.00	6.10	0.0009	2.58	0.00	0
Canal No. 10	100-3	19.00	0.00	6.10	0.0009	0.00	0.00	0
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	5.74	0.00	0

Stage [Node: Canal No. 10]



Node: Post Site Storage

Scenario: Post Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 12.00 ft
Warning Stage: 18.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.00	0.00	0
12.50	1.71	74488
13.00	3.48	151589
13.50	5.50	239580
14.00	7.71	335848
14.50	10.11	440392
15.00	12.68	552341
15.50	15.39	670388
16.00	18.53	807167
16.50	22.65	986634

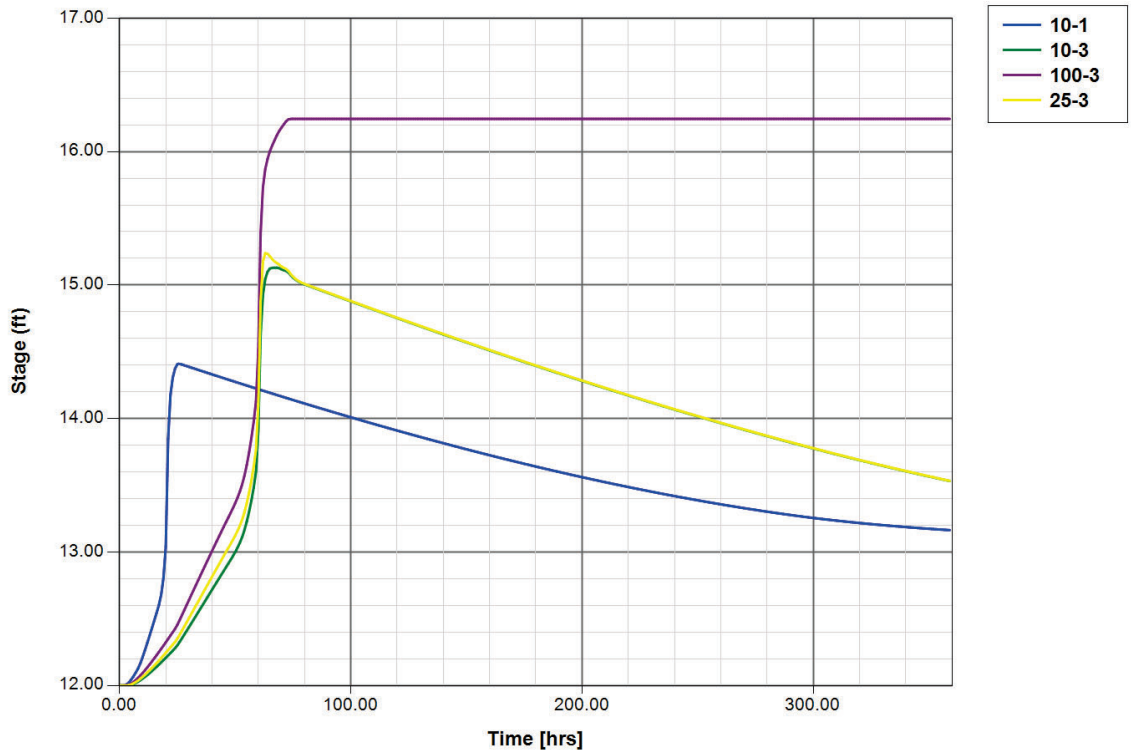
Stage [ft]	Volume [ac-ft]	Volume [ft3]
17.00	27.79	1210532
17.50	33.94	1478426
18.00	41.08	1789445
18.50	49.21	2143588

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Post Site Storage	10-1	18.00	0.00	14.41	0.0010	54.22	0.34	213689
Post Site Storage	10-3	18.00	0.00	15.13	0.0010	54.56	2.58	236513
Post Site Storage	100-3	18.00	0.00	16.25	0.0010	72.98	0.00	358990
Post Site Storage	25-3	18.00	0.00	15.24	0.0010	60.71	5.74	241872

Stage [Node: Post Site Storage]



Drop Structure Link: CS-1		Upstream Pipe		Downstream Pipe	
Scenario:	Post Development	Invert:	6.00 ft	Invert:	6.00 ft
From Node:	Post Site Storage	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Canal No. 10	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	640.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	13.00 ft
Control Elevation:	13.00 ft
Max Depth:	0.25 ft
Max Width:	0.25 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Weir

Weir Component	
Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	15.00 ft
Control Elevation:	15.00 ft
Max Depth:	3.08 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

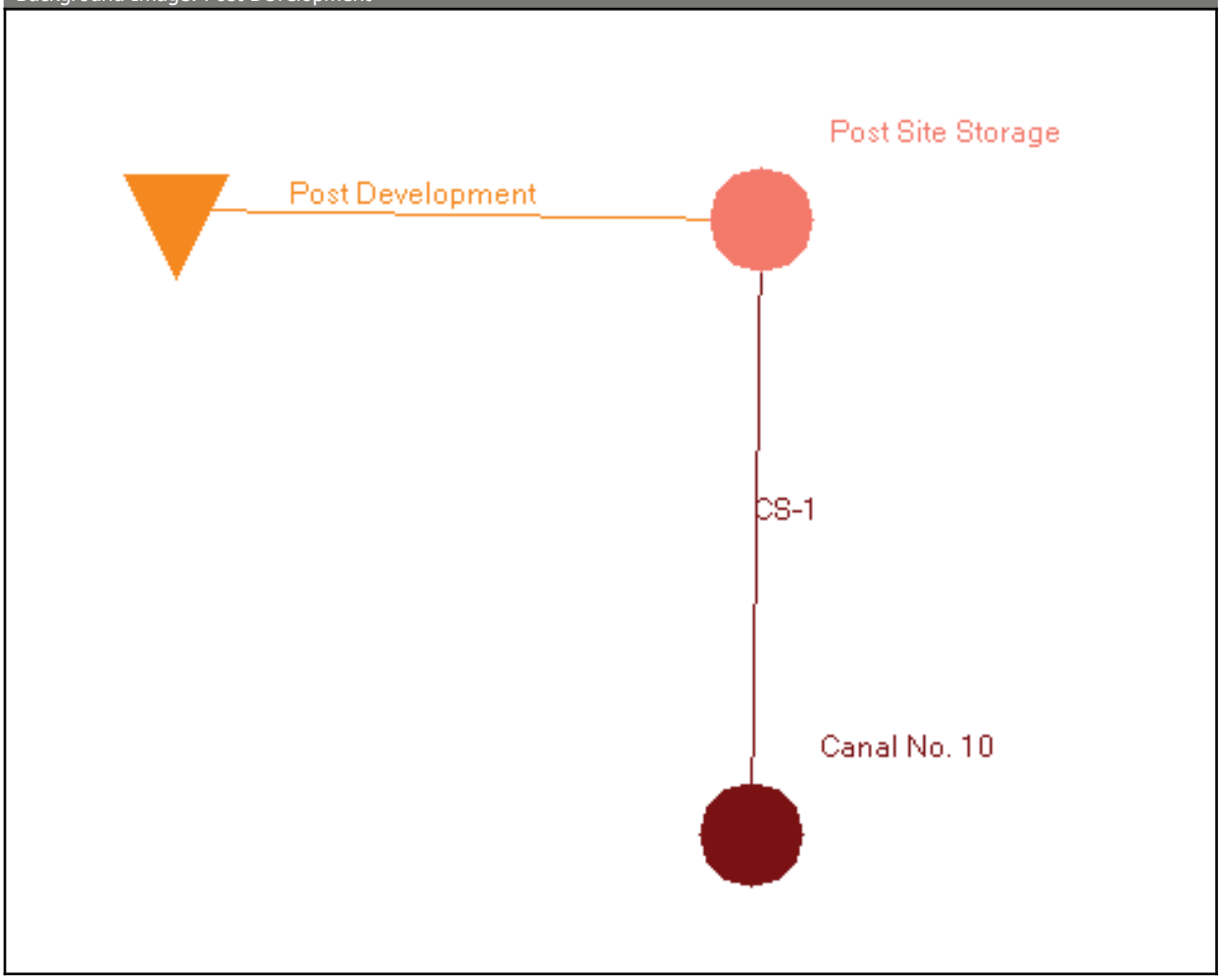
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Rim

Drop Structure Comment:

Background Image: Post Development



Simulation: 10-1

Scenario: Post Development
Run Date/Time: 5/6/2025 9:59:56 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	6.00 in
		Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area	100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 10-3

Scenario: Post Development
Run Date/Time: 5/6/2025 10:01:05 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100-3

Scenario:	Post Development
Run Date/Time:	5/6/2025 10:04:27 AM
Program Version:	StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72
Rainfall Amount: 12.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25-3

Scenario: Post Development
Run Date/Time: 5/6/2025 10:02:19 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	55.0000	60.0000
0	0	0	72.0000	60.0000
0	0	0	360.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec	Ia/S:	0.20 dec
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft		
		Rainfall Name:	~SFWMD-72
		Rainfall Amount:	10.00 in
		Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simple Basin: Post Development

Scenario:	Post Development
Node:	Post Site Storage
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	29.0000 min
Max Allowable Q:	99999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	21.7100 ac
Curve Number:	92.0
Ia/S:	0.00
% Impervious:	43.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Canal No. 10

Scenario:	Post Development
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	2.50 ft
Warning Stage:	19.00 ft

Alert Stage: 0.00 ft
Boundary Stage:

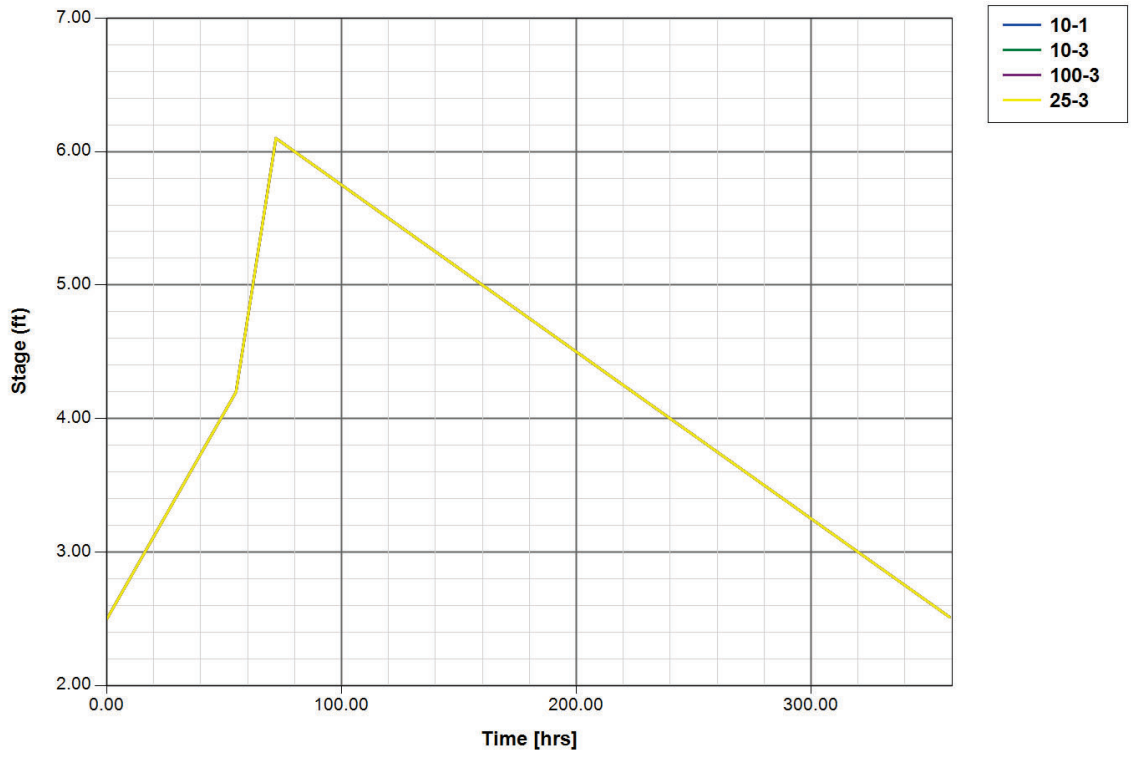
Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.50
0	0	0	55.0000	4.20
0	0	0	72.0000	6.10
0	0	0	360.0000	2.50

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Canal No. 10	10-1	19.00	0.00	6.10	0.0009	5.43	0.00	0
Canal No. 10	10-3	19.00	0.00	6.10	0.0009	15.01	0.00	0
Canal No. 10	100-3	19.00	0.00	6.10	0.0009	0.00	0.00	0
Canal No. 10	25-3	19.00	0.00	6.10	0.0009	20.34	0.00	0

Stage [Node: Canal No. 10]



Node: Post Site Storage

Scenario: Post Development
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 13.53 ft
Warning Stage: 18.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.00	0.00	0
12.50	1.71	74488
13.00	3.48	151589
13.50	5.50	239580
14.00	7.71	335848
14.50	10.11	440392
15.00	12.68	552341
15.50	15.39	670388
16.00	18.53	807167
16.50	22.65	986634

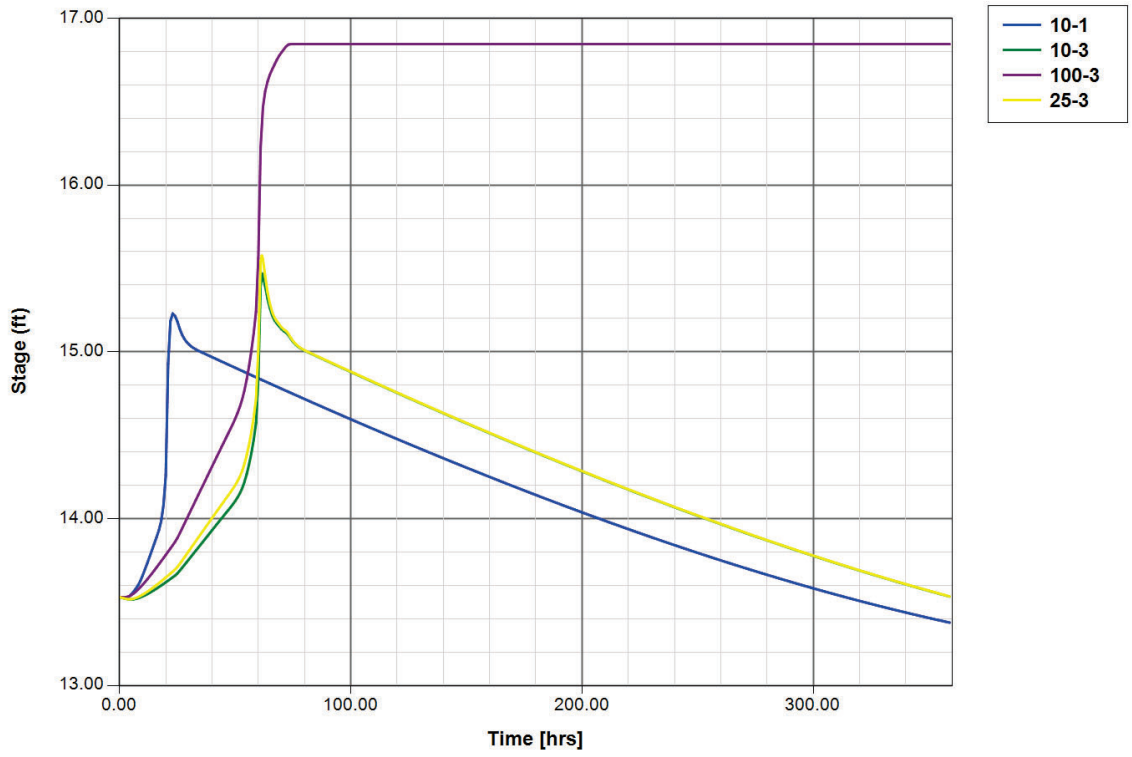
Stage [ft]	Volume [ac-ft]	Volume [ft3]
17.00	27.79	1210532
17.50	33.94	1478426
18.00	41.08	1789445
18.50	49.21	2143588

Comment:

Node Max Conditions [Post Development]

Node Name	Sim Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Post Site Storage	10-1	18.00	0.00	15.23	0.0010	54.22	5.43	241405
Post Site Storage	10-3	18.00	0.00	15.47	0.0010	54.57	15.01	253287
Post Site Storage	100-3	18.00	0.00	16.84	0.0010	72.98	0.00	464299
Post Site Storage	25-3	18.00	0.00	15.58	0.0010	60.71	20.34	264320

Stage [Node: Post Site Storage]



Drop Structure Link: CS-1		Upstream Pipe		Downstream Pipe	
Scenario:	Post Development	Invert:	6.00 ft	Invert:	6.00 ft
From Node:	Post Site Storage	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Canal No. 10	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe Flow Direction:	None	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	640.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	13.00 ft
Control Elevation:	13.00 ft
Max Depth:	0.25 ft
Max Width:	0.25 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Weir

Weir Component	
Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	15.00 ft
Control Elevation:	15.00 ft
Max Depth:	3.08 ft
Max Width:	4.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Rim

Drop Structure Comment:

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	0.0000	12.00	0.00	0.00
Post Development	10-3	1.0027	12.00	0.00	0.00
Post Development	10-3	2.0027	12.00	0.00	0.00
Post Development	10-3	3.0027	12.00	0.00	0.00
Post Development	10-3	4.0027	12.00	0.00	0.00
Post Development	10-3	5.0027	12.01	0.02	0.00
Post Development	10-3	6.0027	12.01	0.04	0.00
Post Development	10-3	7.0027	12.02	0.06	0.00
Post Development	10-3	8.0027	12.03	0.10	0.00
Post Development	10-3	9.0027	12.04	0.13	0.00
Post Development	10-3	10.0027	12.05	0.18	0.00
Post Development	10-3	11.0027	12.07	0.22	0.00
Post Development	10-3	12.0027	12.08	0.27	0.00
Post Development	10-3	13.0027	12.09	0.31	0.00
Post Development	10-3	14.0027	12.11	0.37	0.00
Post Development	10-3	15.0027	12.12	0.42	0.00
Post Development	10-3	16.0027	12.14	0.47	0.00
Post Development	10-3	17.0027	12.16	0.53	0.00
Post Development	10-3	18.0027	12.17	0.59	0.00
Post Development	10-3	19.0027	12.19	0.64	0.00
Post Development	10-3	20.0027	12.21	0.70	0.00
Post Development	10-3	21.0027	12.23	0.76	0.00
Post Development	10-3	22.0027	12.24	0.83	0.00
Post Development	10-3	23.0027	12.26	0.89	0.00
Post Development	10-3	24.0027	12.28	0.95	0.00
Post Development	10-3	25.0027	12.30	1.02	0.00
Post Development	10-3	26.0027	12.33	1.11	0.00
Post Development	10-3	27.0027	12.35	1.20	0.00
Post Development	10-3	28.0027	12.38	1.30	0.00

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	29.0027	12.41	1.39	0.00
Post Development	10-3	30.0027	12.44	1.49	0.00
Post Development	10-3	31.0027	12.46	1.59	0.00
Post Development	10-3	32.0027	12.49	1.69	0.00
Post Development	10-3	33.0027	12.52	1.78	0.00
Post Development	10-3	34.0027	12.55	1.88	0.00
Post Development	10-3	35.0027	12.58	1.98	0.00
Post Development	10-3	36.0027	12.61	2.08	0.00
Post Development	10-3	37.0027	12.63	2.18	0.00
Post Development	10-3	38.0027	12.66	2.28	0.00
Post Development	10-3	39.0027	12.69	2.38	0.00
Post Development	10-3	40.0027	12.72	2.48	0.00
Post Development	10-3	41.0027	12.75	2.58	0.00
Post Development	10-3	42.0027	12.77	2.69	0.00
Post Development	10-3	43.0027	12.80	2.79	0.00
Post Development	10-3	44.0027	12.83	2.89	0.00
Post Development	10-3	45.0027	12.86	2.99	0.00
Post Development	10-3	46.0027	12.89	3.10	0.00
Post Development	10-3	47.0027	12.91	3.20	0.00
Post Development	10-3	48.0027	12.94	3.30	0.00
Post Development	10-3	49.0027	12.97	3.41	0.00
Post Development	10-3	50.0027	13.00	3.53	0.00
Post Development	10-3	51.0027	13.03	3.65	0.00
Post Development	10-3	52.0027	13.07	3.79	0.00
Post Development	10-3	53.0027	13.11	3.96	0.00
Post Development	10-3	54.0027	13.16	4.17	0.01
Post Development	10-3	55.0027	13.23	4.42	0.01
Post Development	10-3	56.0027	13.30	4.73	0.02
Post Development	10-3	57.0027	13.38	5.08	0.03

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	58.0027	13.48	5.50	0.05
Post Development	10-3	59.0032	13.60	6.03	0.06
Post Development	10-3	60.0004	13.91	7.40	0.08
Post Development	10-3	61.0010	14.63	10.88	0.11
Post Development	10-3	62.0047	14.92	12.44	0.14
Post Development	10-3	63.0001	15.05	13.12	0.18
Post Development	10-3	64.0001	15.10	13.53	0.29
Post Development	10-3	65.0001	15.12	13.84	0.48
Post Development	10-3	66.0001	15.13	14.07	0.68
Post Development	10-3	67.0001	15.13	14.29	0.89
Post Development	10-3	68.0001	15.13	14.51	1.10
Post Development	10-3	69.0001	15.13	14.69	1.31
Post Development	10-3	70.0001	15.12	14.85	1.51
Post Development	10-3	71.0001	15.11	14.99	1.69
Post Development	10-3	72.0001	15.11	15.13	1.86
Post Development	10-3	73.0001	15.09	15.22	2.02
Post Development	10-3	74.0001	15.07	15.24	2.15
Post Development	10-3	75.0001	15.06	15.25	2.25
Post Development	10-3	76.0001	15.04	15.25	2.32
Post Development	10-3	77.0001	15.03	15.25	2.38
Post Development	10-3	78.0001	15.02	15.25	2.43
Post Development	10-3	79.0001	15.01	15.25	2.48
Post Development	10-3	80.0001	15.01	15.25	2.51
Post Development	10-3	81.0001	15.00	15.25	2.55
Post Development	10-3	82.0001	14.99	15.25	2.58
Post Development	10-3	83.0001	14.99	15.25	2.62
Post Development	10-3	84.0001	14.98	15.25	2.65
Post Development	10-3	85.0001	14.97	15.25	2.68
Post Development	10-3	86.0001	14.97	15.25	2.72

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	87.0001	14.96	15.25	2.75
Post Development	10-3	88.0001	14.95	15.25	2.79
Post Development	10-3	89.0001	14.95	15.25	2.82
Post Development	10-3	90.0001	14.94	15.25	2.85
Post Development	10-3	91.0001	14.94	15.25	2.89
Post Development	10-3	92.0001	14.93	15.25	2.92
Post Development	10-3	93.0001	14.92	15.25	2.95
Post Development	10-3	94.0001	14.92	15.25	2.99
Post Development	10-3	95.0001	14.91	15.25	3.02
Post Development	10-3	96.0001	14.90	15.25	3.05
Post Development	10-3	97.0001	14.90	15.25	3.09
Post Development	10-3	98.0001	14.89	15.25	3.12
Post Development	10-3	99.0001	14.88	15.25	3.15
Post Development	10-3	100.0001	14.88	15.25	3.18
Post Development	10-3	101.0001	14.87	15.25	3.22
Post Development	10-3	102.0001	14.87	15.25	3.25
Post Development	10-3	103.0001	14.86	15.25	3.28
Post Development	10-3	104.0001	14.85	15.25	3.32
Post Development	10-3	105.0001	14.85	15.25	3.35
Post Development	10-3	106.0001	14.84	15.25	3.38
Post Development	10-3	107.0001	14.83	15.25	3.41
Post Development	10-3	108.0001	14.83	15.25	3.45
Post Development	10-3	109.0001	14.82	15.25	3.48
Post Development	10-3	110.0001	14.82	15.25	3.51
Post Development	10-3	111.0001	14.81	15.25	3.54
Post Development	10-3	112.0001	14.80	15.25	3.58
Post Development	10-3	113.0001	14.80	15.25	3.61
Post Development	10-3	114.0001	14.79	15.25	3.64
Post Development	10-3	115.0001	14.78	15.25	3.67

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	116.0001	14.78	15.25	3.70
Post Development	10-3	117.0001	14.77	15.25	3.74
Post Development	10-3	118.0001	14.77	15.25	3.77
Post Development	10-3	119.0001	14.76	15.25	3.80
Post Development	10-3	120.0001	14.75	15.25	3.83
Post Development	10-3	121.0001	14.75	15.25	3.86
Post Development	10-3	122.0001	14.74	15.25	3.89
Post Development	10-3	123.0001	14.73	15.25	3.93
Post Development	10-3	124.0001	14.73	15.25	3.96
Post Development	10-3	125.0001	14.72	15.25	3.99
Post Development	10-3	126.0001	14.72	15.25	4.02
Post Development	10-3	127.0001	14.71	15.25	4.05
Post Development	10-3	128.0001	14.70	15.25	4.08
Post Development	10-3	129.0001	14.70	15.25	4.11
Post Development	10-3	130.0001	14.69	15.25	4.15
Post Development	10-3	131.0001	14.69	15.25	4.18
Post Development	10-3	132.0001	14.68	15.25	4.21
Post Development	10-3	133.0001	14.67	15.25	4.24
Post Development	10-3	134.0001	14.67	15.25	4.27
Post Development	10-3	135.0001	14.66	15.25	4.30
Post Development	10-3	136.0001	14.66	15.25	4.33
Post Development	10-3	137.0001	14.65	15.25	4.36
Post Development	10-3	138.0001	14.64	15.25	4.39
Post Development	10-3	139.0001	14.64	15.25	4.42
Post Development	10-3	140.0001	14.63	15.25	4.45
Post Development	10-3	141.0001	14.63	15.25	4.48
Post Development	10-3	142.0001	14.62	15.25	4.51
Post Development	10-3	143.0001	14.61	15.25	4.54
Post Development	10-3	144.0001	14.61	15.25	4.57

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	145.0001	14.60	15.25	4.60
Post Development	10-3	146.0001	14.59	15.25	4.64
Post Development	10-3	147.0001	14.59	15.25	4.67
Post Development	10-3	148.0001	14.58	15.25	4.70
Post Development	10-3	149.0001	14.58	15.25	4.73
Post Development	10-3	150.0001	14.57	15.25	4.76
Post Development	10-3	151.0001	14.57	15.25	4.79
Post Development	10-3	152.0001	14.56	15.25	4.81
Post Development	10-3	153.0001	14.55	15.25	4.84
Post Development	10-3	154.0001	14.55	15.25	4.87
Post Development	10-3	155.0001	14.54	15.25	4.90
Post Development	10-3	156.0001	14.54	15.25	4.93
Post Development	10-3	157.0001	14.53	15.25	4.96
Post Development	10-3	158.0001	14.52	15.25	4.99
Post Development	10-3	159.0001	14.52	15.25	5.02
Post Development	10-3	160.0001	14.51	15.25	5.05
Post Development	10-3	161.0001	14.51	15.25	5.08
Post Development	10-3	162.0001	14.50	15.25	5.11
Post Development	10-3	163.0001	14.49	15.25	5.14
Post Development	10-3	164.0001	14.49	15.25	5.17
Post Development	10-3	165.0001	14.48	15.25	5.20
Post Development	10-3	166.0001	14.48	15.25	5.23
Post Development	10-3	167.0001	14.47	15.25	5.25
Post Development	10-3	168.0001	14.47	15.25	5.28
Post Development	10-3	169.0001	14.46	15.25	5.31
Post Development	10-3	170.0001	14.45	15.25	5.34
Post Development	10-3	171.0001	14.45	15.25	5.37
Post Development	10-3	172.0001	14.44	15.25	5.40
Post Development	10-3	173.0001	14.44	15.25	5.43

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	174.0001	14.43	15.25	5.45
Post Development	10-3	175.0001	14.42	15.25	5.48
Post Development	10-3	176.0001	14.42	15.25	5.51
Post Development	10-3	177.0001	14.41	15.25	5.54
Post Development	10-3	178.0001	14.41	15.25	5.57
Post Development	10-3	179.0001	14.40	15.25	5.60
Post Development	10-3	180.0001	14.40	15.25	5.62
Post Development	10-3	181.0001	14.39	15.25	5.65
Post Development	10-3	182.0001	14.38	15.25	5.68
Post Development	10-3	183.0001	14.38	15.25	5.71
Post Development	10-3	184.0001	14.37	15.25	5.74
Post Development	10-3	185.0001	14.37	15.25	5.76
Post Development	10-3	186.0001	14.36	15.25	5.79
Post Development	10-3	187.0001	14.36	15.25	5.82
Post Development	10-3	188.0001	14.35	15.25	5.85
Post Development	10-3	189.0001	14.34	15.25	5.87
Post Development	10-3	190.0001	14.34	15.25	5.90
Post Development	10-3	191.0001	14.33	15.25	5.93
Post Development	10-3	192.0001	14.33	15.25	5.96
Post Development	10-3	193.0001	14.32	15.25	5.98
Post Development	10-3	194.0001	14.32	15.25	6.01
Post Development	10-3	195.0001	14.31	15.25	6.04
Post Development	10-3	196.0001	14.31	15.25	6.06
Post Development	10-3	197.0001	14.30	15.25	6.09
Post Development	10-3	198.0001	14.29	15.25	6.12
Post Development	10-3	199.0001	14.29	15.25	6.14
Post Development	10-3	200.0001	14.28	15.25	6.17
Post Development	10-3	201.0001	14.28	15.25	6.20
Post Development	10-3	202.0001	14.27	15.25	6.22

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	203.0001	14.27	15.25	6.25
Post Development	10-3	204.0001	14.26	15.25	6.28
Post Development	10-3	205.0001	14.26	15.25	6.30
Post Development	10-3	206.0001	14.25	15.25	6.33
Post Development	10-3	207.0001	14.24	15.25	6.36
Post Development	10-3	208.0001	14.24	15.25	6.38
Post Development	10-3	209.0001	14.23	15.25	6.41
Post Development	10-3	210.0001	14.23	15.25	6.44
Post Development	10-3	211.0001	14.22	15.25	6.46
Post Development	10-3	212.0001	14.22	15.25	6.49
Post Development	10-3	213.0001	14.21	15.25	6.51
Post Development	10-3	214.0001	14.21	15.25	6.54
Post Development	10-3	215.0001	14.20	15.25	6.57
Post Development	10-3	216.0001	14.20	15.25	6.59
Post Development	10-3	217.0001	14.19	15.25	6.62
Post Development	10-3	218.0001	14.18	15.25	6.64
Post Development	10-3	219.0001	14.18	15.25	6.67
Post Development	10-3	220.0001	14.17	15.25	6.69
Post Development	10-3	221.0001	14.17	15.25	6.72
Post Development	10-3	222.0001	14.16	15.25	6.74
Post Development	10-3	223.0001	14.16	15.25	6.77
Post Development	10-3	224.0001	14.15	15.25	6.79
Post Development	10-3	225.0001	14.15	15.25	6.82
Post Development	10-3	226.0001	14.14	15.25	6.85
Post Development	10-3	227.0001	14.14	15.25	6.87
Post Development	10-3	228.0001	14.13	15.25	6.90
Post Development	10-3	229.0001	14.13	15.25	6.92
Post Development	10-3	230.0001	14.12	15.25	6.94
Post Development	10-3	231.0001	14.12	15.25	6.97

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	232.0001	14.11	15.25	6.99
Post Development	10-3	233.0001	14.10	15.25	7.02
Post Development	10-3	234.0001	14.10	15.25	7.04
Post Development	10-3	235.0001	14.09	15.25	7.07
Post Development	10-3	236.0001	14.09	15.25	7.09
Post Development	10-3	237.0001	14.08	15.25	7.12
Post Development	10-3	238.0001	14.08	15.25	7.14
Post Development	10-3	239.0001	14.07	15.25	7.17
Post Development	10-3	240.0001	14.07	15.25	7.19
Post Development	10-3	241.0001	14.06	15.25	7.21
Post Development	10-3	242.0001	14.06	15.25	7.24
Post Development	10-3	243.0001	14.05	15.25	7.26
Post Development	10-3	244.0001	14.05	15.25	7.29
Post Development	10-3	245.0001	14.04	15.25	7.31
Post Development	10-3	246.0001	14.04	15.25	7.33
Post Development	10-3	247.0001	14.03	15.25	7.36
Post Development	10-3	248.0001	14.03	15.25	7.38
Post Development	10-3	249.0001	14.02	15.25	7.40
Post Development	10-3	250.0001	14.02	15.25	7.43
Post Development	10-3	251.0001	14.01	15.25	7.45
Post Development	10-3	252.0001	14.01	15.25	7.47
Post Development	10-3	253.0001	14.00	15.25	7.50
Post Development	10-3	254.0001	14.00	15.25	7.52
Post Development	10-3	255.0001	13.99	15.25	7.54
Post Development	10-3	256.0001	13.99	15.25	7.57
Post Development	10-3	257.0001	13.98	15.25	7.59
Post Development	10-3	258.0001	13.98	15.25	7.61
Post Development	10-3	259.0001	13.97	15.25	7.64
Post Development	10-3	260.0001	13.97	15.25	7.66

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	261.0001	13.96	15.25	7.68
Post Development	10-3	262.0001	13.96	15.25	7.70
Post Development	10-3	263.0001	13.95	15.25	7.73
Post Development	10-3	264.0001	13.95	15.25	7.75
Post Development	10-3	265.0001	13.94	15.25	7.77
Post Development	10-3	266.0001	13.94	15.25	7.79
Post Development	10-3	267.0001	13.93	15.25	7.82
Post Development	10-3	268.0001	13.93	15.25	7.84
Post Development	10-3	269.0001	13.92	15.25	7.86
Post Development	10-3	270.0001	13.92	15.25	7.88
Post Development	10-3	271.0001	13.91	15.25	7.91
Post Development	10-3	272.0001	13.91	15.25	7.93
Post Development	10-3	273.0001	13.90	15.25	7.95
Post Development	10-3	274.0001	13.90	15.25	7.97
Post Development	10-3	275.0001	13.89	15.25	7.99
Post Development	10-3	276.0001	13.89	15.25	8.02
Post Development	10-3	277.0001	13.88	15.25	8.04
Post Development	10-3	278.0001	13.88	15.25	8.06
Post Development	10-3	279.0001	13.87	15.25	8.08
Post Development	10-3	280.0001	13.87	15.25	8.10
Post Development	10-3	281.0001	13.86	15.25	8.12
Post Development	10-3	282.0001	13.86	15.25	8.14
Post Development	10-3	283.0001	13.85	15.25	8.17
Post Development	10-3	284.0001	13.85	15.25	8.19
Post Development	10-3	285.0001	13.85	15.25	8.21
Post Development	10-3	286.0001	13.84	15.25	8.23
Post Development	10-3	287.0001	13.84	15.25	8.25
Post Development	10-3	288.0001	13.83	15.25	8.27
Post Development	10-3	289.0001	13.83	15.25	8.29

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	290.0001	13.82	15.25	8.31
Post Development	10-3	291.0001	13.82	15.25	8.33
Post Development	10-3	292.0001	13.81	15.25	8.35
Post Development	10-3	293.0001	13.81	15.25	8.37
Post Development	10-3	294.0001	13.80	15.25	8.39
Post Development	10-3	295.0001	13.80	15.25	8.42
Post Development	10-3	296.0001	13.79	15.25	8.44
Post Development	10-3	297.0001	13.79	15.25	8.46
Post Development	10-3	298.0001	13.79	15.25	8.48
Post Development	10-3	299.0001	13.78	15.25	8.50
Post Development	10-3	300.0001	13.78	15.25	8.52
Post Development	10-3	301.0001	13.77	15.25	8.54
Post Development	10-3	302.0001	13.77	15.25	8.56
Post Development	10-3	303.0001	13.76	15.25	8.58
Post Development	10-3	304.0001	13.76	15.25	8.60
Post Development	10-3	305.0001	13.75	15.25	8.62
Post Development	10-3	306.0001	13.75	15.25	8.64
Post Development	10-3	307.0001	13.75	15.25	8.66
Post Development	10-3	308.0001	13.74	15.25	8.67
Post Development	10-3	309.0001	13.74	15.25	8.69
Post Development	10-3	310.0001	13.73	15.25	8.71
Post Development	10-3	311.0001	13.73	15.25	8.73
Post Development	10-3	312.0001	13.72	15.25	8.75
Post Development	10-3	313.0001	13.72	15.25	8.77
Post Development	10-3	314.0001	13.71	15.25	8.79
Post Development	10-3	315.0001	13.71	15.25	8.81
Post Development	10-3	316.0001	13.71	15.25	8.83
Post Development	10-3	317.0001	13.70	15.25	8.85
Post Development	10-3	318.0001	13.70	15.25	8.87

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	319.0001	13.69	15.25	8.89
Post Development	10-3	320.0001	13.69	15.25	8.90
Post Development	10-3	321.0001	13.68	15.25	8.92
Post Development	10-3	322.0001	13.68	15.25	8.94
Post Development	10-3	323.0001	13.68	15.25	8.96
Post Development	10-3	324.0001	13.67	15.25	8.98
Post Development	10-3	325.0001	13.67	15.25	9.00
Post Development	10-3	326.0001	13.66	15.25	9.01
Post Development	10-3	327.0001	13.66	15.25	9.03
Post Development	10-3	328.0001	13.65	15.25	9.05
Post Development	10-3	329.0001	13.65	15.25	9.07
Post Development	10-3	330.0001	13.65	15.25	9.09
Post Development	10-3	331.0001	13.64	15.25	9.10
Post Development	10-3	332.0001	13.64	15.25	9.12
Post Development	10-3	333.0001	13.63	15.25	9.14
Post Development	10-3	334.0001	13.63	15.25	9.16
Post Development	10-3	335.0001	13.63	15.25	9.18
Post Development	10-3	336.0001	13.62	15.25	9.19
Post Development	10-3	337.0001	13.62	15.25	9.21
Post Development	10-3	338.0001	13.61	15.25	9.23
Post Development	10-3	339.0001	13.61	15.25	9.25
Post Development	10-3	340.0001	13.61	15.25	9.26
Post Development	10-3	341.0001	13.60	15.25	9.28
Post Development	10-3	342.0001	13.60	15.25	9.30
Post Development	10-3	343.0001	13.59	15.25	9.31
Post Development	10-3	344.0001	13.59	15.25	9.33
Post Development	10-3	345.0001	13.59	15.25	9.35
Post Development	10-3	346.0001	13.58	15.25	9.36
Post Development	10-3	347.0001	13.58	15.25	9.38

Scenario	Sim	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]	Total Outflow Volume [ac_ft]
Post Development	10-3	348.0001	13.57	15.25	9.40
Post Development	10-3	349.0001	13.57	15.25	9.41
Post Development	10-3	350.0001	13.57	15.25	9.43
Post Development	10-3	351.0001	13.56	15.25	9.45
Post Development	10-3	352.0001	13.56	15.25	9.46
Post Development	10-3	353.0001	13.56	15.25	9.48
Post Development	10-3	354.0001	13.55	15.25	9.50
Post Development	10-3	355.0001	13.55	15.25	9.51
Post Development	10-3	356.0001	13.54	15.25	9.53
Post Development	10-3	357.0001	13.54	15.25	9.55
Post Development	10-3	358.0001	13.54	15.25	9.56
Post Development	10-3	359.0001	13.53	15.25	9.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	0.0000	12.00
Post Development	100-3	1.0027	12.00
Post Development	100-3	2.0027	12.00
Post Development	100-3	3.0027	12.00
Post Development	100-3	4.0027	12.01
Post Development	100-3	5.0027	12.01
Post Development	100-3	6.0027	12.03
Post Development	100-3	7.0027	12.04
Post Development	100-3	8.0027	12.06
Post Development	100-3	9.0027	12.08
Post Development	100-3	10.0027	12.09
Post Development	100-3	11.0027	12.11
Post Development	100-3	12.0027	12.14
Post Development	100-3	13.0027	12.16
Post Development	100-3	14.0027	12.18
Post Development	100-3	15.0027	12.20
Post Development	100-3	16.0027	12.23
Post Development	100-3	17.0027	12.25
Post Development	100-3	18.0027	12.28
Post Development	100-3	19.0027	12.30
Post Development	100-3	20.0027	12.32
Post Development	100-3	21.0027	12.35
Post Development	100-3	22.0027	12.37
Post Development	100-3	23.0027	12.40
Post Development	100-3	24.0027	12.43
Post Development	100-3	25.0027	12.45
Post Development	100-3	26.0027	12.49
Post Development	100-3	27.0027	12.53
Post Development	100-3	28.0027	12.57
Post Development	100-3	29.0027	12.60
Post Development	100-3	30.0027	12.64
Post Development	100-3	31.0027	12.68
Post Development	100-3	32.0027	12.71
Post Development	100-3	33.0027	12.75
Post Development	100-3	34.0027	12.79
Post Development	100-3	35.0027	12.83
Post Development	100-3	36.0027	12.86
Post Development	100-3	37.0027	12.90
Post Development	100-3	38.0027	12.94
Post Development	100-3	39.0027	12.97
Post Development	100-3	40.0027	13.01
Post Development	100-3	41.0027	13.05

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	42.0027	13.08
Post Development	100-3	43.0027	13.12
Post Development	100-3	44.0027	13.15
Post Development	100-3	45.0027	13.19
Post Development	100-3	46.0027	13.22
Post Development	100-3	47.0027	13.26
Post Development	100-3	48.0027	13.29
Post Development	100-3	49.0027	13.33
Post Development	100-3	50.0027	13.37
Post Development	100-3	51.0027	13.41
Post Development	100-3	52.0027	13.45
Post Development	100-3	53.0027	13.51
Post Development	100-3	54.0027	13.57
Post Development	100-3	55.0027	13.65
Post Development	100-3	56.0027	13.74
Post Development	100-3	57.0027	13.85
Post Development	100-3	58.0012	13.98
Post Development	100-3	59.0040	14.13
Post Development	100-3	60.0004	14.51
Post Development	100-3	61.0005	15.39
Post Development	100-3	62.0002	15.73
Post Development	100-3	63.0048	15.87
Post Development	100-3	64.0048	15.95
Post Development	100-3	65.0048	16.00
Post Development	100-3	66.0048	16.05
Post Development	100-3	67.0048	16.08
Post Development	100-3	68.0048	16.12
Post Development	100-3	69.0048	16.15
Post Development	100-3	70.0048	16.18
Post Development	100-3	71.0048	16.20
Post Development	100-3	72.0048	16.23
Post Development	100-3	73.0048	16.24
Post Development	100-3	74.0048	16.25
Post Development	100-3	75.0048	16.25
Post Development	100-3	76.0048	16.25
Post Development	100-3	77.0048	16.25
Post Development	100-3	78.0048	16.25
Post Development	100-3	79.0048	16.25
Post Development	100-3	80.0048	16.25
Post Development	100-3	81.0048	16.25
Post Development	100-3	82.0048	16.25
Post Development	100-3	83.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	84.0048	16.25
Post Development	100-3	85.0048	16.25
Post Development	100-3	86.0048	16.25
Post Development	100-3	87.0048	16.25
Post Development	100-3	88.0048	16.25
Post Development	100-3	89.0048	16.25
Post Development	100-3	90.0048	16.25
Post Development	100-3	91.0048	16.25
Post Development	100-3	92.0048	16.25
Post Development	100-3	93.0048	16.25
Post Development	100-3	94.0048	16.25
Post Development	100-3	95.0048	16.25
Post Development	100-3	96.0048	16.25
Post Development	100-3	97.0048	16.25
Post Development	100-3	98.0048	16.25
Post Development	100-3	99.0048	16.25
Post Development	100-3	100.0048	16.25
Post Development	100-3	101.0048	16.25
Post Development	100-3	102.0048	16.25
Post Development	100-3	103.0048	16.25
Post Development	100-3	104.0048	16.25
Post Development	100-3	105.0048	16.25
Post Development	100-3	106.0048	16.25
Post Development	100-3	107.0048	16.25
Post Development	100-3	108.0048	16.25
Post Development	100-3	109.0048	16.25
Post Development	100-3	110.0048	16.25
Post Development	100-3	111.0048	16.25
Post Development	100-3	112.0048	16.25
Post Development	100-3	113.0048	16.25
Post Development	100-3	114.0048	16.25
Post Development	100-3	115.0048	16.25
Post Development	100-3	116.0048	16.25
Post Development	100-3	117.0048	16.25
Post Development	100-3	118.0048	16.25
Post Development	100-3	119.0048	16.25
Post Development	100-3	120.0048	16.25
Post Development	100-3	121.0048	16.25
Post Development	100-3	122.0048	16.25
Post Development	100-3	123.0048	16.25
Post Development	100-3	124.0048	16.25
Post Development	100-3	125.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	126.0048	16.25
Post Development	100-3	127.0048	16.25
Post Development	100-3	128.0048	16.25
Post Development	100-3	129.0048	16.25
Post Development	100-3	130.0048	16.25
Post Development	100-3	131.0048	16.25
Post Development	100-3	132.0048	16.25
Post Development	100-3	133.0048	16.25
Post Development	100-3	134.0048	16.25
Post Development	100-3	135.0048	16.25
Post Development	100-3	136.0048	16.25
Post Development	100-3	137.0048	16.25
Post Development	100-3	138.0048	16.25
Post Development	100-3	139.0048	16.25
Post Development	100-3	140.0048	16.25
Post Development	100-3	141.0048	16.25
Post Development	100-3	142.0048	16.25
Post Development	100-3	143.0048	16.25
Post Development	100-3	144.0048	16.25
Post Development	100-3	145.0048	16.25
Post Development	100-3	146.0048	16.25
Post Development	100-3	147.0048	16.25
Post Development	100-3	148.0048	16.25
Post Development	100-3	149.0048	16.25
Post Development	100-3	150.0048	16.25
Post Development	100-3	151.0048	16.25
Post Development	100-3	152.0048	16.25
Post Development	100-3	153.0048	16.25
Post Development	100-3	154.0048	16.25
Post Development	100-3	155.0048	16.25
Post Development	100-3	156.0048	16.25
Post Development	100-3	157.0048	16.25
Post Development	100-3	158.0048	16.25
Post Development	100-3	159.0048	16.25
Post Development	100-3	160.0048	16.25
Post Development	100-3	161.0048	16.25
Post Development	100-3	162.0048	16.25
Post Development	100-3	163.0048	16.25
Post Development	100-3	164.0048	16.25
Post Development	100-3	165.0048	16.25
Post Development	100-3	166.0048	16.25
Post Development	100-3	167.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	168.0048	16.25
Post Development	100-3	169.0048	16.25
Post Development	100-3	170.0048	16.25
Post Development	100-3	171.0048	16.25
Post Development	100-3	172.0048	16.25
Post Development	100-3	173.0048	16.25
Post Development	100-3	174.0048	16.25
Post Development	100-3	175.0048	16.25
Post Development	100-3	176.0048	16.25
Post Development	100-3	177.0048	16.25
Post Development	100-3	178.0048	16.25
Post Development	100-3	179.0048	16.25
Post Development	100-3	180.0048	16.25
Post Development	100-3	181.0048	16.25
Post Development	100-3	182.0048	16.25
Post Development	100-3	183.0048	16.25
Post Development	100-3	184.0048	16.25
Post Development	100-3	185.0048	16.25
Post Development	100-3	186.0048	16.25
Post Development	100-3	187.0048	16.25
Post Development	100-3	188.0048	16.25
Post Development	100-3	189.0048	16.25
Post Development	100-3	190.0048	16.25
Post Development	100-3	191.0048	16.25
Post Development	100-3	192.0048	16.25
Post Development	100-3	193.0048	16.25
Post Development	100-3	194.0048	16.25
Post Development	100-3	195.0048	16.25
Post Development	100-3	196.0048	16.25
Post Development	100-3	197.0048	16.25
Post Development	100-3	198.0048	16.25
Post Development	100-3	199.0048	16.25
Post Development	100-3	200.0048	16.25
Post Development	100-3	201.0048	16.25
Post Development	100-3	202.0048	16.25
Post Development	100-3	203.0048	16.25
Post Development	100-3	204.0048	16.25
Post Development	100-3	205.0048	16.25
Post Development	100-3	206.0048	16.25
Post Development	100-3	207.0048	16.25
Post Development	100-3	208.0048	16.25
Post Development	100-3	209.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	210.0048	16.25
Post Development	100-3	211.0048	16.25
Post Development	100-3	212.0048	16.25
Post Development	100-3	213.0048	16.25
Post Development	100-3	214.0048	16.25
Post Development	100-3	215.0048	16.25
Post Development	100-3	216.0048	16.25
Post Development	100-3	217.0048	16.25
Post Development	100-3	218.0048	16.25
Post Development	100-3	219.0048	16.25
Post Development	100-3	220.0048	16.25
Post Development	100-3	221.0048	16.25
Post Development	100-3	222.0048	16.25
Post Development	100-3	223.0048	16.25
Post Development	100-3	224.0048	16.25
Post Development	100-3	225.0048	16.25
Post Development	100-3	226.0048	16.25
Post Development	100-3	227.0048	16.25
Post Development	100-3	228.0048	16.25
Post Development	100-3	229.0048	16.25
Post Development	100-3	230.0048	16.25
Post Development	100-3	231.0048	16.25
Post Development	100-3	232.0048	16.25
Post Development	100-3	233.0048	16.25
Post Development	100-3	234.0048	16.25
Post Development	100-3	235.0048	16.25
Post Development	100-3	236.0048	16.25
Post Development	100-3	237.0048	16.25
Post Development	100-3	238.0048	16.25
Post Development	100-3	239.0048	16.25
Post Development	100-3	240.0048	16.25
Post Development	100-3	241.0048	16.25
Post Development	100-3	242.0048	16.25
Post Development	100-3	243.0048	16.25
Post Development	100-3	244.0048	16.25
Post Development	100-3	245.0048	16.25
Post Development	100-3	246.0048	16.25
Post Development	100-3	247.0048	16.25
Post Development	100-3	248.0048	16.25
Post Development	100-3	249.0048	16.25
Post Development	100-3	250.0048	16.25
Post Development	100-3	251.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	252.0048	16.25
Post Development	100-3	253.0048	16.25
Post Development	100-3	254.0048	16.25
Post Development	100-3	255.0048	16.25
Post Development	100-3	256.0048	16.25
Post Development	100-3	257.0048	16.25
Post Development	100-3	258.0048	16.25
Post Development	100-3	259.0048	16.25
Post Development	100-3	260.0048	16.25
Post Development	100-3	261.0048	16.25
Post Development	100-3	262.0048	16.25
Post Development	100-3	263.0048	16.25
Post Development	100-3	264.0048	16.25
Post Development	100-3	265.0048	16.25
Post Development	100-3	266.0048	16.25
Post Development	100-3	267.0048	16.25
Post Development	100-3	268.0048	16.25
Post Development	100-3	269.0048	16.25
Post Development	100-3	270.0048	16.25
Post Development	100-3	271.0048	16.25
Post Development	100-3	272.0048	16.25
Post Development	100-3	273.0048	16.25
Post Development	100-3	274.0048	16.25
Post Development	100-3	275.0048	16.25
Post Development	100-3	276.0048	16.25
Post Development	100-3	277.0048	16.25
Post Development	100-3	278.0048	16.25
Post Development	100-3	279.0048	16.25
Post Development	100-3	280.0048	16.25
Post Development	100-3	281.0048	16.25
Post Development	100-3	282.0048	16.25
Post Development	100-3	283.0048	16.25
Post Development	100-3	284.0048	16.25
Post Development	100-3	285.0048	16.25
Post Development	100-3	286.0048	16.25
Post Development	100-3	287.0048	16.25
Post Development	100-3	288.0048	16.25
Post Development	100-3	289.0048	16.25
Post Development	100-3	290.0048	16.25
Post Development	100-3	291.0048	16.25
Post Development	100-3	292.0048	16.25
Post Development	100-3	293.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	294.0048	16.25
Post Development	100-3	295.0048	16.25
Post Development	100-3	296.0048	16.25
Post Development	100-3	297.0048	16.25
Post Development	100-3	298.0048	16.25
Post Development	100-3	299.0048	16.25
Post Development	100-3	300.0048	16.25
Post Development	100-3	301.0048	16.25
Post Development	100-3	302.0048	16.25
Post Development	100-3	303.0048	16.25
Post Development	100-3	304.0048	16.25
Post Development	100-3	305.0048	16.25
Post Development	100-3	306.0048	16.25
Post Development	100-3	307.0048	16.25
Post Development	100-3	308.0048	16.25
Post Development	100-3	309.0048	16.25
Post Development	100-3	310.0048	16.25
Post Development	100-3	311.0048	16.25
Post Development	100-3	312.0048	16.25
Post Development	100-3	313.0048	16.25
Post Development	100-3	314.0048	16.25
Post Development	100-3	315.0048	16.25
Post Development	100-3	316.0048	16.25
Post Development	100-3	317.0048	16.25
Post Development	100-3	318.0048	16.25
Post Development	100-3	319.0048	16.25
Post Development	100-3	320.0048	16.25
Post Development	100-3	321.0048	16.25
Post Development	100-3	322.0048	16.25
Post Development	100-3	323.0048	16.25
Post Development	100-3	324.0048	16.25
Post Development	100-3	325.0048	16.25
Post Development	100-3	326.0048	16.25
Post Development	100-3	327.0048	16.25
Post Development	100-3	328.0048	16.25
Post Development	100-3	329.0048	16.25
Post Development	100-3	330.0048	16.25
Post Development	100-3	331.0048	16.25
Post Development	100-3	332.0048	16.25
Post Development	100-3	333.0048	16.25
Post Development	100-3	334.0048	16.25
Post Development	100-3	335.0048	16.25

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	100-3	336.0048	16.25
Post Development	100-3	337.0048	16.25
Post Development	100-3	338.0048	16.25
Post Development	100-3	339.0048	16.25
Post Development	100-3	340.0048	16.25
Post Development	100-3	341.0048	16.25
Post Development	100-3	342.0048	16.25
Post Development	100-3	343.0048	16.25
Post Development	100-3	344.0048	16.25
Post Development	100-3	345.0048	16.25
Post Development	100-3	346.0048	16.25
Post Development	100-3	347.0048	16.25
Post Development	100-3	348.0048	16.25
Post Development	100-3	349.0048	16.25
Post Development	100-3	350.0048	16.25
Post Development	100-3	351.0048	16.25
Post Development	100-3	352.0048	16.25
Post Development	100-3	353.0048	16.25
Post Development	100-3	354.0048	16.25
Post Development	100-3	355.0048	16.25
Post Development	100-3	356.0048	16.25
Post Development	100-3	357.0048	16.25
Post Development	100-3	358.0048	16.25
Post Development	100-3	359.0048	16.25
Post Development	10-1	0.0000	12.00
Post Development	10-1	1.0027	12.00
Post Development	10-1	2.0027	12.00
Post Development	10-1	3.0027	12.01
Post Development	10-1	4.0027	12.02
Post Development	10-1	5.0027	12.04
Post Development	10-1	6.0027	12.07
Post Development	10-1	7.0027	12.10
Post Development	10-1	8.0027	12.13
Post Development	10-1	9.0027	12.17
Post Development	10-1	10.0027	12.21
Post Development	10-1	11.0027	12.27
Post Development	10-1	12.0027	12.32
Post Development	10-1	13.0027	12.37
Post Development	10-1	14.0027	12.43
Post Development	10-1	15.0027	12.49
Post Development	10-1	16.0027	12.54
Post Development	10-1	17.0027	12.60

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	18.0027	12.68
Post Development	10-1	19.0007	12.81
Post Development	10-1	20.0010	13.04
Post Development	10-1	21.0015	13.85
Post Development	10-1	22.0017	14.17
Post Development	10-1	23.0053	14.31
Post Development	10-1	24.0053	14.37
Post Development	10-1	25.0053	14.41
Post Development	10-1	26.0053	14.41
Post Development	10-1	27.0053	14.41
Post Development	10-1	28.0053	14.40
Post Development	10-1	29.0053	14.39
Post Development	10-1	30.0053	14.39
Post Development	10-1	31.0053	14.38
Post Development	10-1	32.0053	14.38
Post Development	10-1	33.0053	14.37
Post Development	10-1	34.0053	14.37
Post Development	10-1	35.0053	14.36
Post Development	10-1	36.0053	14.35
Post Development	10-1	37.0053	14.35
Post Development	10-1	38.0053	14.34
Post Development	10-1	39.0053	14.34
Post Development	10-1	40.0053	14.33
Post Development	10-1	41.0053	14.33
Post Development	10-1	42.0053	14.32
Post Development	10-1	43.0053	14.31
Post Development	10-1	44.0053	14.31
Post Development	10-1	45.0053	14.30
Post Development	10-1	46.0053	14.30
Post Development	10-1	47.0053	14.29
Post Development	10-1	48.0053	14.29
Post Development	10-1	49.0053	14.28
Post Development	10-1	50.0053	14.28
Post Development	10-1	51.0053	14.27
Post Development	10-1	52.0053	14.26
Post Development	10-1	53.0053	14.26
Post Development	10-1	54.0053	14.25
Post Development	10-1	55.0053	14.25
Post Development	10-1	56.0053	14.24
Post Development	10-1	57.0053	14.24
Post Development	10-1	58.0053	14.23
Post Development	10-1	59.0053	14.23

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	60.0053	14.22
Post Development	10-1	61.0053	14.21
Post Development	10-1	62.0053	14.21
Post Development	10-1	63.0053	14.20
Post Development	10-1	64.0053	14.20
Post Development	10-1	65.0053	14.19
Post Development	10-1	66.0053	14.19
Post Development	10-1	67.0053	14.18
Post Development	10-1	68.0053	14.18
Post Development	10-1	69.0053	14.17
Post Development	10-1	70.0053	14.17
Post Development	10-1	71.0053	14.16
Post Development	10-1	72.0053	14.16
Post Development	10-1	73.0053	14.15
Post Development	10-1	74.0053	14.14
Post Development	10-1	75.0053	14.14
Post Development	10-1	76.0053	14.13
Post Development	10-1	77.0053	14.13
Post Development	10-1	78.0053	14.12
Post Development	10-1	79.0053	14.12
Post Development	10-1	80.0053	14.11
Post Development	10-1	81.0053	14.11
Post Development	10-1	82.0053	14.10
Post Development	10-1	83.0053	14.10
Post Development	10-1	84.0053	14.09
Post Development	10-1	85.0053	14.09
Post Development	10-1	86.0053	14.08
Post Development	10-1	87.0053	14.08
Post Development	10-1	88.0053	14.07
Post Development	10-1	89.0053	14.07
Post Development	10-1	90.0053	14.06
Post Development	10-1	91.0053	14.06
Post Development	10-1	92.0053	14.05
Post Development	10-1	93.0053	14.05
Post Development	10-1	94.0053	14.04
Post Development	10-1	95.0053	14.04
Post Development	10-1	96.0053	14.03
Post Development	10-1	97.0053	14.03
Post Development	10-1	98.0053	14.02
Post Development	10-1	99.0053	14.01
Post Development	10-1	100.0053	14.01
Post Development	10-1	101.0053	14.00

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	102.0053	14.00
Post Development	10-1	103.0053	13.99
Post Development	10-1	104.0053	13.99
Post Development	10-1	105.0053	13.98
Post Development	10-1	106.0053	13.98
Post Development	10-1	107.0053	13.97
Post Development	10-1	108.0053	13.97
Post Development	10-1	109.0053	13.96
Post Development	10-1	110.0053	13.96
Post Development	10-1	111.0053	13.95
Post Development	10-1	112.0053	13.95
Post Development	10-1	113.0053	13.94
Post Development	10-1	114.0053	13.94
Post Development	10-1	115.0053	13.93
Post Development	10-1	116.0053	13.93
Post Development	10-1	117.0053	13.93
Post Development	10-1	118.0053	13.92
Post Development	10-1	119.0053	13.92
Post Development	10-1	120.0053	13.91
Post Development	10-1	121.0053	13.91
Post Development	10-1	122.0053	13.90
Post Development	10-1	123.0053	13.90
Post Development	10-1	124.0053	13.89
Post Development	10-1	125.0053	13.89
Post Development	10-1	126.0053	13.88
Post Development	10-1	127.0053	13.88
Post Development	10-1	128.0053	13.87
Post Development	10-1	129.0053	13.87
Post Development	10-1	130.0053	13.86
Post Development	10-1	131.0053	13.86
Post Development	10-1	132.0053	13.85
Post Development	10-1	133.0053	13.85
Post Development	10-1	134.0053	13.84
Post Development	10-1	135.0053	13.84
Post Development	10-1	136.0053	13.83
Post Development	10-1	137.0053	13.83
Post Development	10-1	138.0053	13.83
Post Development	10-1	139.0053	13.82
Post Development	10-1	140.0053	13.82
Post Development	10-1	141.0053	13.81
Post Development	10-1	142.0053	13.81
Post Development	10-1	143.0053	13.80

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	144.0053	13.80
Post Development	10-1	145.0053	13.79
Post Development	10-1	146.0053	13.79
Post Development	10-1	147.0053	13.78
Post Development	10-1	148.0053	13.78
Post Development	10-1	149.0053	13.77
Post Development	10-1	150.0053	13.77
Post Development	10-1	151.0053	13.77
Post Development	10-1	152.0053	13.76
Post Development	10-1	153.0053	13.76
Post Development	10-1	154.0053	13.75
Post Development	10-1	155.0053	13.75
Post Development	10-1	156.0053	13.74
Post Development	10-1	157.0053	13.74
Post Development	10-1	158.0053	13.73
Post Development	10-1	159.0053	13.73
Post Development	10-1	160.0053	13.73
Post Development	10-1	161.0053	13.72
Post Development	10-1	162.0053	13.72
Post Development	10-1	163.0053	13.71
Post Development	10-1	164.0053	13.71
Post Development	10-1	165.0053	13.70
Post Development	10-1	166.0053	13.70
Post Development	10-1	167.0053	13.70
Post Development	10-1	168.0053	13.69
Post Development	10-1	169.0053	13.69
Post Development	10-1	170.0053	13.68
Post Development	10-1	171.0053	13.68
Post Development	10-1	172.0053	13.67
Post Development	10-1	173.0053	13.67
Post Development	10-1	174.0053	13.67
Post Development	10-1	175.0053	13.66
Post Development	10-1	176.0053	13.66
Post Development	10-1	177.0053	13.65
Post Development	10-1	178.0053	13.65
Post Development	10-1	179.0053	13.64
Post Development	10-1	180.0053	13.64
Post Development	10-1	181.0053	13.64
Post Development	10-1	182.0053	13.63
Post Development	10-1	183.0053	13.63
Post Development	10-1	184.0053	13.62
Post Development	10-1	185.0053	13.62

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	186.0053	13.62
Post Development	10-1	187.0053	13.61
Post Development	10-1	188.0053	13.61
Post Development	10-1	189.0053	13.60
Post Development	10-1	190.0053	13.60
Post Development	10-1	191.0053	13.60
Post Development	10-1	192.0053	13.59
Post Development	10-1	193.0053	13.59
Post Development	10-1	194.0053	13.58
Post Development	10-1	195.0053	13.58
Post Development	10-1	196.0053	13.58
Post Development	10-1	197.0053	13.57
Post Development	10-1	198.0053	13.57
Post Development	10-1	199.0053	13.57
Post Development	10-1	200.0053	13.56
Post Development	10-1	201.0053	13.56
Post Development	10-1	202.0053	13.55
Post Development	10-1	203.0053	13.55
Post Development	10-1	204.0053	13.55
Post Development	10-1	205.0053	13.54
Post Development	10-1	206.0053	13.54
Post Development	10-1	207.0053	13.53
Post Development	10-1	208.0053	13.53
Post Development	10-1	209.0053	13.53
Post Development	10-1	210.0053	13.52
Post Development	10-1	211.0053	13.52
Post Development	10-1	212.0053	13.52
Post Development	10-1	213.0053	13.51
Post Development	10-1	214.0053	13.51
Post Development	10-1	215.0053	13.51
Post Development	10-1	216.0053	13.50
Post Development	10-1	217.0053	13.50
Post Development	10-1	218.0053	13.49
Post Development	10-1	219.0053	13.49
Post Development	10-1	220.0053	13.49
Post Development	10-1	221.0053	13.48
Post Development	10-1	222.0053	13.48
Post Development	10-1	223.0053	13.48
Post Development	10-1	224.0053	13.47
Post Development	10-1	225.0053	13.47
Post Development	10-1	226.0053	13.47
Post Development	10-1	227.0053	13.46

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	228.0053	13.46
Post Development	10-1	229.0053	13.46
Post Development	10-1	230.0053	13.45
Post Development	10-1	231.0053	13.45
Post Development	10-1	232.0053	13.45
Post Development	10-1	233.0053	13.44
Post Development	10-1	234.0053	13.44
Post Development	10-1	235.0053	13.44
Post Development	10-1	236.0053	13.43
Post Development	10-1	237.0053	13.43
Post Development	10-1	238.0053	13.43
Post Development	10-1	239.0053	13.42
Post Development	10-1	240.0053	13.42
Post Development	10-1	241.0053	13.42
Post Development	10-1	242.0053	13.41
Post Development	10-1	243.0053	13.41
Post Development	10-1	244.0053	13.41
Post Development	10-1	245.0053	13.40
Post Development	10-1	246.0053	13.40
Post Development	10-1	247.0053	13.40
Post Development	10-1	248.0053	13.39
Post Development	10-1	249.0053	13.39
Post Development	10-1	250.0053	13.39
Post Development	10-1	251.0053	13.38
Post Development	10-1	252.0053	13.38
Post Development	10-1	253.0053	13.38
Post Development	10-1	254.0053	13.38
Post Development	10-1	255.0053	13.37
Post Development	10-1	256.0053	13.37
Post Development	10-1	257.0053	13.37
Post Development	10-1	258.0053	13.36
Post Development	10-1	259.0053	13.36
Post Development	10-1	260.0053	13.36
Post Development	10-1	261.0053	13.35
Post Development	10-1	262.0053	13.35
Post Development	10-1	263.0053	13.35
Post Development	10-1	264.0053	13.35
Post Development	10-1	265.0053	13.34
Post Development	10-1	266.0053	13.34
Post Development	10-1	267.0053	13.34
Post Development	10-1	268.0053	13.33
Post Development	10-1	269.0053	13.33

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	270.0053	13.33
Post Development	10-1	271.0053	13.33
Post Development	10-1	272.0053	13.32
Post Development	10-1	273.0053	13.32
Post Development	10-1	274.0053	13.32
Post Development	10-1	275.0053	13.32
Post Development	10-1	276.0053	13.31
Post Development	10-1	277.0053	13.31
Post Development	10-1	278.0053	13.31
Post Development	10-1	279.0053	13.31
Post Development	10-1	280.0053	13.30
Post Development	10-1	281.0053	13.30
Post Development	10-1	282.0053	13.30
Post Development	10-1	283.0053	13.30
Post Development	10-1	284.0053	13.29
Post Development	10-1	285.0053	13.29
Post Development	10-1	286.0053	13.29
Post Development	10-1	287.0053	13.29
Post Development	10-1	288.0053	13.28
Post Development	10-1	289.0053	13.28
Post Development	10-1	290.0053	13.28
Post Development	10-1	291.0053	13.28
Post Development	10-1	292.0053	13.27
Post Development	10-1	293.0053	13.27
Post Development	10-1	294.0053	13.27
Post Development	10-1	295.0053	13.27
Post Development	10-1	296.0053	13.26
Post Development	10-1	297.0053	13.26
Post Development	10-1	298.0053	13.26
Post Development	10-1	299.0053	13.26
Post Development	10-1	300.0053	13.26
Post Development	10-1	301.0053	13.25
Post Development	10-1	302.0053	13.25
Post Development	10-1	303.0053	13.25
Post Development	10-1	304.0053	13.25
Post Development	10-1	305.0053	13.25
Post Development	10-1	306.0053	13.24
Post Development	10-1	307.0053	13.24
Post Development	10-1	308.0053	13.24
Post Development	10-1	309.0053	13.24
Post Development	10-1	310.0053	13.24
Post Development	10-1	311.0053	13.23

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	312.0053	13.23
Post Development	10-1	313.0053	13.23
Post Development	10-1	314.0053	13.23
Post Development	10-1	315.0053	13.23
Post Development	10-1	316.0053	13.22
Post Development	10-1	317.0053	13.22
Post Development	10-1	318.0053	13.22
Post Development	10-1	319.0053	13.22
Post Development	10-1	320.0053	13.22
Post Development	10-1	321.0053	13.22
Post Development	10-1	322.0053	13.21
Post Development	10-1	323.0053	13.21
Post Development	10-1	324.0053	13.21
Post Development	10-1	325.0053	13.21
Post Development	10-1	326.0053	13.21
Post Development	10-1	327.0053	13.21
Post Development	10-1	328.0053	13.20
Post Development	10-1	329.0053	13.20
Post Development	10-1	330.0053	13.20
Post Development	10-1	331.0053	13.20
Post Development	10-1	332.0053	13.20
Post Development	10-1	333.0053	13.20
Post Development	10-1	334.0053	13.20
Post Development	10-1	335.0053	13.19
Post Development	10-1	336.0053	13.19
Post Development	10-1	337.0053	13.19
Post Development	10-1	338.0053	13.19
Post Development	10-1	339.0053	13.19
Post Development	10-1	340.0053	13.19
Post Development	10-1	341.0053	13.19
Post Development	10-1	342.0053	13.18
Post Development	10-1	343.0053	13.18
Post Development	10-1	344.0053	13.18
Post Development	10-1	345.0053	13.18
Post Development	10-1	346.0053	13.18
Post Development	10-1	347.0053	13.18
Post Development	10-1	348.0053	13.18
Post Development	10-1	349.0053	13.18
Post Development	10-1	350.0053	13.17
Post Development	10-1	351.0053	13.17
Post Development	10-1	352.0053	13.17
Post Development	10-1	353.0053	13.17

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-1	354.0053	13.17
Post Development	10-1	355.0053	13.17
Post Development	10-1	356.0053	13.17
Post Development	10-1	357.0053	13.17
Post Development	10-1	358.0053	13.17
Post Development	10-1	359.0053	13.16
Post Development	10-3	0.0000	12.00
Post Development	10-3	1.0027	12.00
Post Development	10-3	2.0027	12.00
Post Development	10-3	3.0027	12.00
Post Development	10-3	4.0027	12.00
Post Development	10-3	5.0027	12.01
Post Development	10-3	6.0027	12.01
Post Development	10-3	7.0027	12.02
Post Development	10-3	8.0027	12.03
Post Development	10-3	9.0027	12.04
Post Development	10-3	10.0027	12.05
Post Development	10-3	11.0027	12.07
Post Development	10-3	12.0027	12.08
Post Development	10-3	13.0027	12.09
Post Development	10-3	14.0027	12.11
Post Development	10-3	15.0027	12.12
Post Development	10-3	16.0027	12.14
Post Development	10-3	17.0027	12.16
Post Development	10-3	18.0027	12.17
Post Development	10-3	19.0027	12.19
Post Development	10-3	20.0027	12.21
Post Development	10-3	21.0027	12.23
Post Development	10-3	22.0027	12.24
Post Development	10-3	23.0027	12.26
Post Development	10-3	24.0027	12.28
Post Development	10-3	25.0027	12.30
Post Development	10-3	26.0027	12.33
Post Development	10-3	27.0027	12.35
Post Development	10-3	28.0027	12.38
Post Development	10-3	29.0027	12.41
Post Development	10-3	30.0027	12.44
Post Development	10-3	31.0027	12.46
Post Development	10-3	32.0027	12.49
Post Development	10-3	33.0027	12.52
Post Development	10-3	34.0027	12.55
Post Development	10-3	35.0027	12.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	36.0027	12.61
Post Development	10-3	37.0027	12.63
Post Development	10-3	38.0027	12.66
Post Development	10-3	39.0027	12.69
Post Development	10-3	40.0027	12.72
Post Development	10-3	41.0027	12.75
Post Development	10-3	42.0027	12.77
Post Development	10-3	43.0027	12.80
Post Development	10-3	44.0027	12.83
Post Development	10-3	45.0027	12.86
Post Development	10-3	46.0027	12.89
Post Development	10-3	47.0027	12.91
Post Development	10-3	48.0027	12.94
Post Development	10-3	49.0027	12.97
Post Development	10-3	50.0027	13.00
Post Development	10-3	51.0027	13.03
Post Development	10-3	52.0027	13.07
Post Development	10-3	53.0027	13.11
Post Development	10-3	54.0027	13.16
Post Development	10-3	55.0027	13.23
Post Development	10-3	56.0027	13.30
Post Development	10-3	57.0027	13.38
Post Development	10-3	58.0027	13.48
Post Development	10-3	59.0032	13.60
Post Development	10-3	60.0004	13.91
Post Development	10-3	61.0010	14.63
Post Development	10-3	62.0047	14.92
Post Development	10-3	63.0001	15.05
Post Development	10-3	64.0001	15.10
Post Development	10-3	65.0001	15.12
Post Development	10-3	66.0001	15.13
Post Development	10-3	67.0001	15.13
Post Development	10-3	68.0001	15.13
Post Development	10-3	69.0001	15.13
Post Development	10-3	70.0001	15.12
Post Development	10-3	71.0001	15.11
Post Development	10-3	72.0001	15.11
Post Development	10-3	73.0001	15.09
Post Development	10-3	74.0001	15.07
Post Development	10-3	75.0001	15.06
Post Development	10-3	76.0001	15.04
Post Development	10-3	77.0001	15.03

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	78.0001	15.02
Post Development	10-3	79.0001	15.01
Post Development	10-3	80.0001	15.01
Post Development	10-3	81.0001	15.00
Post Development	10-3	82.0001	14.99
Post Development	10-3	83.0001	14.99
Post Development	10-3	84.0001	14.98
Post Development	10-3	85.0001	14.97
Post Development	10-3	86.0001	14.97
Post Development	10-3	87.0001	14.96
Post Development	10-3	88.0001	14.95
Post Development	10-3	89.0001	14.95
Post Development	10-3	90.0001	14.94
Post Development	10-3	91.0001	14.94
Post Development	10-3	92.0001	14.93
Post Development	10-3	93.0001	14.92
Post Development	10-3	94.0001	14.92
Post Development	10-3	95.0001	14.91
Post Development	10-3	96.0001	14.90
Post Development	10-3	97.0001	14.90
Post Development	10-3	98.0001	14.89
Post Development	10-3	99.0001	14.88
Post Development	10-3	100.0001	14.88
Post Development	10-3	101.0001	14.87
Post Development	10-3	102.0001	14.87
Post Development	10-3	103.0001	14.86
Post Development	10-3	104.0001	14.85
Post Development	10-3	105.0001	14.85
Post Development	10-3	106.0001	14.84
Post Development	10-3	107.0001	14.83
Post Development	10-3	108.0001	14.83
Post Development	10-3	109.0001	14.82
Post Development	10-3	110.0001	14.82
Post Development	10-3	111.0001	14.81
Post Development	10-3	112.0001	14.80
Post Development	10-3	113.0001	14.80
Post Development	10-3	114.0001	14.79
Post Development	10-3	115.0001	14.78
Post Development	10-3	116.0001	14.78
Post Development	10-3	117.0001	14.77
Post Development	10-3	118.0001	14.77
Post Development	10-3	119.0001	14.76

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	120.0001	14.75
Post Development	10-3	121.0001	14.75
Post Development	10-3	122.0001	14.74
Post Development	10-3	123.0001	14.73
Post Development	10-3	124.0001	14.73
Post Development	10-3	125.0001	14.72
Post Development	10-3	126.0001	14.72
Post Development	10-3	127.0001	14.71
Post Development	10-3	128.0001	14.70
Post Development	10-3	129.0001	14.70
Post Development	10-3	130.0001	14.69
Post Development	10-3	131.0001	14.69
Post Development	10-3	132.0001	14.68
Post Development	10-3	133.0001	14.67
Post Development	10-3	134.0001	14.67
Post Development	10-3	135.0001	14.66
Post Development	10-3	136.0001	14.66
Post Development	10-3	137.0001	14.65
Post Development	10-3	138.0001	14.64
Post Development	10-3	139.0001	14.64
Post Development	10-3	140.0001	14.63
Post Development	10-3	141.0001	14.63
Post Development	10-3	142.0001	14.62
Post Development	10-3	143.0001	14.61
Post Development	10-3	144.0001	14.61
Post Development	10-3	145.0001	14.60
Post Development	10-3	146.0001	14.59
Post Development	10-3	147.0001	14.59
Post Development	10-3	148.0001	14.58
Post Development	10-3	149.0001	14.58
Post Development	10-3	150.0001	14.57
Post Development	10-3	151.0001	14.57
Post Development	10-3	152.0001	14.56
Post Development	10-3	153.0001	14.55
Post Development	10-3	154.0001	14.55
Post Development	10-3	155.0001	14.54
Post Development	10-3	156.0001	14.54
Post Development	10-3	157.0001	14.53
Post Development	10-3	158.0001	14.52
Post Development	10-3	159.0001	14.52
Post Development	10-3	160.0001	14.51
Post Development	10-3	161.0001	14.51

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	162.0001	14.50
Post Development	10-3	163.0001	14.49
Post Development	10-3	164.0001	14.49
Post Development	10-3	165.0001	14.48
Post Development	10-3	166.0001	14.48
Post Development	10-3	167.0001	14.47
Post Development	10-3	168.0001	14.47
Post Development	10-3	169.0001	14.46
Post Development	10-3	170.0001	14.45
Post Development	10-3	171.0001	14.45
Post Development	10-3	172.0001	14.44
Post Development	10-3	173.0001	14.44
Post Development	10-3	174.0001	14.43
Post Development	10-3	175.0001	14.42
Post Development	10-3	176.0001	14.42
Post Development	10-3	177.0001	14.41
Post Development	10-3	178.0001	14.41
Post Development	10-3	179.0001	14.40
Post Development	10-3	180.0001	14.40
Post Development	10-3	181.0001	14.39
Post Development	10-3	182.0001	14.38
Post Development	10-3	183.0001	14.38
Post Development	10-3	184.0001	14.37
Post Development	10-3	185.0001	14.37
Post Development	10-3	186.0001	14.36
Post Development	10-3	187.0001	14.36
Post Development	10-3	188.0001	14.35
Post Development	10-3	189.0001	14.34
Post Development	10-3	190.0001	14.34
Post Development	10-3	191.0001	14.33
Post Development	10-3	192.0001	14.33
Post Development	10-3	193.0001	14.32
Post Development	10-3	194.0001	14.32
Post Development	10-3	195.0001	14.31
Post Development	10-3	196.0001	14.31
Post Development	10-3	197.0001	14.30
Post Development	10-3	198.0001	14.29
Post Development	10-3	199.0001	14.29
Post Development	10-3	200.0001	14.28
Post Development	10-3	201.0001	14.28
Post Development	10-3	202.0001	14.27
Post Development	10-3	203.0001	14.27

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	204.0001	14.26
Post Development	10-3	205.0001	14.26
Post Development	10-3	206.0001	14.25
Post Development	10-3	207.0001	14.24
Post Development	10-3	208.0001	14.24
Post Development	10-3	209.0001	14.23
Post Development	10-3	210.0001	14.23
Post Development	10-3	211.0001	14.22
Post Development	10-3	212.0001	14.22
Post Development	10-3	213.0001	14.21
Post Development	10-3	214.0001	14.21
Post Development	10-3	215.0001	14.20
Post Development	10-3	216.0001	14.20
Post Development	10-3	217.0001	14.19
Post Development	10-3	218.0001	14.18
Post Development	10-3	219.0001	14.18
Post Development	10-3	220.0001	14.17
Post Development	10-3	221.0001	14.17
Post Development	10-3	222.0001	14.16
Post Development	10-3	223.0001	14.16
Post Development	10-3	224.0001	14.15
Post Development	10-3	225.0001	14.15
Post Development	10-3	226.0001	14.14
Post Development	10-3	227.0001	14.14
Post Development	10-3	228.0001	14.13
Post Development	10-3	229.0001	14.13
Post Development	10-3	230.0001	14.12
Post Development	10-3	231.0001	14.12
Post Development	10-3	232.0001	14.11
Post Development	10-3	233.0001	14.10
Post Development	10-3	234.0001	14.10
Post Development	10-3	235.0001	14.09
Post Development	10-3	236.0001	14.09
Post Development	10-3	237.0001	14.08
Post Development	10-3	238.0001	14.08
Post Development	10-3	239.0001	14.07
Post Development	10-3	240.0001	14.07
Post Development	10-3	241.0001	14.06
Post Development	10-3	242.0001	14.06
Post Development	10-3	243.0001	14.05
Post Development	10-3	244.0001	14.05
Post Development	10-3	245.0001	14.04

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	246.0001	14.04
Post Development	10-3	247.0001	14.03
Post Development	10-3	248.0001	14.03
Post Development	10-3	249.0001	14.02
Post Development	10-3	250.0001	14.02
Post Development	10-3	251.0001	14.01
Post Development	10-3	252.0001	14.01
Post Development	10-3	253.0001	14.00
Post Development	10-3	254.0001	14.00
Post Development	10-3	255.0001	13.99
Post Development	10-3	256.0001	13.99
Post Development	10-3	257.0001	13.98
Post Development	10-3	258.0001	13.98
Post Development	10-3	259.0001	13.97
Post Development	10-3	260.0001	13.97
Post Development	10-3	261.0001	13.96
Post Development	10-3	262.0001	13.96
Post Development	10-3	263.0001	13.95
Post Development	10-3	264.0001	13.95
Post Development	10-3	265.0001	13.94
Post Development	10-3	266.0001	13.94
Post Development	10-3	267.0001	13.93
Post Development	10-3	268.0001	13.93
Post Development	10-3	269.0001	13.92
Post Development	10-3	270.0001	13.92
Post Development	10-3	271.0001	13.91
Post Development	10-3	272.0001	13.91
Post Development	10-3	273.0001	13.90
Post Development	10-3	274.0001	13.90
Post Development	10-3	275.0001	13.89
Post Development	10-3	276.0001	13.89
Post Development	10-3	277.0001	13.88
Post Development	10-3	278.0001	13.88
Post Development	10-3	279.0001	13.87
Post Development	10-3	280.0001	13.87
Post Development	10-3	281.0001	13.86
Post Development	10-3	282.0001	13.86
Post Development	10-3	283.0001	13.85
Post Development	10-3	284.0001	13.85
Post Development	10-3	285.0001	13.85
Post Development	10-3	286.0001	13.84
Post Development	10-3	287.0001	13.84

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	288.0001	13.83
Post Development	10-3	289.0001	13.83
Post Development	10-3	290.0001	13.82
Post Development	10-3	291.0001	13.82
Post Development	10-3	292.0001	13.81
Post Development	10-3	293.0001	13.81
Post Development	10-3	294.0001	13.80
Post Development	10-3	295.0001	13.80
Post Development	10-3	296.0001	13.79
Post Development	10-3	297.0001	13.79
Post Development	10-3	298.0001	13.79
Post Development	10-3	299.0001	13.78
Post Development	10-3	300.0001	13.78
Post Development	10-3	301.0001	13.77
Post Development	10-3	302.0001	13.77
Post Development	10-3	303.0001	13.76
Post Development	10-3	304.0001	13.76
Post Development	10-3	305.0001	13.75
Post Development	10-3	306.0001	13.75
Post Development	10-3	307.0001	13.75
Post Development	10-3	308.0001	13.74
Post Development	10-3	309.0001	13.74
Post Development	10-3	310.0001	13.73
Post Development	10-3	311.0001	13.73
Post Development	10-3	312.0001	13.72
Post Development	10-3	313.0001	13.72
Post Development	10-3	314.0001	13.71
Post Development	10-3	315.0001	13.71
Post Development	10-3	316.0001	13.71
Post Development	10-3	317.0001	13.70
Post Development	10-3	318.0001	13.70
Post Development	10-3	319.0001	13.69
Post Development	10-3	320.0001	13.69
Post Development	10-3	321.0001	13.68
Post Development	10-3	322.0001	13.68
Post Development	10-3	323.0001	13.68
Post Development	10-3	324.0001	13.67
Post Development	10-3	325.0001	13.67
Post Development	10-3	326.0001	13.66
Post Development	10-3	327.0001	13.66
Post Development	10-3	328.0001	13.65
Post Development	10-3	329.0001	13.65

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	10-3	330.0001	13.65
Post Development	10-3	331.0001	13.64
Post Development	10-3	332.0001	13.64
Post Development	10-3	333.0001	13.63
Post Development	10-3	334.0001	13.63
Post Development	10-3	335.0001	13.63
Post Development	10-3	336.0001	13.62
Post Development	10-3	337.0001	13.62
Post Development	10-3	338.0001	13.61
Post Development	10-3	339.0001	13.61
Post Development	10-3	340.0001	13.61
Post Development	10-3	341.0001	13.60
Post Development	10-3	342.0001	13.60
Post Development	10-3	343.0001	13.59
Post Development	10-3	344.0001	13.59
Post Development	10-3	345.0001	13.59
Post Development	10-3	346.0001	13.58
Post Development	10-3	347.0001	13.58
Post Development	10-3	348.0001	13.57
Post Development	10-3	349.0001	13.57
Post Development	10-3	350.0001	13.57
Post Development	10-3	351.0001	13.56
Post Development	10-3	352.0001	13.56
Post Development	10-3	353.0001	13.56
Post Development	10-3	354.0001	13.55
Post Development	10-3	355.0001	13.55
Post Development	10-3	356.0001	13.54
Post Development	10-3	357.0001	13.54
Post Development	10-3	358.0001	13.54
Post Development	10-3	359.0001	13.53
Post Development	25-3	0.0000	12.00
Post Development	25-3	1.0027	12.00
Post Development	25-3	2.0027	12.00
Post Development	25-3	3.0027	12.00
Post Development	25-3	4.0027	12.00
Post Development	25-3	5.0027	12.01
Post Development	25-3	6.0027	12.02
Post Development	25-3	7.0027	12.03
Post Development	25-3	8.0027	12.04
Post Development	25-3	9.0027	12.05
Post Development	25-3	10.0027	12.07
Post Development	25-3	11.0027	12.08

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	12.0027	12.10
Post Development	25-3	13.0027	12.11
Post Development	25-3	14.0027	12.13
Post Development	25-3	15.0027	12.15
Post Development	25-3	16.0027	12.17
Post Development	25-3	17.0027	12.19
Post Development	25-3	18.0027	12.21
Post Development	25-3	19.0027	12.23
Post Development	25-3	20.0027	12.25
Post Development	25-3	21.0027	12.27
Post Development	25-3	22.0027	12.29
Post Development	25-3	23.0027	12.31
Post Development	25-3	24.0027	12.33
Post Development	25-3	25.0027	12.35
Post Development	25-3	26.0027	12.38
Post Development	25-3	27.0027	12.41
Post Development	25-3	28.0027	12.44
Post Development	25-3	29.0027	12.47
Post Development	25-3	30.0027	12.50
Post Development	25-3	31.0027	12.54
Post Development	25-3	32.0027	12.57
Post Development	25-3	33.0027	12.60
Post Development	25-3	34.0027	12.63
Post Development	25-3	35.0027	12.66
Post Development	25-3	36.0027	12.69
Post Development	25-3	37.0027	12.72
Post Development	25-3	38.0027	12.75
Post Development	25-3	39.0027	12.78
Post Development	25-3	40.0027	12.82
Post Development	25-3	41.0027	12.85
Post Development	25-3	42.0027	12.88
Post Development	25-3	43.0027	12.91
Post Development	25-3	44.0027	12.94
Post Development	25-3	45.0027	12.97
Post Development	25-3	46.0027	13.00
Post Development	25-3	47.0027	13.03
Post Development	25-3	48.0027	13.06
Post Development	25-3	49.0027	13.09
Post Development	25-3	50.0027	13.12
Post Development	25-3	51.0027	13.16
Post Development	25-3	52.0027	13.20
Post Development	25-3	53.0027	13.24

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	54.0027	13.30
Post Development	25-3	55.0027	13.36
Post Development	25-3	56.0027	13.44
Post Development	25-3	57.0027	13.53
Post Development	25-3	58.0027	13.64
Post Development	25-3	59.0002	13.77
Post Development	25-3	60.0001	14.10
Post Development	25-3	61.0004	14.87
Post Development	25-3	62.0038	15.18
Post Development	25-3	63.0057	15.24
Post Development	25-3	64.0057	15.23
Post Development	25-3	65.0057	15.22
Post Development	25-3	66.0057	15.19
Post Development	25-3	67.0057	15.18
Post Development	25-3	68.0057	15.17
Post Development	25-3	69.0057	15.15
Post Development	25-3	70.0057	15.14
Post Development	25-3	71.0057	15.13
Post Development	25-3	72.0057	15.12
Post Development	25-3	73.0057	15.11
Post Development	25-3	74.0057	15.08
Post Development	25-3	75.0057	15.06
Post Development	25-3	76.0057	15.05
Post Development	25-3	77.0057	15.04
Post Development	25-3	78.0057	15.03
Post Development	25-3	79.0057	15.02
Post Development	25-3	80.0057	15.01
Post Development	25-3	81.0057	15.00
Post Development	25-3	82.0057	15.00
Post Development	25-3	83.0057	14.99
Post Development	25-3	84.0057	14.98
Post Development	25-3	85.0057	14.98
Post Development	25-3	86.0057	14.97
Post Development	25-3	87.0057	14.96
Post Development	25-3	88.0057	14.96
Post Development	25-3	89.0057	14.95
Post Development	25-3	90.0057	14.94
Post Development	25-3	91.0057	14.94
Post Development	25-3	92.0057	14.93
Post Development	25-3	93.0057	14.93
Post Development	25-3	94.0057	14.92
Post Development	25-3	95.0057	14.91

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	96.0057	14.91
Post Development	25-3	97.0057	14.90
Post Development	25-3	98.0057	14.89
Post Development	25-3	99.0057	14.89
Post Development	25-3	100.0057	14.88
Post Development	25-3	101.0057	14.87
Post Development	25-3	102.0057	14.87
Post Development	25-3	103.0057	14.86
Post Development	25-3	104.0057	14.86
Post Development	25-3	105.0057	14.85
Post Development	25-3	106.0057	14.84
Post Development	25-3	107.0057	14.84
Post Development	25-3	108.0057	14.83
Post Development	25-3	109.0057	14.82
Post Development	25-3	110.0057	14.82
Post Development	25-3	111.0057	14.81
Post Development	25-3	112.0057	14.81
Post Development	25-3	113.0057	14.80
Post Development	25-3	114.0057	14.79
Post Development	25-3	115.0057	14.79
Post Development	25-3	116.0057	14.78
Post Development	25-3	117.0057	14.77
Post Development	25-3	118.0057	14.77
Post Development	25-3	119.0057	14.76
Post Development	25-3	120.0057	14.76
Post Development	25-3	121.0057	14.75
Post Development	25-3	122.0057	14.74
Post Development	25-3	123.0057	14.74
Post Development	25-3	124.0057	14.73
Post Development	25-3	125.0057	14.72
Post Development	25-3	126.0057	14.72
Post Development	25-3	127.0057	14.71
Post Development	25-3	128.0057	14.71
Post Development	25-3	129.0057	14.70
Post Development	25-3	130.0057	14.69
Post Development	25-3	131.0057	14.69
Post Development	25-3	132.0057	14.68
Post Development	25-3	133.0057	14.68
Post Development	25-3	134.0057	14.67
Post Development	25-3	135.0057	14.66
Post Development	25-3	136.0057	14.66
Post Development	25-3	137.0057	14.65

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	138.0057	14.65
Post Development	25-3	139.0057	14.64
Post Development	25-3	140.0057	14.63
Post Development	25-3	141.0057	14.63
Post Development	25-3	142.0057	14.62
Post Development	25-3	143.0057	14.62
Post Development	25-3	144.0057	14.61
Post Development	25-3	145.0057	14.60
Post Development	25-3	146.0057	14.60
Post Development	25-3	147.0057	14.59
Post Development	25-3	148.0057	14.59
Post Development	25-3	149.0057	14.58
Post Development	25-3	150.0057	14.57
Post Development	25-3	151.0057	14.57
Post Development	25-3	152.0057	14.56
Post Development	25-3	153.0057	14.56
Post Development	25-3	154.0057	14.55
Post Development	25-3	155.0057	14.54
Post Development	25-3	156.0057	14.54
Post Development	25-3	157.0057	14.53
Post Development	25-3	158.0057	14.53
Post Development	25-3	159.0057	14.52
Post Development	25-3	160.0057	14.51
Post Development	25-3	161.0057	14.51
Post Development	25-3	162.0057	14.50
Post Development	25-3	163.0057	14.50
Post Development	25-3	164.0057	14.49
Post Development	25-3	165.0057	14.48
Post Development	25-3	166.0057	14.48
Post Development	25-3	167.0057	14.47
Post Development	25-3	168.0057	14.47
Post Development	25-3	169.0057	14.46
Post Development	25-3	170.0057	14.46
Post Development	25-3	171.0057	14.45
Post Development	25-3	172.0057	14.44
Post Development	25-3	173.0057	14.44
Post Development	25-3	174.0057	14.43
Post Development	25-3	175.0057	14.43
Post Development	25-3	176.0057	14.42
Post Development	25-3	177.0057	14.42
Post Development	25-3	178.0057	14.41
Post Development	25-3	179.0057	14.40

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	180.0057	14.40
Post Development	25-3	181.0057	14.39
Post Development	25-3	182.0057	14.39
Post Development	25-3	183.0057	14.38
Post Development	25-3	184.0057	14.38
Post Development	25-3	185.0057	14.37
Post Development	25-3	186.0057	14.36
Post Development	25-3	187.0057	14.36
Post Development	25-3	188.0057	14.35
Post Development	25-3	189.0057	14.35
Post Development	25-3	190.0057	14.34
Post Development	25-3	191.0057	14.34
Post Development	25-3	192.0057	14.33
Post Development	25-3	193.0057	14.32
Post Development	25-3	194.0057	14.32
Post Development	25-3	195.0057	14.31
Post Development	25-3	196.0057	14.31
Post Development	25-3	197.0057	14.30
Post Development	25-3	198.0057	14.30
Post Development	25-3	199.0057	14.29
Post Development	25-3	200.0057	14.29
Post Development	25-3	201.0057	14.28
Post Development	25-3	202.0057	14.27
Post Development	25-3	203.0057	14.27
Post Development	25-3	204.0057	14.26
Post Development	25-3	205.0057	14.26
Post Development	25-3	206.0057	14.25
Post Development	25-3	207.0057	14.25
Post Development	25-3	208.0057	14.24
Post Development	25-3	209.0057	14.24
Post Development	25-3	210.0057	14.23
Post Development	25-3	211.0057	14.22
Post Development	25-3	212.0057	14.22
Post Development	25-3	213.0057	14.21
Post Development	25-3	214.0057	14.21
Post Development	25-3	215.0057	14.20
Post Development	25-3	216.0057	14.20
Post Development	25-3	217.0057	14.19
Post Development	25-3	218.0057	14.19
Post Development	25-3	219.0057	14.18
Post Development	25-3	220.0057	14.18
Post Development	25-3	221.0057	14.17

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	222.0057	14.17
Post Development	25-3	223.0057	14.16
Post Development	25-3	224.0057	14.15
Post Development	25-3	225.0057	14.15
Post Development	25-3	226.0057	14.14
Post Development	25-3	227.0057	14.14
Post Development	25-3	228.0057	14.13
Post Development	25-3	229.0057	14.13
Post Development	25-3	230.0057	14.12
Post Development	25-3	231.0057	14.12
Post Development	25-3	232.0057	14.11
Post Development	25-3	233.0057	14.11
Post Development	25-3	234.0057	14.10
Post Development	25-3	235.0057	14.10
Post Development	25-3	236.0057	14.09
Post Development	25-3	237.0057	14.09
Post Development	25-3	238.0057	14.08
Post Development	25-3	239.0057	14.08
Post Development	25-3	240.0057	14.07
Post Development	25-3	241.0057	14.06
Post Development	25-3	242.0057	14.06
Post Development	25-3	243.0057	14.05
Post Development	25-3	244.0057	14.05
Post Development	25-3	245.0057	14.04
Post Development	25-3	246.0057	14.04
Post Development	25-3	247.0057	14.03
Post Development	25-3	248.0057	14.03
Post Development	25-3	249.0057	14.02
Post Development	25-3	250.0057	14.02
Post Development	25-3	251.0057	14.01
Post Development	25-3	252.0057	14.01
Post Development	25-3	253.0057	14.00
Post Development	25-3	254.0057	14.00
Post Development	25-3	255.0057	13.99
Post Development	25-3	256.0057	13.99
Post Development	25-3	257.0057	13.98
Post Development	25-3	258.0057	13.98
Post Development	25-3	259.0057	13.97
Post Development	25-3	260.0057	13.97
Post Development	25-3	261.0057	13.96
Post Development	25-3	262.0057	13.96
Post Development	25-3	263.0057	13.95

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	264.0057	13.95
Post Development	25-3	265.0057	13.94
Post Development	25-3	266.0057	13.94
Post Development	25-3	267.0057	13.93
Post Development	25-3	268.0057	13.93
Post Development	25-3	269.0057	13.92
Post Development	25-3	270.0057	13.92
Post Development	25-3	271.0057	13.91
Post Development	25-3	272.0057	13.91
Post Development	25-3	273.0057	13.90
Post Development	25-3	274.0057	13.90
Post Development	25-3	275.0057	13.90
Post Development	25-3	276.0057	13.89
Post Development	25-3	277.0057	13.89
Post Development	25-3	278.0057	13.88
Post Development	25-3	279.0057	13.88
Post Development	25-3	280.0057	13.87
Post Development	25-3	281.0057	13.87
Post Development	25-3	282.0057	13.86
Post Development	25-3	283.0057	13.86
Post Development	25-3	284.0057	13.85
Post Development	25-3	285.0057	13.85
Post Development	25-3	286.0057	13.84
Post Development	25-3	287.0057	13.84
Post Development	25-3	288.0057	13.83
Post Development	25-3	289.0057	13.83
Post Development	25-3	290.0057	13.82
Post Development	25-3	291.0057	13.82
Post Development	25-3	292.0057	13.81
Post Development	25-3	293.0057	13.81
Post Development	25-3	294.0057	13.81
Post Development	25-3	295.0057	13.80
Post Development	25-3	296.0057	13.80
Post Development	25-3	297.0057	13.79
Post Development	25-3	298.0057	13.79
Post Development	25-3	299.0057	13.78
Post Development	25-3	300.0057	13.78
Post Development	25-3	301.0057	13.77
Post Development	25-3	302.0057	13.77
Post Development	25-3	303.0057	13.76
Post Development	25-3	304.0057	13.76
Post Development	25-3	305.0057	13.76

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	306.0057	13.75
Post Development	25-3	307.0057	13.75
Post Development	25-3	308.0057	13.74
Post Development	25-3	309.0057	13.74
Post Development	25-3	310.0057	13.73
Post Development	25-3	311.0057	13.73
Post Development	25-3	312.0057	13.72
Post Development	25-3	313.0057	13.72
Post Development	25-3	314.0057	13.72
Post Development	25-3	315.0057	13.71
Post Development	25-3	316.0057	13.71
Post Development	25-3	317.0057	13.70
Post Development	25-3	318.0057	13.70
Post Development	25-3	319.0057	13.69
Post Development	25-3	320.0057	13.69
Post Development	25-3	321.0057	13.69
Post Development	25-3	322.0057	13.68
Post Development	25-3	323.0057	13.68
Post Development	25-3	324.0057	13.67
Post Development	25-3	325.0057	13.67
Post Development	25-3	326.0057	13.66
Post Development	25-3	327.0057	13.66
Post Development	25-3	328.0057	13.66
Post Development	25-3	329.0057	13.65
Post Development	25-3	330.0057	13.65
Post Development	25-3	331.0057	13.64
Post Development	25-3	332.0057	13.64
Post Development	25-3	333.0057	13.64
Post Development	25-3	334.0057	13.63
Post Development	25-3	335.0057	13.63
Post Development	25-3	336.0057	13.62
Post Development	25-3	337.0057	13.62
Post Development	25-3	338.0057	13.62
Post Development	25-3	339.0057	13.61
Post Development	25-3	340.0057	13.61
Post Development	25-3	341.0057	13.60
Post Development	25-3	342.0057	13.60
Post Development	25-3	343.0057	13.60
Post Development	25-3	344.0057	13.59
Post Development	25-3	345.0057	13.59
Post Development	25-3	346.0057	13.58
Post Development	25-3	347.0057	13.58

Scenario	Sim	Relative Time [hrs]	Stage [ft]
Post Development	25-3	348.0057	13.58
Post Development	25-3	349.0057	13.57
Post Development	25-3	350.0057	13.57
Post Development	25-3	351.0057	13.56
Post Development	25-3	352.0057	13.56
Post Development	25-3	353.0057	13.56
Post Development	25-3	354.0057	13.55
Post Development	25-3	355.0057	13.55
Post Development	25-3	356.0057	13.55
Post Development	25-3	357.0057	13.54
Post Development	25-3	358.0057	13.54
Post Development	25-3	359.0057	13.53

APPENDIX D: Geotechnical Report

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

January 16, 2025

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458
Phone: (561) 561-847-7533 Email: jenai.ferguson@meritagehomes.com

Subject: Report Summary: Report of Geotechnical Exploration
Sunrise Townhomes
Sunrise Blvd
Fort Pierce, Florida

Dear Ms. Ferguson:

Nutting Engineers of Florida, Inc. has performed a Geotechnical Exploration at the above referenced project in accordance with your authorization to proceed provided on December 18, 2024. Included in the report are our observations, results of our exploration, analysis, and recommendations for the proposed development.

The site covers approximately 22 acres and currently is vacant with six inches to three feet of standing water covering approximately two-thirds of the site under water and heavy vegetation. In summary, our test borings and test pits indicate that in general the development of the proposed buildings, roadways, etc. may be performed using conventional construction methods and may be supported on conventional shallow foundations. Once the site improvement has been completed as outlined herein, the proposed structures may be supported upon a shallow foundation system utilizing an allowable soil bearing pressure of 3,000 pounds per square foot. Additionally, the subsurface soils encountered on site can be utilized as fill for the project.

Thank you for providing us the opportunity to be a part of your team for this project. If you have any questions or require further assistance, please contact us at your convenience.

Respectfully submitted,
Nutting Engineers of Florida, Inc.

Stephen J. Mrachek, P.E.
Senior Engineer

REPORT OF
GEOTECHNICAL EXPLORATION

SUNRISE TOWNHOMES
SUNRISE BLVD
FORT PIERCE, FLORIDA

FOR

MERITAGE HOMES
1395 UNIVERSITY BLVD, SUITE 300
JUPITER, FLORIDA 33458

PREPARED BY

NUTTING ENGINEERS OF FLORIDA, INC.
615 SW BILTMORE STREET
PORT ST. LUCIE, FLORIDA 34983

PROJECT No. 551.12

JANUARY 2025

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

January 16, 2025

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458
Phone: (561) 561-847-7533 Email: jenai.ferguson@meritagehomes.com

Subject: Report of Geotechnical Exploration
Sunrise Townhomes
Sunrise Blvd
Fort Pierce, Florida

Dear Ms. Ferguson:

Nutting Engineers of Florida, Inc. (NE), has performed a Geotechnical Exploration for the proposed development at the above referenced site in Fort Pierce, Florida. This exploration was performed in accordance with an authorization to proceed provided by Meritage Homes on December 18, 2024. This evaluation was performed to develop information regarding subsurface soil conditions at specific test locations which along with proposed construction information provided was used to develop opinions regarding earthwork procedures and foundations for support of the proposed construction. This report presents our findings and recommendations based upon the information examined at the time of this evaluation.

PROJECT INFORMATION

We understand that preliminary plans for this project include the construction of a residential development consisting of approximately 112 townhome units (15 buildings) at the 12.5-acre referenced site. Additional improvements will include a 0.76-acre amenity area, 1.39-acre lake, asphalt paved parking and drive areas, and site utilities. We were provided with a conceptual site plan indicating the proposed improvements.

The residential structures are planned to consist of concrete block construction and be supported upon a shallow foundation system similar to surrounding neighborhoods.

NE should be notified in writing by the client of any changes in the proposed construction along with a request to amend our foundation analysis and/or recommendations within this report as appropriate.

Existing Site Conditions and Historical Aerial Photograph Review

Currently, the site is vacant with heavy vegetation along toe perimeter of the site. The vegetation includes pine trees, palm trees, Brazilian pepper trees, and Melaleucas. The interior of the site is primarily grasses with and plants commonly seen in wetlands. Additionally, approximately six inches to three feet of standing water is present on the southern two thirds of the property.

Historically, based on a limited review of available aerial photographs obtained by our office, from at least 1958 the site has low lying areas indicative of wetlands and upland areas that were vacant containing native grasses and few trees. From 1958 to present, the site has remained in the same state with the exception of continued vegetation growth.

SUBSURFACE CONDITIONS

Subsurface Exploration

In order to explore the subsurface soil conditions Nutting Engineers of Florida, Inc. proposed ten (10) Standard Penetration Test (SPT) borings (ASTM D-1586) to depths of fifteen to thirty feet below land surface, but due to the site conditions (standing water) only five (5) borings were performed.. In addition to the borings, twenty-three (23), mini-trackhoe excavated test pits were performed to depths of one to ten feet below existing grades, where the cave-in or the maximum reach of the equipment was encountered. The locations of the test borings and test pits are indicated on the boring location plan presented in the Appendix of this report. The test locations were identified in the field using approximate methods; namely, a measuring wheel and available surface controls. As such the soil boring locations should be considered to be approximate.

In addition, Nutting Engineers proposed to perform four 'Usual Open-Hole' exfiltration tests in accordance with South Florida Water Management District specifications, but due to site conditions (standing water) only two tests were performed. The exfiltration tests were completed to depths of six feet.

Test Boring Results

In general, the borings encountered a loose gray fine sand to depths of two and a half to three feet underlain by medium dense dark brown fine sand with trace silt to depths of four and a half to seven feet below grade. Thereafter brown to light brown fine sand in a medium dense condition was encountered to depths of seven to nine feet. Next, the borings encountered medium dense gray slightly clayey to clayey sand to depths of approximately thirteen to thirteen and a half feet followed by loose gray fine sand to depths of fifteen to thirty feet, the maximum depths explored. Please see the enclosed soil classification sheet in the Appendix of this report for additional important information regarding these descriptions, the field evaluation and other related information.

Test Pit Results

In general, the test pits recorded a two-to-twelve-inch layer of surficial topsoil followed by gray sand to depths of one to three feet. Next the test pits encountered brown to dark brown slightly silty to silty sand to depths of two to five and three quarters feet with a layer of sand intermixed in some of the pits. Thereafter brown to tan sand was encountered to depths of four to eight feet followed by gray sand with trace clayey to slightly clayey to depths of eight to ten feet, the maximum depths explored.

Note in test pit TP-6, what Nutting believes was an artesian spring was encountered when digging. The water stabilized at approximately six inches below grade.

Exfiltration Results

Two 'Usual Open-Hole' exfiltration tests were performed in accordance with South Florida Water Management District (SFWMD) specifications to depths of six feet below the existing ground surface. The tests were performed in order to determine the hydraulic conductivity of the in situ subsurface soils to evaluate drainage requirements for the project.

The hydraulic conductivity values were determined to range from approximately 5.32×10^{-5} to 7.72×10^{-5} cubic feet per second, per square foot, per foot of head at the specific location tested. Detailed soil descriptions and flow rates are presented in the Appendix.

Groundwater Information

The immediate groundwater level was measured at the boring locations at the time of drilling. The groundwater level was encountered at an approximate depth of two feet below the existing ground surface, at the time of the field work.

The immediate depth to groundwater measurements presented in this report may not provide a reliable indication of stabilized or a more long-term depth to groundwater at this site. Water table elevations can vary dramatically with time through rainfall, droughts, storm events, flood control activities, nearby surface water bodies, tidal activity, pumping and many other factors. For these reasons, this immediate depth to water data **should not** be relied upon alone for project design considerations.

ANALYSIS AND RECOMMENDATIONS

Review of test borings and test pits performed for this project suggests that the site is suitable for the planned residential development and may be prepared using conventional site preparation and compaction techniques as described herein. Once the site is successfully prepared in accordance with the recommendations presented in this report, the site may be developed with the proposed residential development using a shallow foundation system designed for an allowable soil bearing pressure of 3,000 pounds per square foot. All work should be completed in accordance with

applicable building codes, other regulations as appropriate, and good standard local practice. Additionally, the soils encountered can safely support the proposed lift stations.

We recommend that the bottom of footings be at least 12 inches below the lowest adjacent finished grade. It is our opinion that the floor slab system may be constructed as a slab on grade. We recommend that a vapor barrier be placed between the soil and concrete. Reinforcing for the floor slab should be in accordance with the structural engineer's requirements.

Settlement Analysis

We performed a settlement evaluation based upon an improved soil profile following completion of the general site compaction using a moderately sized vibratory compactor for the construction. This method should improve the soils to provide an allowable bearing capacity of 3,000 pounds per square foot. It was estimated that upon proper completion, long-term total settlements should be on the order of less than approximately one inch.

Differential settlements should be approximately one-half of the total settlement. Most of this settlement should occur upon the application of the dead load during construction.

In order to maintain the calculated settlement throughout the life of the structures it would be necessary to grade the site such that stormwater is directed away from the foundations. This could be maintained through the use of roof gutters and downspouts to migrate the water away from the foundations. Any ponding nearby/adjacent to walls and foundations should be avoided.

Site Preparation

The surficial organic soils (approximately one to four inches thick), debris from the clearing and demolition operations, and any unsuitable soils as determined by the Geotechnical Engineer will need to be completely removed within the construction area and to a lateral distance of at least 5 feet beyond the footprint limits, where practical.

A Nutting Engineer's representative **must be** present to observe that the stripping operations are performed as we have discussed herein. Otherwise, Nutting Engineers shall bear no liability for acceptance of work or resulting foundation performance and consequences.

Upon approval by the geotechnical engineer, the stripped surface (no fill added at this time) should be compacted until a density equivalent to at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557) is achieved to a depth of at least 12 inches below the compacted surface. The coverages should be equally divided into two perpendicular directions. The soils should be at an acceptable moisture content to allow for proper compaction. The compaction operations must be observed by a representative of Nutting Engineers.

Any structural fill needed to bring the site to construction grade may then be placed in lifts not exceeding twelve inches in loose thickness. Each lift should be thoroughly compacted until densities equivalent to at least 95 percent of the modified Proctor maximum dry density are uniformly obtained. Based on the test borings and pits, the onsite soils can be utilized as fill.

Any imported fill should consist of granular soil, with less than 10% passing the No. 200 sieve, free of rubble, organics (5% or less) clay, debris and other unsuitable material. The fill should have ASTM designation (D-2487) of GP, GW, SP, or SW, with a maximum particle size of no more than 3 inches or as otherwise approved by Nutting Engineers.

Following site and building pad construction as discussed above, the foundation area should be excavated and the footings formed.

The bottom of foundation excavations should be compacted after excavation to develop a minimum density requirement of 95 percent of the maximum modified Proctor dry density, for a minimum depth of one foot below the bottom of the footing depth, as determined by field density compaction tests. The floor slab area should also be compacted in the same manner.

Pavements

At a minimum, pavement areas should be compacted to a minimum of 98 percent of the modified Proctor maximum dry density to a depth of at least 12 inches below the subgrade level. We recommend that stabilized subgrade having a minimum Limerock Bearing Ratio (LBR) of 40 be placed to a depth of approximately one foot below the base course. The base course will range from approximately 6 to 8 inches, and should have a minimum LBR of 100. Based on the soil exploration performed, material will need to be imported to the site in order to prepare the base and sub-base course. We can provide more detailed pavement design recommendations including material types and thicknesses. However, it would be necessary to provide us with the anticipated traffic loading characteristics and pavement design life.

GENERAL INFORMATION

Our client for this geotechnical evaluation was:

Ms. Jenai Ferguson
Meritage Homes
1395 University Blvd, Suite 300
Jupiter, Florida 33458

The contents of this report are for the exclusive use of the client, the client's design & construction team and governmental authorities for this specific project exclusively. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of Nutting Engineers of Florida, Inc. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction for foundation support. Environmental issues including (but not limited to), soil and/or groundwater contamination, and other environmental considerations are beyond our scope of service for this project. As such, this report should not be used or relied upon for evaluation of environmental issues.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified immediately so that the condition or change can be evaluated and appropriate action taken.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

We appreciate the opportunity to be of service on this project. If we can be of any further assistance, or if you need additional information, please contact us at your convenience.

Sincerely,
NUTTING ENGINEERS OF FLORIDA, INC.

Richard C. Wohlfarth, P.E.
Director of Engineering

Stephen J. Mrachek, P.E. #70784
Senior Engineer

Appendix: Test Location Plan
Test Boring Results
Test Pit Results
Exfiltration Test Results
Limitations of Liability/Soil Classification Criteria

REP MERITAGE HOMES SUNRISE TOWNHOMES FT PIERCE



N

- LEGEND -

TEST BORING LOCATION

APPROX. TEST PIT LOCATION

EXFILTRATION TEST LOCATION

NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967

Meritage Homes
Sunrise Townhomes
Sunrise Blvd
Ft. Pierce, Florida

PROJECT NO. 551.12

APPROXIMATE TEST LOCATION PLAN

GEOTECHNICAL EXPLORATION

FIG. 1A

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-1

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 1.8 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND, trace root ▽	SS 1	1-2-2-2	4	▲
		Dk. brown fine SAND, trace silt	SS 2	3-5-6-7	11	▲
5		Brown fine SAND	SS 3	7-6-7-11	13	▲
		Lt. brown fine SAND	SS 4	9-9-11-12	20	▲
		Gray slightly clayey to clayey SAND	SS 5	7-8-7-7	15	▲
10			SS 6	6-6-5-5	11	▲
		Gray fine SAND	SS 7	4-4-4-4	8	▲
15		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-2

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/13/25 COMPLETED 1/13/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.0 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	2-3-3-4	6	
		Dk. brown fine SAND, trace silt	SS 2	5-7-8-8	15	
5			SS 3	7-6-6-7	12	
		Gray slightly clayey to clayey SAND	SS 4	6-7-6-6	13	
			SS 5	5-7-5-5	12	
10			SS 6	4-5-4-4	9	
		Gray fine SAND	SS 7	4-4-4-5	8	
15						
			SS 8	3-4-4-7	8	
20						
			SS 9	2-1-2-2	3	
25						
			SS 10	2-2-3-3	5	
30		Bottom of hole at 30.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-3

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.3 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	2-3-2-3	5	
		▽	SS 2	4-6-8-11	14	
5		Dk. brown fine SAND, trace silt	SS 3	8-11-8-8	19	
		Lt. brown fine SAND	SS 4	6-6-7-7	13	
		Gray slightly clayey to clayey SAND	SS 5	6-7-7-8	14	
10			SS 6	3-5-5-5	10	
		Gray fine SAND	SS 7	5-10-11-8	21	
15						
			SS 8	3-6-6-7	12	
20						
			SS 9	4-5-6-7	11	
25						
			SS 10	3-3-3-37	6	
30		Bottom of hole at 30.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-4

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/14/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.3 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND	SS 1	1-1-1-2	2	▲
		▽ Dk. brown fine SAND	SS 2	3-3-4-6	7	▲
5		Brown fine SAND	SS 3	6-6-5-5	11	▲
		Lt. brown fine SAND	SS 4	3-4-6-6	10	▲
10		Gray slightly clayey to clayey SAND	SS 5	5-5-6-6	11	▲
			SS 6	6-5-6-6	11	▲
15		Gray fine SAND	SS 7	4-3-3-4	6	▲
		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment
1310 Neptune Drive
Boynton Beach Fl., 33426
Telephone: 561-736-4900
Fax: 561-737-9975

BORING NUMBER B-5

PROJECT NUMBER 551.12

CLIENT Meritage Homes **PROJECT NAME** Sunrise Townhomes

PROJECT LOCATION Sunrise Boulevard, Fort Pierce, Florida

DATE STARTED 1/13/25 COMPLETED 1/14/25 SURFACE ELEVATION REFERENCE Approx. @ Road Crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY C. Stanley CHECKED BY S. Mrachek ▽ AT TIME OF DRILLING 2.0 ft

APPROXIMATE LOCATION OF BORING **As located on the approximate test location plan**

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲ 10 20 30 40 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray fine SAND, trace root	SS 1	2-3-3-2	6	▲
		▽ Dk. brown fine SAND, trace silt	SS 2	4-5-5-7	10	▲
5		Gray slightly clayey to clayey SAND	SS 3	5-7-6-5	13	▲
			SS 4	5-5-6-7	11	▲
10			SS 5	5-6-5-6	11	▲
			SS 6	4-5-5-6	10	▲
15		Gray fine SAND	SS 7	4-4-4-5	8	▲
		Bottom of hole at 15.0 feet.				

TEST NUTTING BOREHOLE 3-551.12 MERITAGE HOMES -SUNRISE TOWNHOMES SUNRISE BOULEVARD FORT PIERCE.GPJ GINT US.GDT 1/16/25

Disclaimer Nutting Engineers of Florida, Inc. accepts no liability for the consequences of the independent interpretation of drilling logs by others.

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-1

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1.5	Gray SAND
1.5	3	Brown slightly silty SAND
3	4.5	Gray SAND
4.5	5	Dark brown SILTY SAND (Hardpan)
5	6	Brown SAND
6	8	Tan SAND

TEST PIT TP-2

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	2	Gray SAND
2	3	Brown slightly silty SAND
3	4	Gray SAND
4	4.5	Dark brown SILTY SAND (Hardpan)
4.5	6	Brown SAND
6	6.5	Tan SAND

TEST PIT TP-3

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	3	Brown slightly silty SAND
3	4	Gray SAND
4	5	Tan SAND
5	6	Brown SAND
6	7	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-4

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	4	Gray SAND
4	4.5	Dark brown SILTY SAND (Hardpan)
4.5	6	Tan SAND

TEST PIT TP-5

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	6	Gray SAND
6	6.5	Brown SAND
3.5	8	Tan SAND

TEST PIT TP-6

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
At a depth of one foot water filled excavation to a depth of 6 inches believed to be an artesian spring.		

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-7

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2.5	Gray SAND
2.5	7	Brown SAND
7	8	Tan SAND
8	10	Gray SAND, trace to slightly clayey

TEST PIT TP-8

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3.5	Gray SAND
3.5	4	Dark brown SILTY SAND (Hardpan)
4	5.5	Gray SAND
5.5	5.75	Dark brown SILTY SAND (Hardpan)
5.75	6.5	Brown SAND
6.5	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-9

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	4	Dark brown SILTY SAND (Hardpan)
4	7	Brown SAND
7	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-10

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	6	Brown SAND
6	8	Tan SAND

TEST PIT TP-11

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	2.5	Gray SAND
2.5	3	Dark brown SILTY SAND (Hardpan)
3	7	Brown SAND
7	8	Tan SAND

TEST PIT TP-12

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	5.5	Brown SAND
5.5	8	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-13

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	2	Dark brown SILTY SAND (Hardpan)
2	5.5	Brown SAND
5.5	7	Tan SAND
7	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-14

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	4.5	Brown SAND
4.5	7	Tan SAND
7	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-15

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1.5	Gray SAND
1.5	2	Dark brown SILTY SAND (Hardpan)
2	3	Gray SAND
3	6	Brown SAND
6	6.5	Tan SAND
6.5	8	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-16

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	3	Gray SAND
3	4	Tan SAND
4.5	8	Gray SAND, trace to slightly clayey

TEST PIT TP-17

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1	Gray SAND
1	2.5	Brown slighlty silty SAND
2.5	5	Brown SAND
5	5.25	Dark brown SILTY SAND (Hardpan)
5.25	6	Tan SAND
6	8	Gray SAND

TEST PIT TP-18

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2	Gray SAND
2	3	Dark brown SILTY SAND (Hardpan)
3	5.5	Brown SAND
5.5	8	Tan SAND

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-19

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	2.5	Gray SAND
2.5	3	Dark brown SILTY SAND (Hardpan)
3	6	Brown SAND
6	8	Tan SAND
8	8.5	Gray SAND, trace to slightly clayey

TEST PIT TP-20

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1	Dark brown SILTY SAND, trace organics (Topsoil)
1	3	Gray SAND
3	3.5	Dark brown SILTY SAND (Hardpan)
3.5	6	Gray SAND
6	7	Gray SAND, trace to slightly clayey

TEST PIT TP-21

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	1	Gray SAND
1	2	Brown slighlty silty SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	4	Brown SAND
4	5.5	Tan SAND
5.5	8	Gray SAND, trace to slightly clayey

TEST PIT LOGS

CLIENT NAME: Meritage Homes
PROJECT NAME: Sunrise Townhomes
PROJECT LOCATION: Fort Pierce, Florida

TEST PIT TP-22

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	1.5	Gray SAND
1.5	3	Brown SAND
3	8	Gray SAND, trace to slightly clayey

TEST PIT TP-23

DEPTH (FEET)		SOIL DESCRIPTION
FROM	TO	
0	0.5	Dark brown SILTY SAND, trace organics (Topsoil)
0.5	2	Gray SAND
2	2.5	Dark brown SILTY SAND (Hardpan)
2.5	4	Brown SAND
4	8	Gray SAND, trace to slightly clayey

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

Report of Exfiltration Test

Client:	Meritage Homes	Order No	551.12
Project:	Sunrise Townhomes	Report No	1
Location:	Sunrise Boulevard, Fort Pierce, Florida	Date:	1/14/25
	Fort Pierce, Florida		
Test:	Usual Open Hole Exfiltration Test		
Surface Elevation:	Approx. @ Road Crown	Water table from ground surface:	1.8'
Casing Diameter:	6"		
Tube Depth:	6'		

Hydraulic Conductivity (K) = 7.72×10^{-5} cfs/ft^{2}ft.head

EXFIL NO. 1

Sample Location: As located on the approx. test location plan.

Material:

0-1.3'	Gray fine SAND
1.3'-3'	Lt. gray fine SAND
3'-5'	Dk. brown silty SAND
5'-6'	Brown fine SAND

One Minute Increment	Pump Rate in Gal/Min
1	0.5
2	0.5
3	0.5
4	0.5
5	0.5
6	0.5
7	0.5
8	0.5
9	0.5
10	0.5

Nutting Engineers
of Florida Inc. | Established 1967
Your Project is Our Commitment

Geotechnical & Construction Materials
Engineering, Testing, & Inspection
Environmental Services

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com

Report of Exfiltration Test

Client:	Meritage Homes	Order No	551.12
Project:	Sunrise Townhomes	Report No	2
Location:	Sunrise Boulevard, Fort Pierce, Florida	Date:	1/13/25
	Fort Pierce, Florida		
Test:	Usual Open Hole Exfiltration Test		
Surface Elevation:	Approx. @ Road Crown	Water table from ground surface:	2.5'
Casing Diameter:	6"		
Tube Depth:	6'		

Hydraulic Conductivity (K) = 5.32×10^{-5} cfs/ft^{2}ft.head

EXFIL NO. 2	One Minute Increment	Pump Rate in Gal/Min
	1	0.5
	2	0.5
Sample Location: As located on the approx. test location plan.	3	0.5
	4	0.5
	5	0.5
Material: 0-2" Gray fine SAND	6	0.5
2"-1.8' Lt. gray fine SAND	7	0.5
1.8'-6' Dk. brown silty SAND	8	0.5
	9	0.5
	10	0.5

SOIL AND ROCK CLASSIFICATION CRITERIA

SAND/SILT

N-VALUE (bpf)	RELATIVE DENSITY
0 – 4	Very Loose
5 – 10	Loose
11 – 29	Medium
30 – 49	Dense
>50	Very dense
100	Refusal

CLAY/SILTY CLAY

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 – 4	0.25 – 0.50	Soft
5 – 8	0.50 – 1.00	Medium
9 – 15	1.00 – 2.00	Stiff
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
N≥ 100	Hard to v. hard	Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.
25≤ N ≤ 100	Medium hard to hard	
5≤ N ≤ 25	Soft to medium hard	

PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76 mm to 3 in.
Sand	0.074 mm to 4.76 mm
Silt	0.005 mm to 0.074 mm
Clay	<0.005 mm

DESCRIPTION MODIFIERS

0 – 5%	Slight trace
6 – 10%	Trace
11 – 20%	Little
21 – 35%	Some
>35%	And

Major Divisions			Group Symbols	Typical names
Coarse-grained soils (More than half of material is *larger* than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gavels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		Gravels with fines (Appreciable amount of fines)	GW* d / u	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		Sands with fines (Appreciable amount of fines)	SM* d / u	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-grained soils (More than half of material is *smaller* than No. 200 sieve size)	Silts and clays (Liquid limit less than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy, clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and clays (Liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays or high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
	Highly organic soils		PT	Peat and other highly organic soils

Laboratory classification criteria

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than five percent……GW, GP, SW, SP

More than 12 percent……GM, GC, SM, SC

5 to 12 percent……*Borderline* cases requiring dual systems**

$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3

Not meeting all gradation requirements for GW

Atterberg limits below "A" line or P.I. less than 4

Atterberg limits above "A" line with P.I. greater than 7

Above "A" line with P.I. between 4 and 7 are *borderline* cases requiring use of dual symbols.

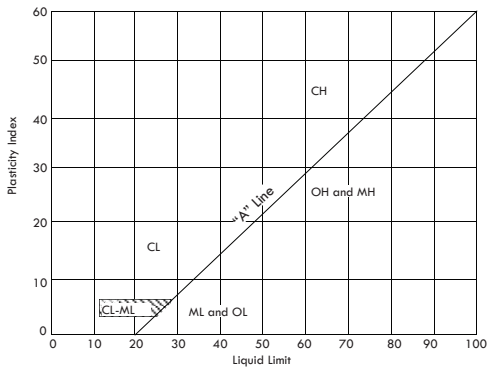
$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} x D_{60}}$ *between* 1 and 3

Not meeting all gradation requirements for SW

Atterberg limits below "A" line or P.I. less than 4

Atterberg limits above "A" line with P.I. more than 7

Limits plotting in hatched zone with P.I. between 4 and 7 are *borderline* cases requiring use of dual system.



Plasticity Chart

Nutting Engineers of Florida Inc. | Established 1967
Your Project is Our Commitment

LIMITATIONS OF LIABLILITY

WARRANTY

We warranty that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. ***No other warranties, expressed or implied, are made***. While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.

ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. ***Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately*** so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

CONSTRUCTION OBSERVATION

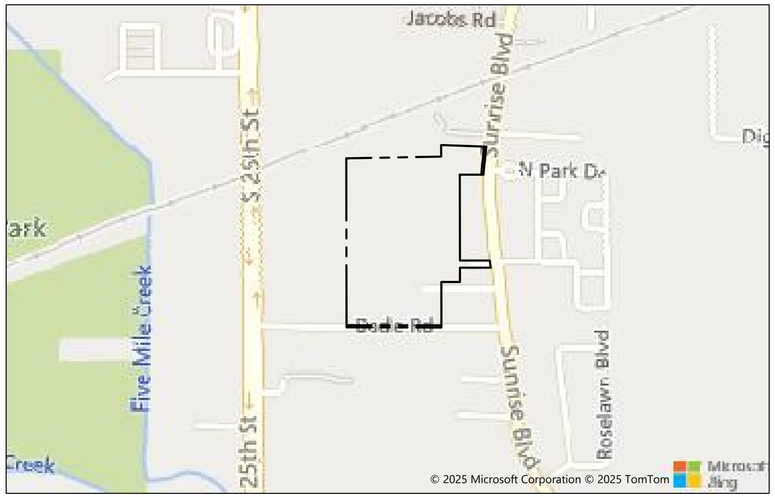
Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. ***The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.*** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.

PRELIMINARY ENGINEERING PLANS

SUNRISE BLVVD

SECTION 28, TOWNSHIP 35S, RANGE 40E

FORT PIERCE, FLORIDA

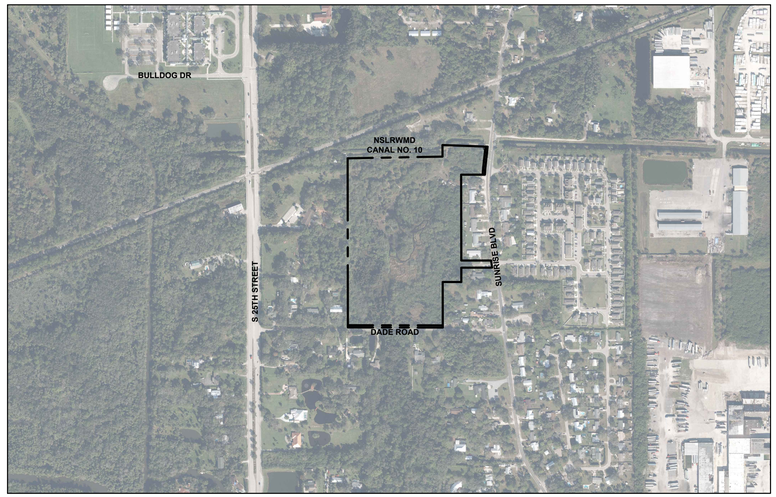


LOCATION MAP

GRAPHIC SCALE

0

(IN FEET)



PROJECT AREA

GRAPHIC SCALE

500 0 250 500 1000 1500

(IN FEET)

INDEX OF DRAWINGS

C-101 EXISTING CONDITIONS, DEMO, & STORMWATER POLLUTION PREVENTION PLAN
C-102 STORMWATER POLLUTION PREVENTION PLAN DETAILS
C-103 OVERALL PAVING, GRADING, & DRAINAGE PLAN
C-104 OVERALL UTILITY PLAN
C-105 OFF-SITE UTILITY IMPROVEMENTS
C-501 PAVING, GRADING, & DRAINAGE DETAILS

PROJECT INFORMATION

HW PROJECT NO: --

PARCEL ID#: PARCEL 1 - 2428-321-0001-000-3
PARCEL 2 - 2428-601-0252-000-6
ZONING INFO: R-4 (10 DU/AC)
OWNERSHIP: GPS DEVELOPMENTS LLC
10465 NW 29TH TERRACE
DORAL, FL 33172-2530
PROJECT DATUM AND COORDINATE SYSTEM:
HORIZONTAL: FLORIDA STATE PLANE NAD83 (FL83-EF)
VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

GOVERNING STANDARDS & SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, FY2025-26 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE:
https://www.fdot.gov/programmanagement/Implemented/SpecBooks

LAND DEVELOPMENT TO CONFORM TO THE CURRENT FORT PIERCE ENGINEERING DEPARTMENT STANDARDS.

UTILITY CONSTRUCTION TO CONFORM TO THE CURRENT EDITION OF THE FPUA CONSTRUCTION STANDARDS AND DETAILS.

REVISIONS

DATE	COMMENT
-	-
-	-
-	-
-	-
-	-
-	-
-	-

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

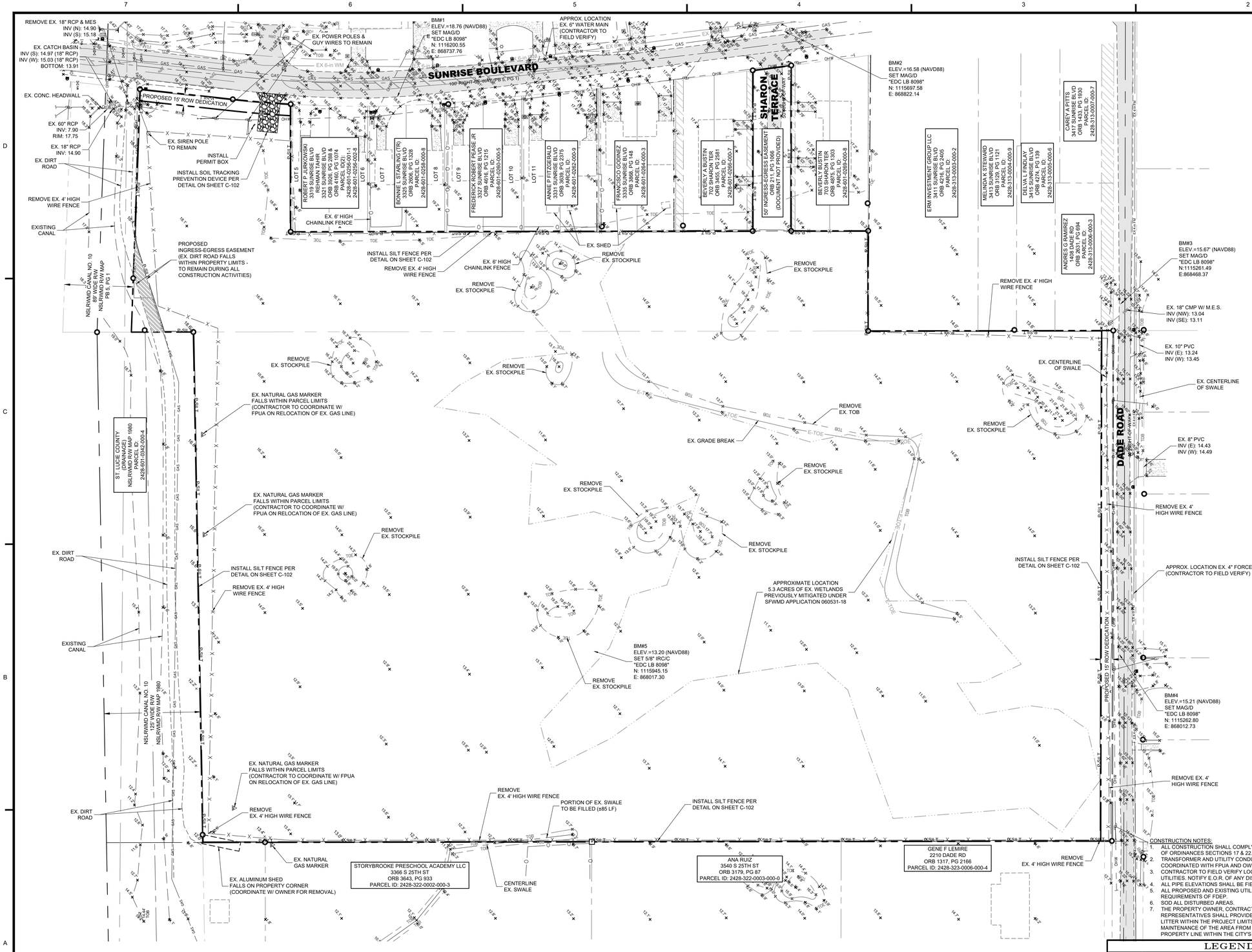
DATE
December 12, 2025

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

PROJECT No. 24-237

REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:28 AM


SUNRISE BOULEVARD
100' RIGHT-OF-WAY (PB 5, PG 1)
SHARON TERRACE
DADE ROAD
PROPOSED 15' ROW DEDICATION
REMOVE EX. 18" RCP & MES
INV (N): 14.90
INV (S): 15.18
EX. CATCH BASIN
INV (S): 14.97 (18" RCP)
INV (W): 15.03 (18" RCP)
BOTTOM: 13.91
EX. CONC. HEADWALL
EX. 60" RCP
INV: 7.90
RIM: 17.75
EX. 18" RCP
INV: 14.90
EX. DIRT ROAD
EX. SIREN POLE TO REMAIN
INSTALL PERMIT BOX
INSTALL SOIL TRACKING PREVENTION DEVICE PER DETAIL ON SHEET C-102
REMOVE EX. 4' HIGH WIRE FENCE
EXISTING CANAL
EX. 6' HIGH CHAINLINK FENCE
EX. POWER POLES & GUY WIRES TO REMAIN
BM#1
ELEV.=18.76 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1116200.55
E: 868737.76
APPROX. LOCATION
EX. 6" WATER MAIN
(CONTRACTOR TO FIELD VERIFY)
BM#2
ELEV.=16.58 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115697.58
E: 868822.14
LOT 5
ROBERT P JURKOWSKI
3319 SUNRISE BLVD
REHMAN TAHIR
3323 SUNRISE BLVD
ORB 3926, PG 288 &
ORB 4160, PG 1074
2428-601-0256-001-1
2428-601-0256-002-8
LOT 6
LOT 7
BONNIE L STARLING (TR)
3327 SUNRISE BLVD
ORB 2606, PG 1328
PARCEL ID:
2428-601-0256-000-8
LOT 8
LOT 9
FREDERICK ROBERT PEASE JR
3327 SUNRISE BLVD
ORB 4661, PG 715
PARCEL ID:
2428-601-0260-000-5
LOT 10
LOT 11
ANNE P FITZGERALD
3331 SUNRISE BLVD
ORB 3639, PG 2375
PARCEL ID:
2428-601-0262-000-9
FRANCISCO GODINEZ
3335 SUNRISE BLVD
ORB 4666, PG 1146
PARCEL ID:
2428-601-0264-000-3
BEVERLY BUSTIN
3339 SUNRISE BLVD
ORB 3455, PG 2581
PARCEL ID:
2428-601-0266-000-7
50' INGRESS-EGRESS EASEMENT
ORB 211, PG 1666
(DOCUMENT NOT PROVIDED)
BEVERLY BUSTIN
703 SHARON TER
ORB 4875, PG 1303
PARCEL ID:
2428-601-0269-000-8
ERM INVESTMENT GROUP LLC
3411 SUNRISE BLVD
ORB 4216, PG 2405
PARCEL ID:
2428-313-0003-000-2
MELINDA K STEWARD
3413 SUNRISE BLVD
ORB 3129, PG 1121
PARCEL ID:
2428-313-0004-000-9
DELVA L FINDLAY
3415 SUNRISE BLVD
ORB 2752, PG 159
PARCEL ID:
2428-313-0005-000-6
CAREY A PITTS
3417 SUNRISE BLVD
ORB 1433, PG 1930
PARCEL ID:
2428-313-0500-000-7
ANDRES G RAMIREZ
1408 DADE RD
ORB 2831, PG 694
PARCEL ID:
2428-313-0006-000-3
PROPOSED INGRESS-EGRESS EASEMENT (EX. DIRT ROAD FALLS WITHIN PROPERTY LIMITS - TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES)
NSLRWMD CANAL NO. 10
89' WIDE R/W
NSLRWMD R/W MAP
PB 5, PG 1
ST. LUCIE COUNTY
CANAL NO. 10
NSLRWMD R/W MAP 1980
PARCEL ID:
2428-601-0262-000-4
INSTALL SILT FENCE PER DETAIL ON SHEET C-102
REMOVE EX. 4' HIGH WIRE FENCE
EX. SHED
REMOVE EX. STOCKPILE
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
EX. GRADE BREAK
REMOVE EX. TOB
EX. DIRT ROAD
EXISTING CANAL
NSLRWMD CANAL NO. 10
89' WIDE R/W
NSLRWMD R/W MAP 1980
PB 5, PG 1
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)
EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)
EX. NATURAL GAS MARKER
STORYBROOKE PRESCHOOL ACADEMY LLC
3366 S 25TH ST
ORB 3643, PG 933
PARCEL ID: 2428-322-0002-000-3
CENTERLINE EX. SWALE
PORTION OF EX. SWALE TO BE FILLED (±85 LF)
ANA RUIZ
3540 S 25TH ST
ORB 3179, PG 87
PARCEL ID: 2428-322-0003-000-0
GENE F LEMIRE
2210 DADE RD
ORB 1317, PG 2166
PARCEL ID: 2428-323-0006-000-4
APPROXIMATE LOCATION
5.3 ACRES OF EX. WETLANDS
PREVIOUSLY MITIGATED UNDER
SFWMD APPLICATION 060531-18
BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30
BM#3
ELEV.=15.67' (NAVD88)
SET MAG/D
"EDC LB 8098"
N:1152621.49
E:868468.37
EX. 18" CMP W/ M.E.S.
INV (NW): 13.04
INV (SE): 13.11
EX. 10" PVC
INV (E): 13.24
INV (W): 13.45
EX. CENTERLINE OF SWALE
EX. 8" PVC
INV (E): 14.43
INV (W): 14.49
REMOVE EX. 4' HIGH WIRE FENCE
APPROX. LOCATION EX. 4" FORCE MAIN (CONTRACTOR TO FIELD VERIFY)
BM#4
ELEV.=15.21 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115262.80
E: 868012.73
REMOVE EX. 4' HIGH WIRE FENCE
CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
DEMUCKING:
1. THE SUBJECT AREA PLUS AN AREA EXTENDING 5 FEET OUTSIDE PROPOSED CONSTRUCTION PERIMETERS SHOULD BE EXCAVATED AS NEEDED TO REMOVE ANY ENCOUNTERED DEEPER DEPOSITS OF ORGANIC SOIL. CARE MUST BE EXERCISED TO AVOID MIXING THE ORGANIC SOILS WITH THE UNDERLYING, SUITABLE GRANULAR MATERIALS. THE ORGANICS ARE TO BE DISPOSED OF AWAY FROM THE BUILDING AREA AS DIRECTED BY THE OWNER.
2. IN GENERAL IT IS DESIRED TO COMPLETE THE EXCAVATION AND BACKFILLING OPERATIONS IN AS SHORT A TIME AS POSSIBLE TO AVOID OPEN EXCAVATIONS. CONSIDERATION SHOULD BE GIVEN TO PROCEEDING WITH THE DEMUCKING/BACKFILLING OPERATION IN STAGES ACROSS THE SITE SO THAT NO DEEP EXCAVATIONS REMAIN OPEN OVERNIGHT. SUCH GRADUAL APPROACH MAY ALSO REDUCE DEWATERING AND SLOPE BRACING NEEDS.
3. IF THE EXCAVATION REACHES AREAS NEAR THE PROPERTY LINES, THE SLOPE OF THE EXCAVATION MAY HAVE TO BE PROTECTED WITH A BRACING SYSTEM. THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE INTEGRITY OF ADJACENT PROPERTY, AND FOR IMPLEMENTING ALL NECESSARY SAFETY MEASURES.
4. ONCE THE BOTTOM OF THE EXCAVATION IS INSPECTED AND APPROVED, BACKFILL CAN BE PLACED TO A HEIGHT OF 2 FEET ABOVE THE WATER TABLE. IF DEWATERING MEASURES APPEAR TO BE NECESSARY ON THIS SITE TO FACILITATE THE REMOVAL OF ANY ORGANIC SOILS, ALLOW THE INSPECTION OF ANY DEMUCKED AREAS, AND ALLOW THE COMPACTION OF THE BACKFILL, THE CONTRACTOR SHOULD CONSIDER DEMUCKING AND AT LEAST PARTIALLY BACKFILLING SMALL SEGMENTS OF THE SITE AT A TIME TO REDUCE DEWATERING NEEDS AND DISCHARGE FLOWS.
DENSIFICATION:
1. GRANULAR BACKFILL SHOULD BE PLACED IN THE DRY AND COMPACTED WITH A VIBRATORY ROLLER. ANY SOFT, YIELDING SOILS DETECTED DURING THIS OPERATION SHOULD BE EXCAVATED AND REPLACED WITH CLEAN, COMPACTED BACKFILL THAT CONFORMS WITH THE RECOMMENDATIONS BELOW. SUFFICIENT PASSES SHOULD BE MADE DURING THE COMPACTION OPERATIONS TO PRODUCE DRY DENSITIES NOT LESS THAN 98 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY OF THE COMPACTED MATERIAL TO DEPTHS OF 1 FOOT BELOW THE COMPACTED SURFACE. IN ANY CASE, THE AREA SHOULD RECEIVE NOT LESS THAN 10 OVERLAPPING PASSES, HALF OF THEM IN EACH OF TWO PERPENDICULAR DIRECTIONS, IF POSSIBLE. THE INITIAL PASSES MAY HAVE TO BE GIVEN WITHOUT VIBRATIONS, AND THEN WITH THE LOWEST POSSIBLE VIBRATION SETTING SO AS TO ALLOW THE TRAFFIC OF THE VIBRATING ROLLER. AN ADDITIONAL SIX INCH LIFT MAY BE ADDED TO THE INITIAL LIFT IF THE TRAFFIC OF THE ROLLER IS MADE DIFFICULT BY HIGH PORE PRESSURE CONDITIONS.
2. WE RECOMMEND THAT THE SITE PREPARATION CONTRACTOR CLOSELY MONITOR THE VIBRATIONS PRODUCED DURING THE VIBRATORY ROLLER COMPACTION OPERATIONS SO THAT THEY DO NOT ADVERSELY AFFECT ANY NEARBY STRUCTURES.
3. AFTER THE EXCAVATION AREA HAS BEEN PROOFROLLED AND TESTED TO VERIFY THAT THE DESIRED DRY DENSITY HAS BEEN OBTAINED, THE AREA MAY BE FILLED TO THE DESIRED GRADES. ALL FILL MATERIAL SHOULD CONFORM TO THE RECOMMENDATIONS BELOW. IT SHOULD BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS. EACH LAYER SHOULD BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98 PERCENT OF ITS MODIFIED PROCTOR (ASTM D1557) MAXIMUM VALUE.
PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD
GRAPHIC SCALE
60 0 30 60 120 180
(IN FEET)
LEGEND
EXISTING METER
EXISTING UTILITY POLE
PROPOSED SIGN
PROPOSED DRAINAGE INLET
PROPOSED MITERED END SECTION
EXIST. DRAINAGE INLET
HANDICAP PARKING SYMBOL
EXISTING STREET LIGHT
EXISTING CONCRETE
PROPOSED LIGHT POLE (SINGLE)
EXISTING PAVEMENT
DRAINAGE FLOW ARROW
PROPOSED CONCRETE
PROPOSED LIGHT POLE (DOUBLE)
PROPOSED PAVEMENT
PARKING STALL COUNT
EXISTING DRAINAGE
PROPOSED DRAINAGE PIPE
811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com
REV. | DATE | DESCRIPTION | BY | CHK.
DRAWING ISSUE STATUS
HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM
PROJECT
SUNRISE BLVD
FORT PIERCE
TITLE
STORMWATER POLLUTION PREVENTION PLAN
DATE 2025.12.12
SCALE AS SHOWN
DRAWN BY JLW
DESIGNED BY MDL
CHECKED BY MDL
PROJECT No. 24-237
CERTIFICATE OF AUTHORIZATION No. C.O.A. No.
MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455
DRAWING No. C-101
REV.
FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALD - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\DALITOCAD\DWG\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:28 AM

Section 1	Project Name and location information:	PRIVILEGE DEVELOPMENT TOWNHOUSE RESIDENTIAL DADE ROAD & SUNRISE BLVD
Section 2	Describe the nature of the construction activity:	Buildings w/ Parking, Drainage Infrastructure, and Water & Sewer Infrastructure
Section 3	Describe the intended sequence of major soil disturbing activities:	0-2 days, site prep and stabilized construction entrance; 3-6 days, install perimeter sediment and erosion controls; 7-60 days, install stormwater retention basin; 7-10 days, clearing/grubbing over all areas; 11-90 days, site grading; 90-150 days, install storm sewer and utilities; 150-180 days, stabilize site
Section 4	Total area of the site:	21.97 AC. - 15' R.O.W. DEDICATION = 21.74 AC
Section 5	Total area of the site to be disturbed:	21.74 acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	
Section 7	Estimate the drainage area size for each discharge point:	21.74 acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	N27°24'10.65", W80°20'46.44"
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	
	* Prior to clearing, a silt fence (trenched 6 inches deep and backfilled on the uphill side), shall be installed around the perimeter of the site. 2 rock entrance roads (that are 60ft long with a 6 inch depth of FDOT #1 stone and lined with filter fabric) shall be constructed to minimize the effects of truck traffic and sedimentation tracking both on and off of the site. There will be only one construction entrance at this site. * After the initial site grading work, all proposed inlet(s) / outfall, once installed, shall be protected from erosion and sediment runoff by the use of filter fabric and properly installed inlet filters. Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with sod or other permanent stabilization methods (if other methods are used, this SWPPP will be modified) no later than 7 days after the last construction activity. Seeding shall be the same as in temporary seeding. * All installation shall be commenced as depicted on the attached site map and installation "typicals" sheet.	
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
	* Temporary seeding shall be rye grass or other appropriate ground covers depending upon season of installation that is applied at manufacturer's recommendations to any disturbed areas that are inactive more than 7 days. * Sod shall be used to stabilize the sides of the detention basins. * Filter fabric shall be placed under the rock entrance / exit. * Vegetative buffers shall be left undisturbed along the boundaries of the property, with the exception of exotic vegetation removal.	
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
	* A silt fence (with the same installation as indicated under the Best Management Practices heading) shall be placed around the entire perimeter of each construction phase. * A wet detention basin shall be constructed which may be used as a temporary sediment basin (prior to being connected to a discharge structure) if needed. Care shall be taken to assure the removal of accumulated fine sediments and that the excessive compaction of soil by construction machinery is avoided. * Inlets / Outfalls shall be protected with filter fabric and properly installed inlet filters (with the same installation as indicated under the Best Management Practices heading).	
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
	No temporary sedimentation basins are proposed. The detention basins (prior to being connected to a discharge structure) may be used as a temporary sediment basin if needed.	
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
	* A stormwater detention basin shall be constructed per ERP permit and all disturbed areas shall be grassed.	

Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff.
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.	
	Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent: • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.	
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.	
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	It is expected that the following non-stormwater discharges may occur from the site during construction period: wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). Dewatering shall be done in accordance with the requirements of the SFWMD Water Use Permit. If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Turbid water from the stormwater pond shall not be pumped directly into the receiving waters. Any pumped water from the stormwater pond shall be treated so as to not allow a discharge of polluted stormwater. Treatment can include silt fences, settling ponds, the proper use of flocculating agents, or other appropriate means.	
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:	
	"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."	

Section 22	Name	Title	Company Name, Address and Phone Number	Date

DESCRIPTION	FOUND (YES/NO)	AGENCY CONTACT INFORMATION	MANAGEMENT PLAN (YES/NO)	RELOCATION PLAN (YES/NO)
WETLANDS	YES	---	---	---
RARE HABITAT	NO	---	---	---
THREATENED SPECIES	NO	---	---	---
ENDANGERED SPECIES	NO	---	---	---
SPECIES OF SPECIAL CONCERN	NO	---	---	---
INVASIVE/EXOTIC VEGETATION	YES	---	---	---

REFER TO ENVIRONMENTAL ASSESSMENT COMPLETED BY EDC (A DIVISION OF HALEY WARD, INC) ON 02-14-25



EXCAVATION WARNING SIGN DETAIL

N.T.S.

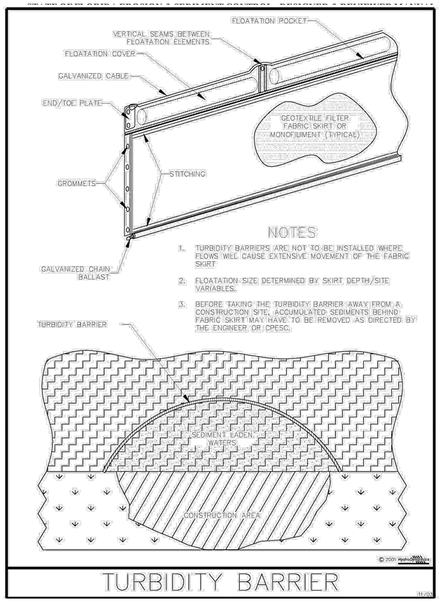


Figure V-44: Illustration of a Turbidity Barrier Curtain

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

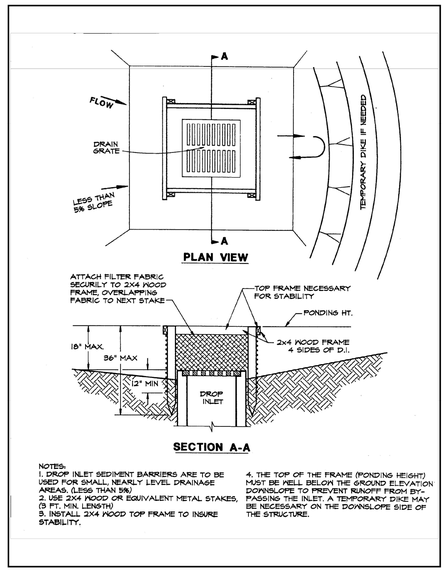


Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier

Source: Erosion Draw

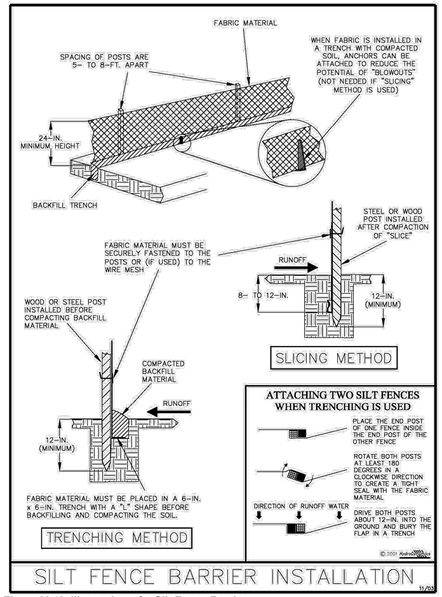


Figure V-40: Illustration of a Silt Fence Barrier

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

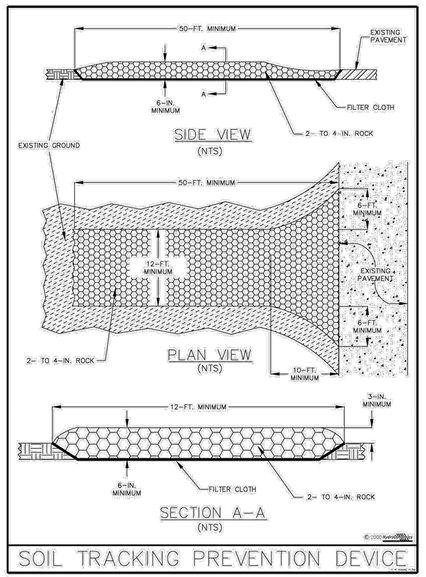


Figure V-52: Illustration of a Soil Tracking Prevention Device

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

PRIVILEGE DEVELOPMENT TOWNHOUSE RESIDENTIAL DADE ROAD & SUNRISE BLVD
FORT PIERCE

TITLE

STORMWATER POLLUTION PREVENTION PLAN DETAILS

DATE	SCALE
2025.12.12	AS SHOWN

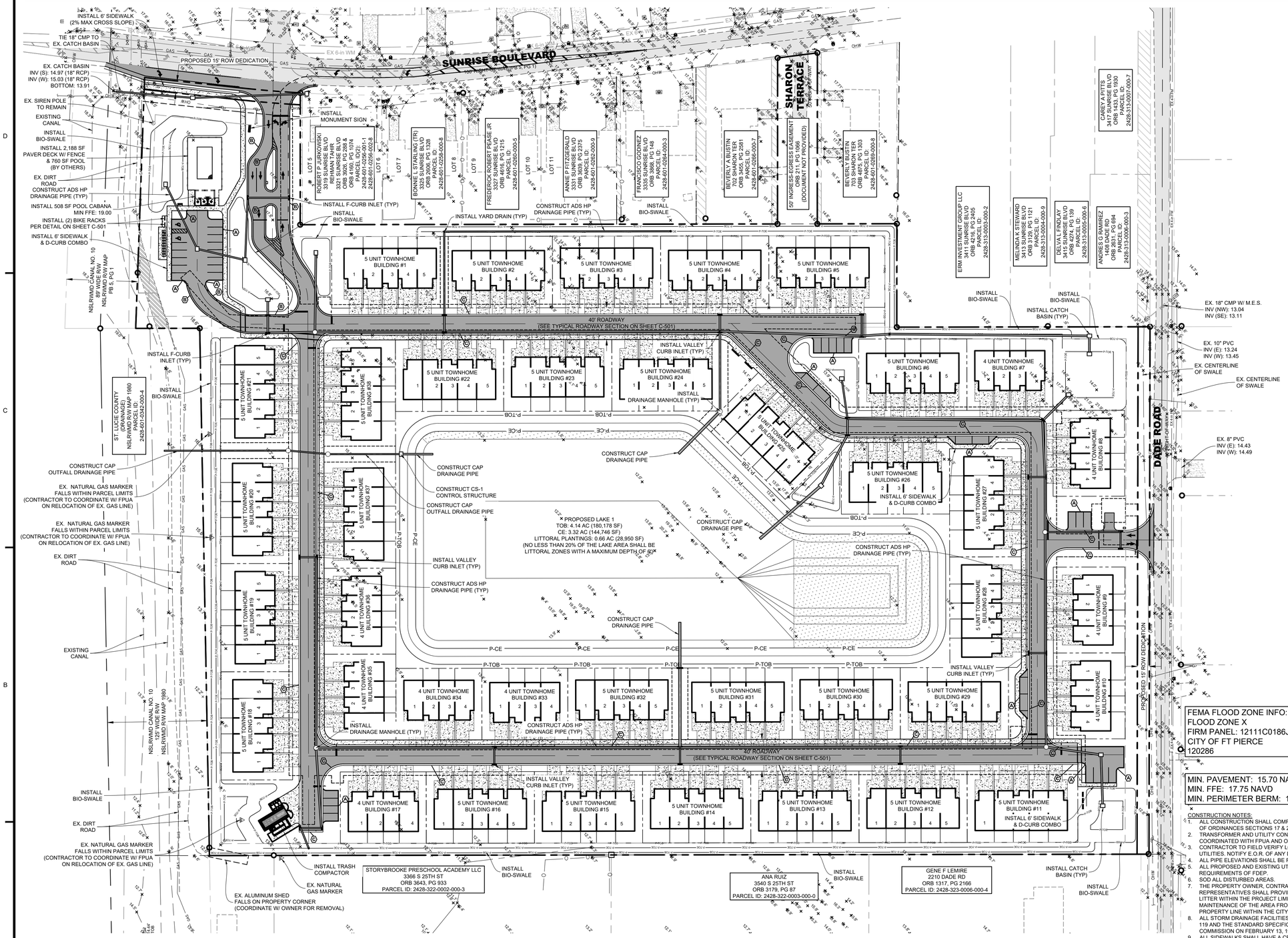
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-102 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARGIFALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\DAUTOCAD\DWG\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 6:28 AM



FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:28 AM

FEMA FLOOD ZONE INFO:
FLOOD ZONE X
FIRM PANEL: 12111C0186J
CITY OF FT PIERCE
120286

MIN. PAVEMENT: 15.70 NAVD
MIN. FFE: 17.75 NAVD
MIN. PERIMETER BERM: 15.25 NAVD

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
10. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
60 0 30 60 120 180
(IN FEET)

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		DRAINAGE FLOW ARROW
	EXISTING PAVEMENT	(A)	PROPOSED D-CURB
	PROPOSED CONCRETE	(B)	PROPOSED F-CURB
	PROPOSED PAVEMENT	(C)	PROPOSED VALLEY GUTTER
		(#)	PARKING STALL COUNT
	PROPOSED LITTORALS		PROPOSED DRAINAGE PIPE

811 Know what's below. Call before you dig. It's fast. It's free. It's the law. www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
OVERALL
PAVING, GRADING, & DRAINAGE PLAN

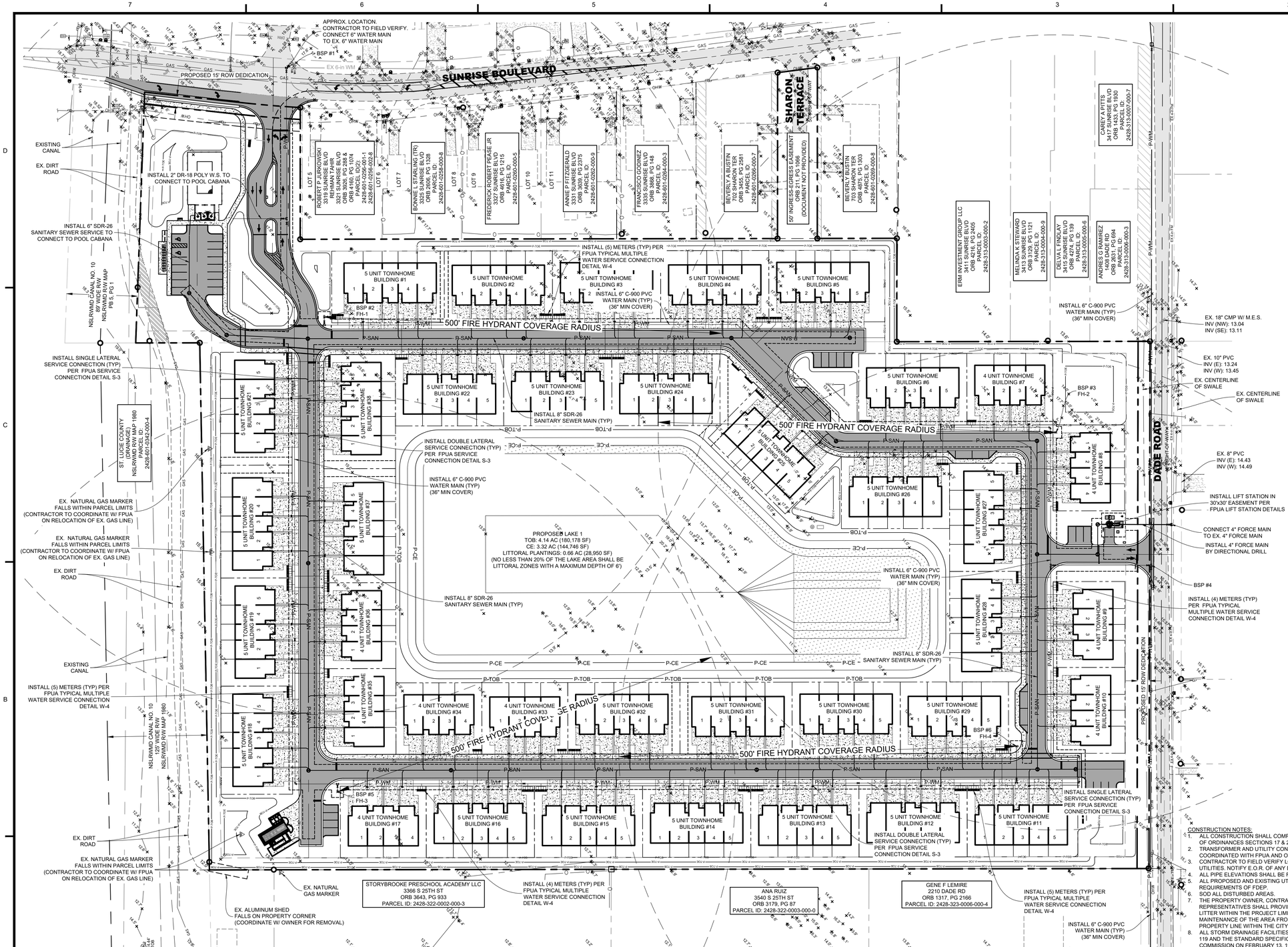
DATE	SCALE
2025.12.12	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-103 REV.



PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.
10. SEE LANDSCAPE PLANS FOR SPECIFIC PLANTINGS IN THE BIOSWALE AREAS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

OVERALL UTILITY PLAN

DATE	SCALE
2025.12.12	AS SHOWN

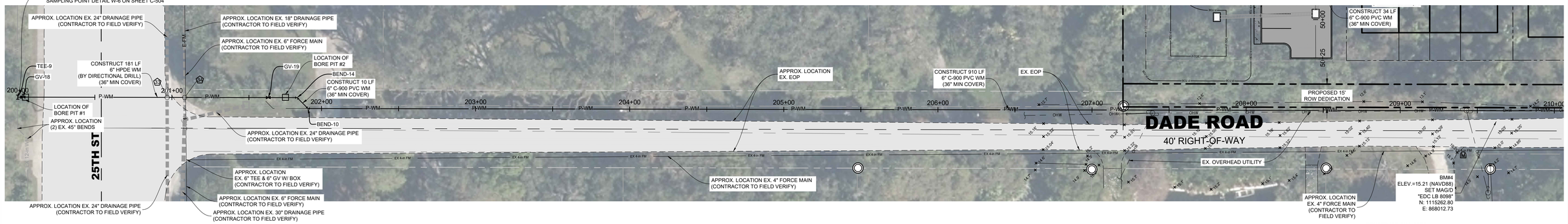
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

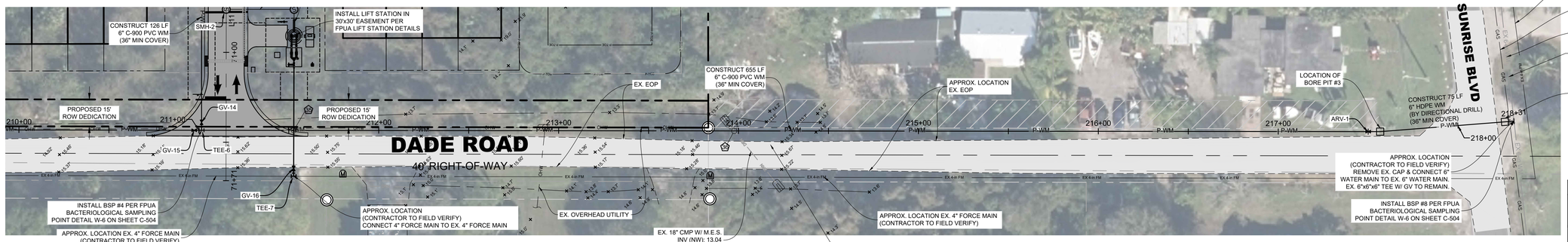
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

DRAWING No. **C-104** REV.

MARK LANDSMAN, P.E. **(DATE)**
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

FILE LOCATION: Z:\EDC 2024\24-237 - GARGALO - SUNRISE BLVD, I:\PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:28 AM





CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

OFF-SITE UTILITY IMPROVEMENTS

DATE	SCALE
2025.12.12	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL	CHECKED BY: MDL
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

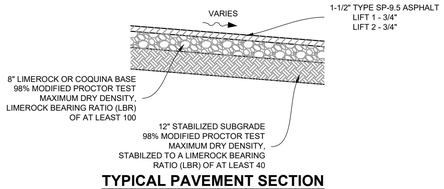
DRAWING No.: **C-105**

REV.

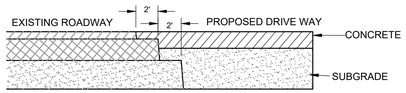
FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\CIVIL\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:28 AM

SPACING OR REQUIRED ROADWAY / PARKING AREA TESTS						
ITEMS TO BE TESTED	DENSITY		L.B.R.		THICKNESS	
	MAX. SPACING		MAX. SPACING		MAX. SPACING	
	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.
COMPACTED OR STABILIZED SUBGRADE	300	10,000	300	10,000	300	10,000
LIMEROCK BASE	300	10,000	300	10,000	300	10,000
SHELLROCK BASE	300	10,000	300	10,000	300	10,000
ASPHALT	—	—	—	—	PER INSP.	PER INSP.

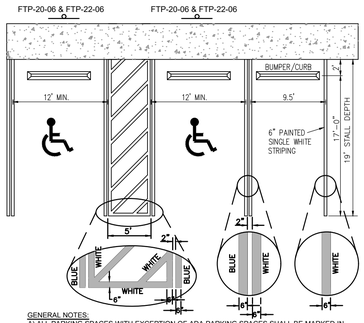
NOTE: ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 12" INSIDE THE LEFT EDGE OF THE ITEM TESTED, TO THE CENTER, TO A POINT 12" INSIDE



TYPICAL PAVEMENT SECTION
NTS



MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS



GENERAL NOTES:
A) ALL PARKING SPACES WITH EXCEPTION OF ADA PARKING SPACES SHALL BE MARKED IN WHITE. RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,2010 SECTION 710.

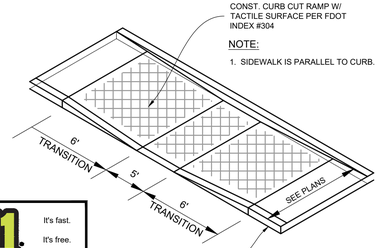
B) ALL ADA PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, FY 2025-26.

C) ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.



NOTES:
1. FTP 20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP 21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP 22-06 IS SUPPLEMENTAL PANEL FOR THE FTP 20-06 & FTP 21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "$250 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

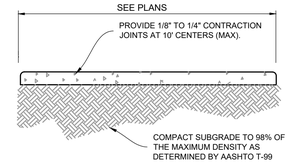
HANDICAP AND TYPICAL PARKING DETAIL
NTS



NOTE:
1. SIDEWALK IS PARALLEL TO CURB.

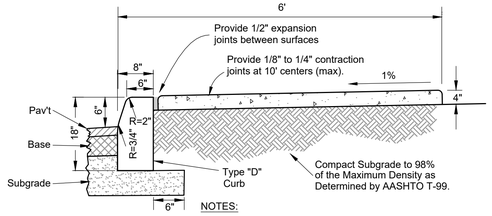
ADA RAMP DETAIL
NTS

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com



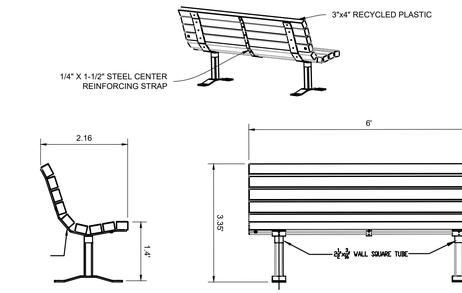
NOTES:
1. USE 3,000 P.S.I. CONCRETE AT 28 DAYS FOR SIDEWALK CONSTRUCTION.
2. SIDEWALK THICKNESS TO BE INCREASED TO 6" THICK AT DRIVEWAY LOCATIONS.
3. ALL REPAIRS REQUIRED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED 10' MINIMUM TO NEXT FULL JOINT.
4. ALL SIDEWALK WITHIN FDOT RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD PLANS 522-001.

TYPICAL SIDEWALK DETAIL
NTS

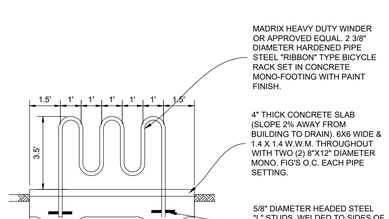


NOTES:
1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.

TYPE "D" CURB & SIDEWALK COMBINATION
NTS



6' CONTOUR BENCH DETAIL
NTS



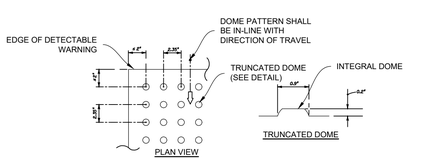
NOTES: EACH BIKE RACK SHOULD ACCOMMODATE A MINIMUM OF FIVE (5) BIKES.

MADRIX HEAVY DUTY WINDER OR APPROVED EQUAL. 2 3/8" DIAMETER HARDENED PIPE STEEL "RIBBOON" TYPE BICYCLE RACK SET IN CONCRETE MONO-FOOTING WITH PAINT FINISH.

4" THICK CONCRETE SLAB (SLOPE 2% AWAY FROM BUILDING TO DRAIN). 6X6 WIDE & 1.4 X 1.4 W.W.M. THROUGHOUT WITH TWO (2) 8'X12" DIAMETER MONO. FIG'S O.C. EACH PIPE SETTING.

5/8" DIAMETER HEADED STEEL "L" STUDS, WELDED TO SIDES OF PIPE AT EACH END TO BE EMBEDDED IN CONCRETE (TYP).

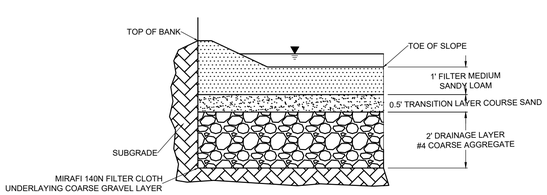
TYPICAL BIKE RACK DETAIL
NTS



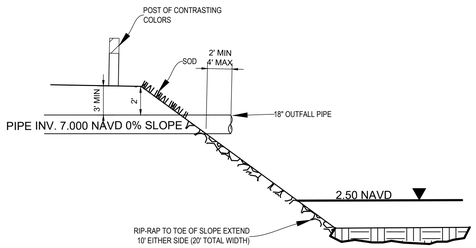
ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB

NOTES:
REFER TO FDOT INDEX 304 FOR FURTHER DETAILS CAST IN PLACE

DETECTABLE WARNING SURFACE DETAIL
NTS

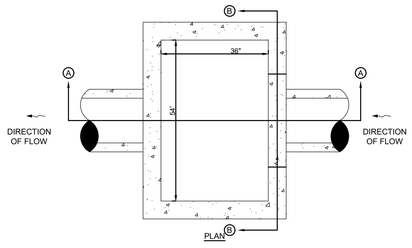


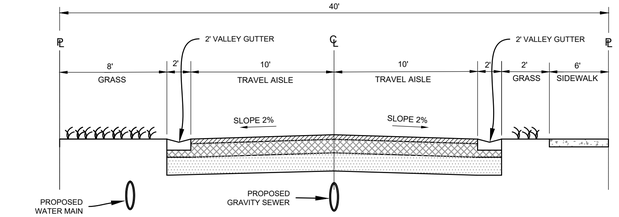
RAIN GARDEN / BIO-SWALE DETAIL



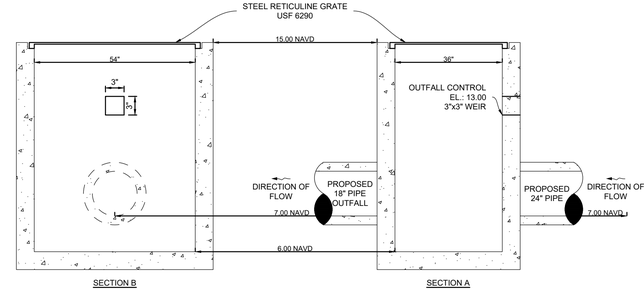
NSLRWCD TYPICAL CONNECTION DETAIL

NOTE: ALL NSLRWCD CANAL SLOPES SHALL BE SODDED EXCEPT FOR RIP-RAP AS SHOWN ON THIS DETAIL.



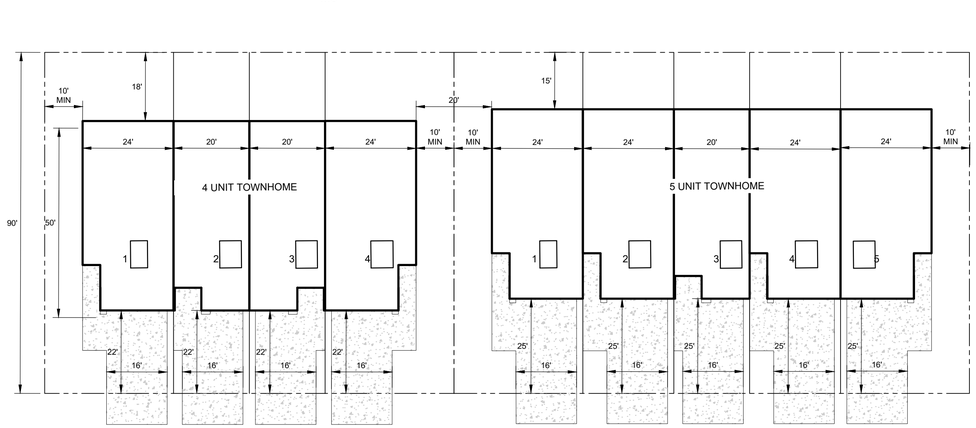


TYPICAL 40' ROADWAY SECTION
NTS

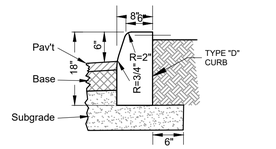


NOTES:
1. REFER TO F.D.O.T. STANDARD INDEX FOR ADDITIONAL PLANS 425-001, 425-010, AND 425-052 FOR INFORMATION.
2. SOD ALL DISTURBED AREAS AND POND SIDE BANKS.

(CS-1) CONTROL STRUCTURE MODIFIED E TYPE INLET
NTS

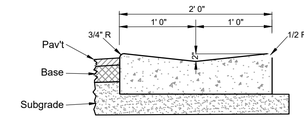


TYPICAL TOWNHOME UNITS
NTS



1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.
3. Type "D" Curb to be constructed in accordance with FDOT Index #522-001.

TYPE "D" CURB DETAIL
NTS



NOTES:
3,000 P.S.I. CONCRETE AT 28 DAYS

VALLEY GUTTER DETAIL
NTS

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

PAVING, GRADING, & DRAINGE DETAILS

DATE	SCALE
2025.12.12	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL
CHECKED BY: MDL	
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No.: C-501
REV.:

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 PRELIMINARY ENGINEERING PLAN.DWG, 2025.12.12, 8:29 AM

CONSTRUCTION PLANS AND SPECIFICATIONS

SUNRISE BLVVD

SECTION 28, TOWNSHIP 35S, RANGE 40E

FORT PIERCE, FLORIDA

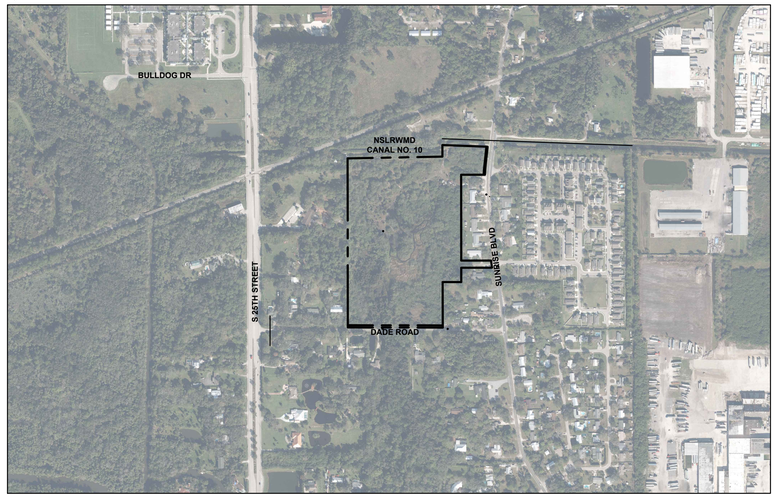


LOCATION MAP

GRAPHIC SCALE

0

(IN FEET)



PROJECT AREA

GRAPHIC SCALE

500 0 250 500 1000 1500

(IN FEET)

PROJECT INFORMATION

HW PROJECT NO: --

PARCEL ID#: PARCEL 1 - 2428-321-0001-000-3
PARCEL 2 - 2428-601-0252-000-6
ZONING INFO: R-4 (10 DU/AC)
OWNERSHIP: GPS DEVELOPMENTS LLC
1046S NW 29TH TERRACE
DORAL, FL 33172-2530
PROJECT DATUM AND COORDINATE SYSTEM:
HORIZONTAL: FLORIDA STATE PLANE NAD83 (FL83-EF)
VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

GOVERNING STANDARDS & SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, FY2025-26 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE:
https://www.fdot.gov/programmanagement/Implemented/SpecBooks

LAND DEVELOPMENT TO CONFORM TO THE CURRENT FORT PIERCE ENGINEERING DEPARTMENT STANDARDS.

UTILITY CONSTRUCTION TO CONFORM TO THE CURRENT EDITION OF THE FPUA CONSTRUCTION STANDARDS AND DETAILS.

PERMIT SET

REVISIONS	
DATE	COMMENT
-	-
-	-
-	-
-	-
-	-
-	-
-	-

INDEX OF DRAWINGS

C-101	EXISTING CONDITIONS, DEMO, & STORMWATER POLLUTION PREVENTION PLAN
C-102	STORMWATER POLLUTION PREVENTION PLAN DETAILS
C-103	OVERALL KEYSHEET
C-104	HORIZONTAL CONTROL PLAN
C-105	HORIZONTAL CONTROL PLAN
C-106	HORIZONTAL CONTROL PLAN
C-107	HORIZONTAL CONTROL PLAN
C-108	PAVING, GRADING, & DRAINAGE PLAN
C-109	PAVING, GRADING, & DRAINAGE PLAN
C-110	PAVING, GRADING, & DRAINAGE PLAN
C-111	PAVING, GRADING, & DRAINAGE PLAN
C-112	STRIPING PLAN
C-113	UTILITY PLAN
C-114	UTILITY PLAN
C-115	UTILITY PLAN
C-116	UTILITY PLAN
C-117	OFF-SITE UTILITY IMPROVEMENTS
C-118	UTILITY PROFILES
C-119	UTILITY PROFILES
C-120	UTILITY PROFILES
C-121	UTILITY PROFILES
C-501	PAVING, GRADING, & DRAINAGE DETAILS
C-502	LAKE SECTIONS
C-503	UTILITY DETAILS
C-504	UTILITY DETAILS
C-505	UTILITY DETAILS
C-506	UTILITY DETAILS
C-507	UTILITY DETAILS
C-700	SPECIFICATIONS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

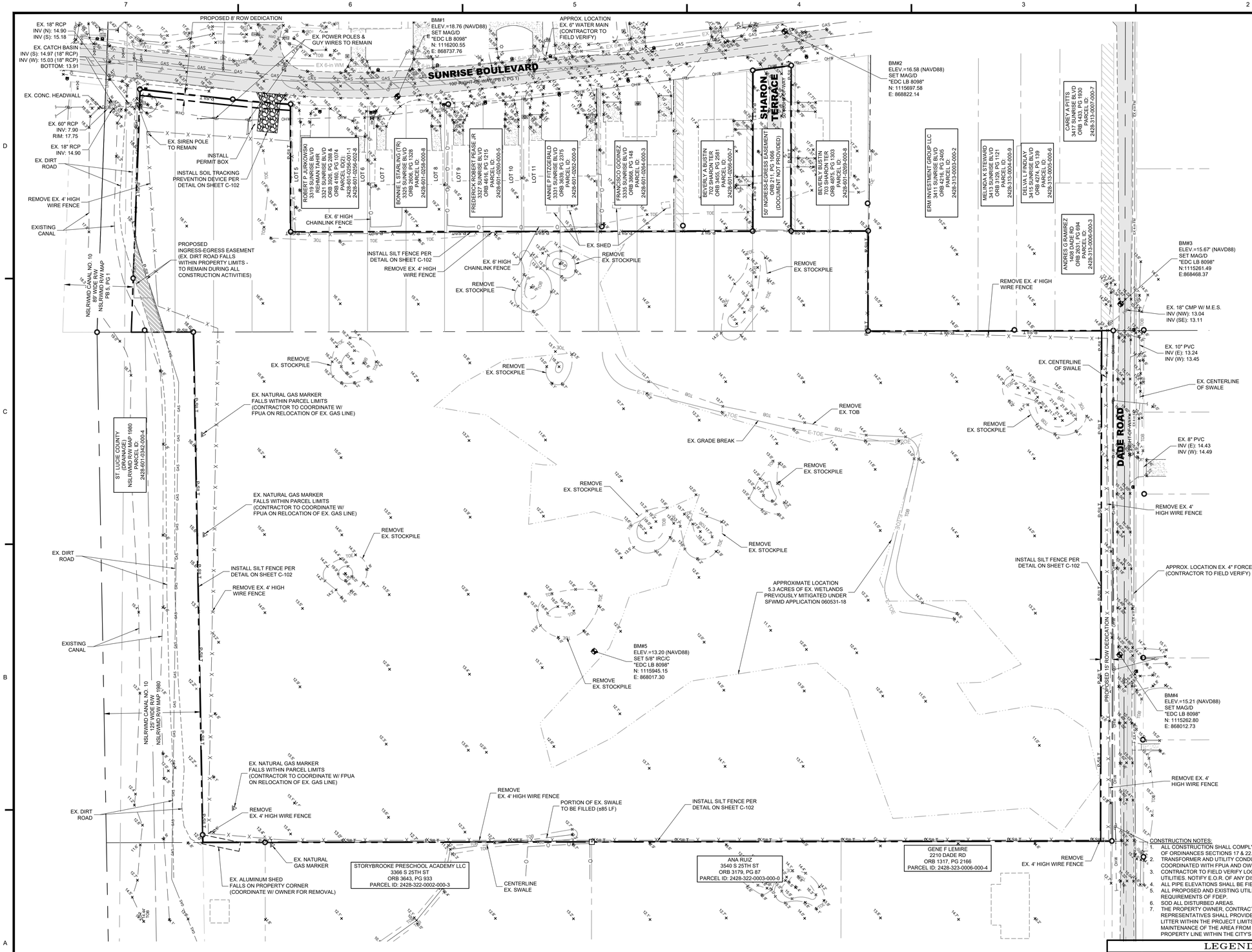
DATE
May 23, 2025

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

PROJECT No. 24-237

REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING FS1.DWG, 2025-06-11, 8:05 AM



DEMUCKING:

1. THE SUBJECT AREA PLUS AN AREA EXTENDING 5 FEET OUTSIDE PROPOSED CONSTRUCTION PERIMETERS SHOULD BE EXCAVATED AS NEEDED TO REMOVE ANY ENCOUNTERED DEEPER DEPOSITS OF ORGANIC SOIL. CARE MUST BE EXERCISED TO AVOID MIXING THE ORGANIC SOILS WITH THE UNDERLYING, SUITABLE GRANULAR MATERIALS. THE ORGANICS ARE TO BE DISPOSED OF AWAY FROM THE BUILDING AREA AS DIRECTED BY THE OWNER.
2. IN GENERAL IT IS DESIRED TO COMPLETE THE EXCAVATION AND BACKFILLING OPERATIONS IN AS SHORT A TIME AS POSSIBLE TO AVOID OPEN EXCAVATIONS. CONSIDERATION SHOULD BE GIVEN TO PROCEEDING WITH THE DEMUCKING/BACKFILLING OPERATION IN STAGES ACROSS THE SITE SO THAT NO DEEP EXCAVATIONS REMAIN OPEN OVERNIGHT. SUCH GRADUAL APPROACH MAY ALSO REDUCE DEWATERING AND SLOPE BRACING NEEDS.
3. IF THE EXCAVATION REACHES AREAS NEAR THE PROPERTY LINES, THE SLOPE OF THE EXCAVATION MAY HAVE TO BE PROTECTED WITH A BRACING SYSTEM. THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE INTEGRITY OF ADJACENT PROPERTY, AND FOR IMPLEMENTING ALL NECESSARY SAFETY MEASURES.
4. ONCE THE BOTTOM OF THE EXCAVATION IS INSPECTED AND APPROVED, BACKFILL CAN BE PLACED TO A HEIGHT OF 2 FEET ABOVE THE WATER TABLE. IF DEWATERING MEASURES APPEAR TO BE NECESSARY ON THIS SITE TO FACILITATE THE REMOVAL OF ANY ORGANIC SOILS, ALLOW THE INSPECTION OF ANY DEMUCKED AREAS, AND ALLOW THE COMPACTION OF THE BACKFILL, THE CONTRACTOR SHOULD CONSIDER DEMUCKING AND AT LEAST PARTIALLY BACKFILLING SMALL SEGMENTS OF THE SITE AT A TIME TO REDUCE DEWATERING NEEDS AND DISCHARGE FLOWS.

DENSIFICATION:

1. GRANULAR BACKFILL SHOULD BE PLACED IN THE DRY AND COMPACTED WITH A VIBRATORY ROLLER. ANY SOFT, YIELDING SOILS DETECTED DURING THIS OPERATION SHOULD BE EXCAVATED AND REPLACED WITH CLEAN, COMPACTED BACKFILL THAT CONFORMS WITH THE RECOMMENDATIONS BELOW. SUFFICIENT PASSES SHOULD BE MADE DURING THE COMPACTION OPERATIONS TO PRODUCE DRY DENSITIES NOT LESS THAN 98 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY OF THE COMPACTED MATERIAL TO DEPTHS OF 1 FOOT BELOW THE COMPACTED SURFACE. IN ANY CASE, THE AREA SHOULD RECEIVE NOT LESS THAN 10 OVERLAPPING PASSES, HALF OF THEM IN EACH OF TWO PERPENDICULAR DIRECTIONS, IF POSSIBLE. THE INITIAL PASSES MAY HAVE TO BE GIVEN WITHOUT VIBRATIONS, AND THEN WITH THE LOWEST POSSIBLE VIBRATION SETTING SO AS TO ALLOW THE TRAFFIC OF THE VIBRATING ROLLER. AN ADDITIONAL SIX INCH LIFT MAY BE ADDED TO THE INITIAL LIFT IF THE TRAFFIC OF THE ROLLER IS MADE DIFFICULT BY HIGH PORE PRESSURE CONDITIONS.
2. WE RECOMMEND THAT THE SITE PREPARATION CONTRACTOR CLOSELY MONITOR THE VIBRATIONS PRODUCED DURING THE VIBRATORY ROLLER COMPACTION OPERATIONS SO THAT THEY DO NOT ADVERSELY AFFECT ANY NEARBY STRUCTURES.
3. AFTER THE EXCAVATION AREA HAS BEEN PROOFROLLED AND TESTED TO VERIFY THAT THE DESIRED DRY DENSITY HAS BEEN OBTAINED, THE AREA MAY BE FILLED TO THE DESIRED GRADES. ALL FILL MATERIAL SHOULD CONFORM TO THE RECOMMENDATIONS BELOW. IT SHOULD BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 12 INCHES IN LOOSE THICKNESS. EACH LAYER SHOULD BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98 PERCENT OF ITS MODIFIED PROCTOR (ASTM D1557) MAXIMUM VALUE.

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.

LEGEND

M E	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

STORMWATER POLLUTION PREVENTION PLAN

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

DRAWING No. **C-101** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALD - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RD.DWG, 2025.06.11, 8:55 AM

Section 1	Project Name and location information:	PRIVILEGE DEVELOPMENT TOWNHOUSE RESIDENTIAL DADE ROAD & SUNRISE BLVD
Section 2	Describe the nature of the construction activity:	Buildings w/ Parking, Drainage Infrastructure, and Water & Sewer Infrastructure
Section 3	Describe the intended sequence of major soil disturbing activities:	0-2 days, site prep and stabilized construction entrance; 3-6 days, install perimeter sediment and erosion controls; 7-60 days, install stormwater retention basin; 7-10 days, clearing/grubbing over all areas; 11-90 days, site grading; 90-150 days, install storm sewer and utilities; 150-180 days, stabilize site
Section 4	Total area of the site:	21.97 AC. - 15' R.O.W. DEDICATION = 21.74 AC
Section 5	Total area of the site to be disturbed:	21.74 acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	
Section 7	Estimate the drainage area size for each discharge point:	21.74 acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	N27°24'10.65", W80°20'46.44"
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	
	* Prior to clearing, a silt fence (trenched 6 inches deep and backfilled on the uphill side), shall be installed around the perimeter of the site. 2 rock entrance roads (that are 60ft long with a 6 inch depth of FDOT #1 stone and lined with filter fabric) shall be constructed to minimize the effects of truck traffic and sedimentation tracking both on and off of the site. There will be only one construction entrance at this site. * After the initial site grading work, all proposed inlet(s) / outfall, once installed, shall be protected from erosion and sediment runoff by the use of filter fabric and properly installed inlet filters. Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with sod or other permanent stabilization methods (if other methods are used, this SWPPP will be modified) no later than 7 days after the last construction activity. Seeding shall be the same as in temporary seeding. * All installation shall be commenced as depicted on the attached site map and installation "typicals" sheet.	
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
	* Temporary seeding shall be rye grass or other appropriate ground covers depending upon season of installation that is applied at manufacturer's recommendations to any disturbed areas that are inactive more than 7 days. * Sod shall be used to stabilize the sides of the detention basins. * Filter fabric shall be placed under the rock entrance / exit. * Vegetative buffers shall be left undisturbed along the boundaries of the property, with the exception of exotic vegetation removal.	
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
	* A silt fence (with the same installation as indicated under the Best Management Practices heading) shall be placed around the entire perimeter of each construction phase. * A wet detention basin shall be constructed which may be used as a temporary sediment basin (prior to being connected to a discharge structure) if needed. Care shall be taken to assure the removal of accumulated fine sediments and that the excessive compaction of soil by construction machinery is avoided. * Inlets / Outfalls shall be protected with filter fabric and properly installed inlet filters (with the same installation as indicated under the Best Management Practices heading).	
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
	No temporary sedimentation basins are proposed. The detention basins (prior to being connected to a discharge structure) may be used as a temporary sediment basin if needed.	
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
	* A stormwater detention basin shall be constructed per ERP permit and all disturbed areas shall be grassed.	

Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff.
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.	
	Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent: • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.	
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.	
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	It is expected that the following non-stormwater discharges may occur from the site during construction period: wash water (where no spills or leaks of toxic or hazardous materials have occurred), and uncontaminated groundwater (from dewatering excavation). Dewatering shall be done in accordance with the requirements of the SFWMD Water Use Permit. If said discharges do occur, they will be directed to the temporary sediment basin prior to discharge. Turbid water from the stormwater pond shall not be pumped directly into the receiving waters. Any pumped water from the stormwater pond shall be treated so as to not allow a discharge of polluted stormwater. Treatment can include silt fences, settling ponds, the proper use of flocculating agents, or other appropriate means.	
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:	
	"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."	

Section 22	Name	Title	Company Name, Address and Phone Number	Date

DESCRIPTION	FOUND (YES/NO)	AGENCY CONTACT INFORMATION	MANAGEMENT PLAN (YES/NO)	RELOCATION PLAN (YES/NO)
WETLANDS	YES	---	---	---
RARE HABITAT	NO	---	---	---
THREATENED SPECIES	NO	---	---	---
ENDANGERED SPECIES	NO	---	---	---
SPECIES OF SPECIAL CONCERN	NO	---	---	---
INVASIVE/EXOTIC VEGETATION	YES	---	---	---

REFER TO ENVIRONMENTAL ASSESSMENT COMPLETED BY EDC (A DIVISION OF HALEY WARD, INC) ON 02-14-25



EXCAVATION WARNING SIGN DETAIL

N.T.S.

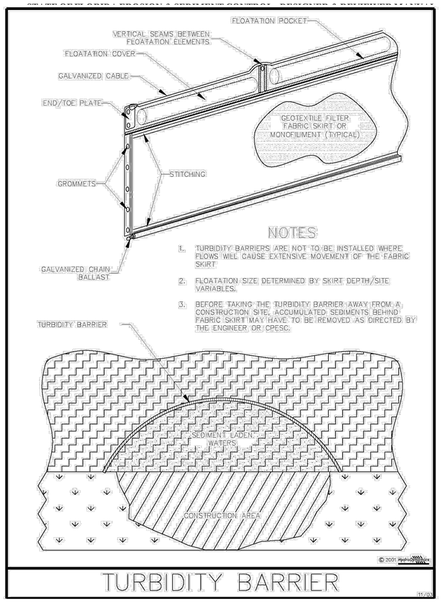


Figure V-44: Illustration of a Turbidity Barrier Curtain

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

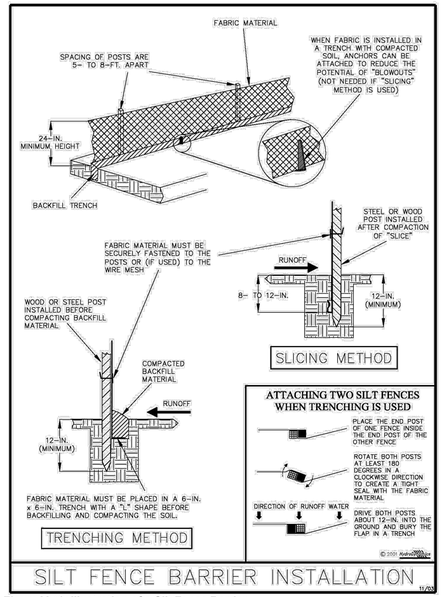


Figure V-40: Illustration of a Silt Fence Barrier

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

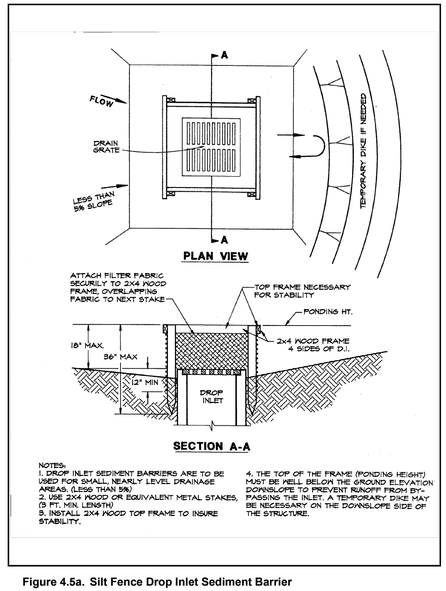


Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier

Source: Erosion Draw

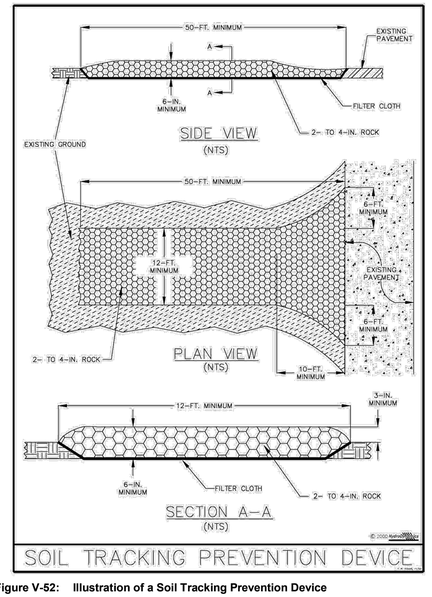


Figure V-52: Illustration of a Soil Tracking Prevention Device

Permission is given by HydroDynamics Incorporated to copy and reproduce this detail

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

PRIVILEGE DEVELOPMENT TOWNHOUSE RESIDENTIAL DADE ROAD & SUNRISE BLVD
FORT PIERCE

TITLE

STORMWATER POLLUTION PREVENTION PLAN DETAILS

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

DRAWING No. C-102 REV:

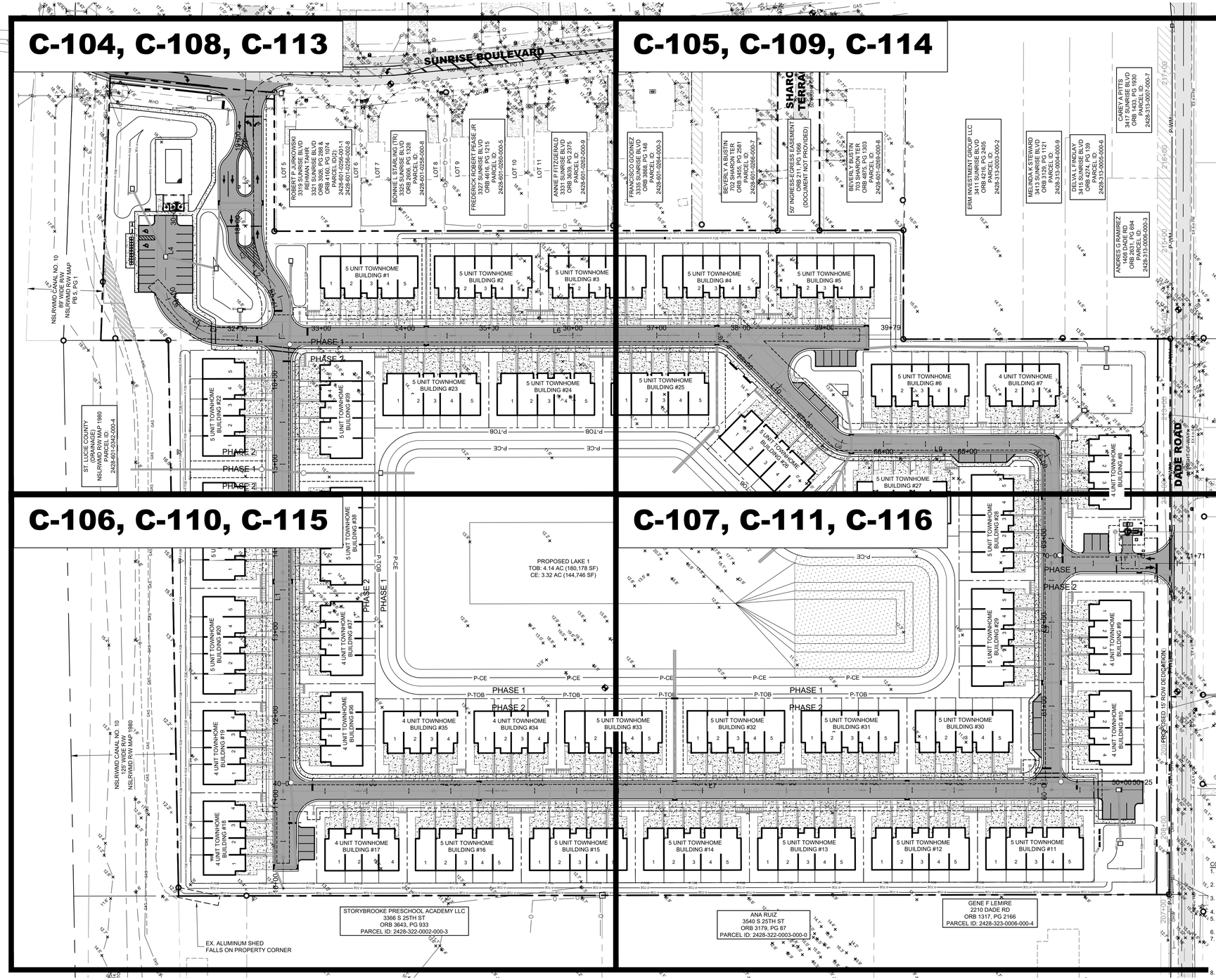
FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:05 AM

C-104, C-108, C-113

C-105, C-109, C-114

C-106, C-110, C-115

C-107, C-111, C-116



PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	(#)	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

OVERALL KEYSHEET

DATE	SCALE
2025.05.06	AS SHOWN

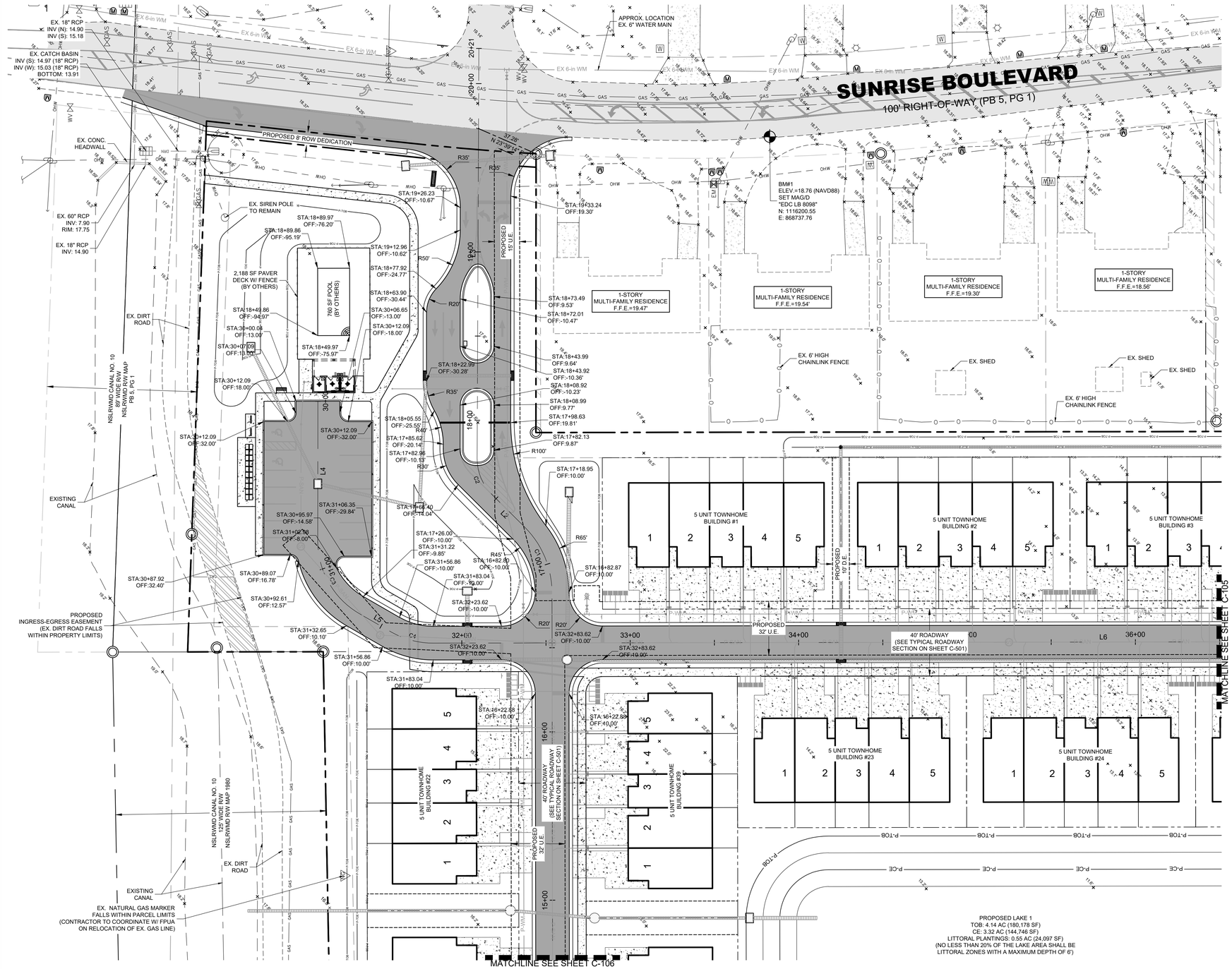
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-103 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING R5.DWG, 2025.06.11, 8:05 AM



ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L1	682.80'	N89° 54' 31"E
L2	27.46'	N44° 54' 31"E
L3	243.71'	S89° 45' 27"E
L4	83.02'	N89° 55' 02"W
L5	21.33'	S29° 54' 31"W
L6	795.99'	S0° 05' 29"E

ALIGNMENT CURVE DATA						
CURVE #	RADIUS	LENGTH	PC	PT	DELTA	SUPERELEVATION
C1	55.00'	43.20'	16+82.80	17+26.00	45.00	NC
C2	30.00'	23.74'	17+53.46	17+77.20	45.33	NC
C3	50.00'	52.51'	30+83.02	31+35.53	60.17	NC
C4	50.00'	26.18'	31+56.86	31+83.04	30.00	NC

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND			
M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

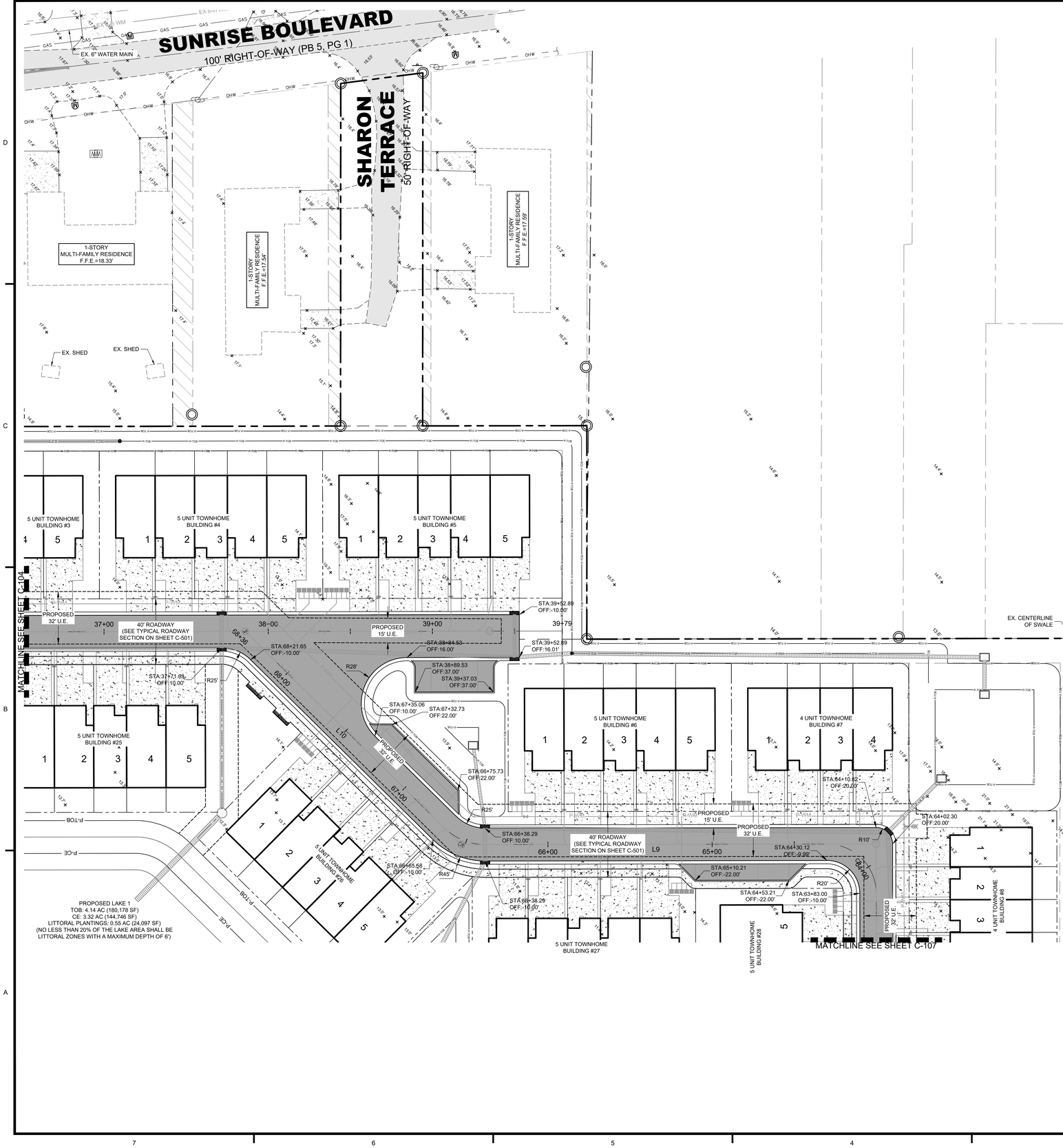
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-104** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:05 AM



ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L9	208.17'	N0° 05' 16"W
L10	170.45'	N44° 35' 52"E

ALIGNMENT CURVE DATA						
CURVE #	RADIUS	LENGTH	PC	PT	DELTA	SUPERELEVATION
C5	30.00'	47.12'	63+83.00	64+30.12	90.00	NC
C6	35.00'	27.30'	66+38.29	66+65.58	44.69	NC

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M E	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
WWW.HALEYWARD.COM
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

DRAWING No. **C-105** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALD - SUNRISE BLVD\ (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RD.DWG, 2025.06.11, 8:55 AM

MATCHLINE SEE SHEET C-104

MATCHLINE SEE SHEET C-107

ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L1	682.80'	N89° 54' 31"E

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EXISTING CANAL

EX. DIRT ROAD

NSLRWMD CANAL NO. 10
125' WIDE R/W
NSLRWMD R/W #4487 1980

5 UNIT TOWNHOME BUILDING #21

5 UNIT TOWNHOME BUILDING #20

4 UNIT TOWNHOME BUILDING #19

4 UNIT TOWNHOME BUILDING #18

5 UNIT TOWNHOME BUILDING #38

4 UNIT TOWNHOME BUILDING #37

4 UNIT TOWNHOME BUILDING #36

4 UNIT TOWNHOME BUILDING #35

4 UNIT TOWNHOME BUILDING #34

5 UNIT TOWNHOME BUILDING #33

4 UNIT TOWNHOME BUILDING #17

5 UNIT TOWNHOME BUILDING #16

5 UNIT TOWNHOME BUILDING #15

PROPOSED 32' U.E.

PROPOSED 15' U.E.

40' ROADWAY (SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

14+00 13+00 12+00 11+00 40+00 41+00 42+00 43+00

STA:11+44.88 OFF:10.00'

STA:40+35.00 OFF:-10.00'

STA:40+44.00 OFF:10.00'

STA:10+73.32 OFF:16.00'

STA:10+68.32 OFF:37.00'

STA:10+28.32 OFF:37.00'

STA:10+16.44 OFF:16.00'

STA:10+16.32 OFF:-10.00'

P-TOB P-CE P-TOB

EX. NATURAL GAS MARKER

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

CENTERLINE EX. SWALE

1-STORY SINGLE-FAMILY RESIDENCE F.F.E.=15.24'

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND			
	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-106** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - SUNRISE BLVD_IPRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RI.DWG, 2025.06.11, 8:09 AM

MATCH LINE SEE SHEET C-105

MATCH LINE SEE SHEET C-106

ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L7	1024.75'	S0° 05' 29"E
L8	383.00'	N89° 54' 32"E
L11	171.36'	S0° 05' 30"W

PROPOSED LAKE
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

5 UNIT TOWNHOME BUILDING #27
5 UNIT TOWNHOME BUILDING #28
5 UNIT TOWNHOME BUILDING #29
5 UNIT TOWNHOME BUILDING #33
5 UNIT TOWNHOME BUILDING #32
5 UNIT TOWNHOME BUILDING #31
5 UNIT TOWNHOME BUILDING #30
5 UNIT TOWNHOME BUILDING #14
5 UNIT TOWNHOME BUILDING #13
5 UNIT TOWNHOME BUILDING #12
5 UNIT TOWNHOME BUILDING #11
4 UNIT TOWNHOME BUILDING #9
4 UNIT TOWNHOME BUILDING #10

40' ROADWAY (SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

PROPOSED 32' U.E.
PROPOSED 28.80' U.E.
PROPOSED 15' U.E.
PROPOSED 15.00' ROW DEDICATION

P-TOB
P-CE
P-TOW
P-SWK
P-DWK
EX-SWK
EX-RW

STA:71+46.61 OFF:-45.50'
STA:70+67.67 OFF:-35.00'
STA:63+08.27 OFF:10.00'
STA:70+39.17 OFF:-35.00'
STA:70+37.88 OFF:-10.00'
STA:70+38.12 OFF:10.00'
STA:62+32.27 OFF:10.00'
STA:71+11.62 OFF:-10.01'
STA:71+11.35 OFF:9.99'
STA:71+46.55 OFF:44.18'
STA:61+05.13 OFF:-22.00'
STA:60+48.13 OFF:-22.00'
STA:60+35.46 OFF:10.18'
STA:60+30.00 OFF:10.00'
STA:48+91.35 OFF:-10.00'
STA:49+46.35 OFF:-10.00'
STA:49+71.91 OFF:10.03'
STA:49+77.18 OFF:14.65'
STA:49+77.12 OFF:35.00'
STA:50+24.69 OFF:16.01'
STA:50+20.17 OFF:16.01'
STA:50+15.17 OFF:20.99'
STA:50+15.12 OFF:35.01'

APPROX. LOCATION EX. 4" FORCE MAIN

BM#4
ELEV.=15.21 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115262.80
E: 868012.73

1-STORY SINGLE-FAMILY RESIDENCE F.F.E.=15.48'

DADE ROAD
40' RIGHT-OF-WAY

63+00 70+00 71+71 62+00 61+00 60+00 45+00 46+00 47+00 48+00 49+00 50+00 50+25 210+00 209+00 208+00 207+00

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

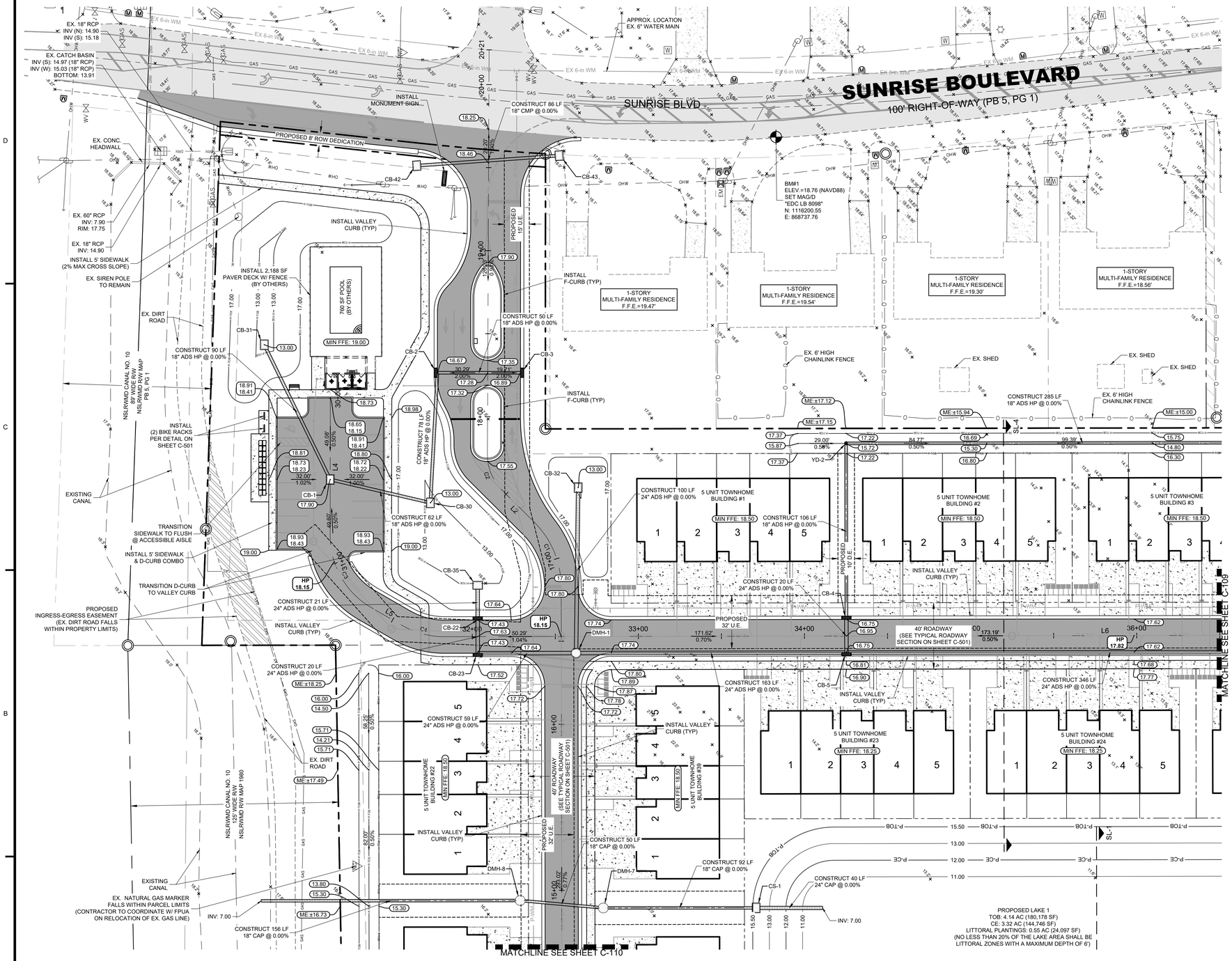
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-107** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - SUNRISE BLVD, (PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:55 AM



STORM INLET TABLE

STRUCTURE NAME	BOT TYPE	TOP TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:	BOTTOM ELEV.
CB-1	TYPE C	USF4155 6209	30+49.08	0.00'	17.90	8.00 (NE)	8.00 (S)	7.00
CB-2	TYPE C	USF5105 6148	18+26.34	-30.29'	16.99	8.00 (W)	8.00 (S)	7.00
CB-3	TYPE C	USF5105 6148	18+26.53	19.71'	17.20	8.00 (N)		7.00
CB-4	TYPE C	USF5105 6148	34+25.25	-10.00'	16.80	8.00 (E)	8.00 (W)	7.00
CB-5	TYPE E	USF5105 6148	34+25.25	10.00'	16.80	8.00 (E) 8.00 (N)	8.00 (S)	7.00
CB-22	TYPE C	USF5105 6148	32+03.33	-10.00'	17.43	8.00 (E)	8.00 (W)	7.00
CB-23	TYPE E	USF5105 6148	32+03.33	10.00'	17.43	8.00 (E)	8.00 (S)	7.00
CB-30	TYPE C	USF4155 6209	30+63.04	-60.35'	13.00	8.00 (N)	8.00 (E)	7.00
CB-31	TYPE C	USF4155 6209	18+42.76	-134.60'	13.00		8.00 (SW)	7.00
CB-32	TYPE C	USF4155 6209	17+23.56	33.48'	13.00		8.00 (W)	7.00
CB-42	TYPE C	USF5105 6148	19+50.98	-43.24'	18.00		8.00 (S)	7.00
CB-43	TYPE C	USF5105 6148	19+57.39	42.39'	18.00	8.00 (N)		7.00
CS-1	TYPE E	USF 4155 6209	14+89.25	117.00'	15.00	7.00 (S)	7.00 (N)	6.00
DMH-1	5' DIA MANHOLE	USF 420	16+42.88	8.86'	17.64	8.00 (N) 8.00 (E)	8.00 (S)	7.00
DMH-7	4' DIA MANHOLE	USF 420	14+89.36	25.00'	17.02	7.00 (S)	7.00 (N)	6.00
DMH-8	4' DIA MANHOLE	USF 420	14+93.94	-25.00'	17.23	7.00 (S)	7.00 (N)	6.00
YD-2	18"	YARD DRAIN INLET	34+25.25	-116.00'	15.72	8.00 (S)	8.00 (W)	7.00
YD-4	18"	YARD DRAIN INLET	37+09.79	-116.00'	14.30		8.00 (N)	7.00

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

MIN. PAVEMENT: 15.70
MIN. FFE: 17.75
MIN. PERIMETER BERM: 15.25

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT		PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

PAVING, GRADING, & DRAINGE PLAN

DATE	SCALE
2025.05.06	AS SHOWN

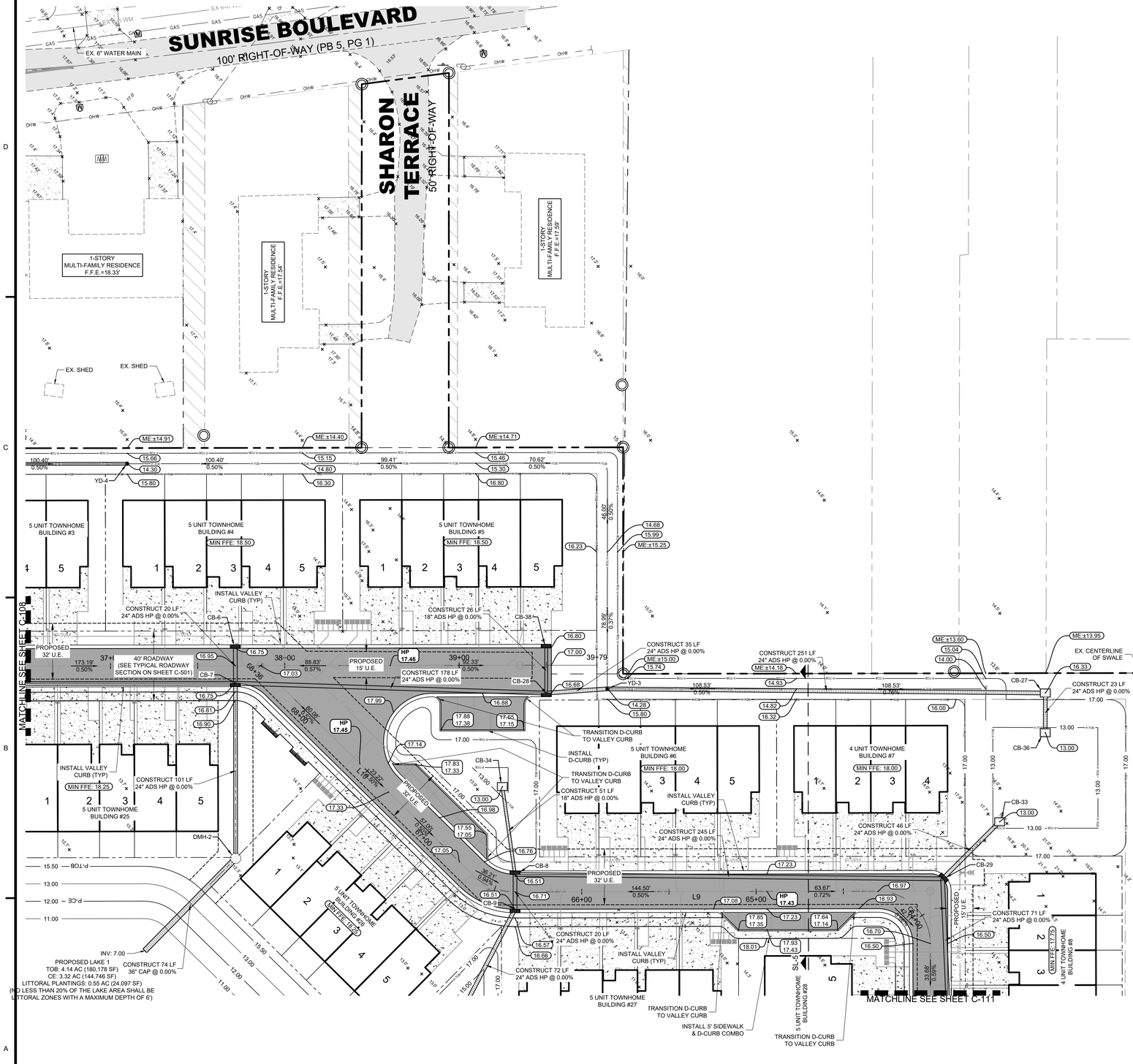
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-108** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:59 AM



STORM INLET TABLE								
STRUCTURE NAME	BOT TYPE	TOP TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:	BOTTOM ELEV.
CB-6	TYPE C	USF5105 6148	37+71.63	-10.00'	16.80		7.00 (W)	6.00
CB-7	TYPE E	USF5105 6148	37+71.63	10.00'	16.80	7.00 (S) 7.00 (E) 8.00 (N)	7.00 (W)	6.00
CB-8	TYPE C	USF5105 6148	66+38.29	10.00'	16.30	8.00 (E)	6.00 (W) 8.00 (S)	5.00
CB-9	TYPE E	USF5105 6148	66+38.29	-10.00'	16.30	6.00 (E) 6.00 (NW)		5.00
CB-27	TYPE C	USF5105 6148	64+12.42	142.86'	16.33	8.00 (W) 8.00 (N)		7.00
CB-28	TYPE E	USF5105 6148	39+49.91	16.01'	16.69	8.00 (E)	8.00 (S) 7.00 (N)	6.00
CB-29	TYPE E	USF5105 6148	64+06.56	22.43'	16.39	8.00 (SE) 8.00 (N)	8.00 (W)	7.00
CB-33	TYPE C	USF5105 6148	64+06.54	68.76'	13.00		8.00 (NW)	7.00
CB-34	TYPE C	USF5105 6148	66+88.55	48.06'	13.00		8.00 (W)	7.00
CB-36	TYPE C	USF5105 6148	64+09.96	124.39'	13.00		8.00 (E)	7.00
CB-38	TYPE C	USF5105 6148	39+49.91	-10.00'	16.81		8.00 (W)	7.00
DMH-2	6' DIA MANHOLE	USF 420	67+68.54	-88.69'	18.25	7.00 (E)	7.00 (NW)	6.00
YD-3	24"	YARD DRAIN INLET	???	???	14.28	8.00 (N)	8.00 (S)	7.00

MIN. PAVEMENT: 15.70
MIN. FFE: 17.75
MIN. PERIMETER BERM: 15.25

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	(#)	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 Know what's below. Call before you dig. It's fast. It's free. It's the law. www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
PAVING, GRADING, & DRAINGE PLAN

DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL
CHECKED BY: MDL	
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No.: C-109
REV.:

FILE LOCATION: Z:\EDC-SD\24\24-237 - GARDFALO - SUNRISE BLVD_PRIVILEGE\NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:09 AM

MATCHLINE SEE SHEET C-108

MATCHLINE SEE SHEET C-111

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EXISTING CANAL

EX. DIRT ROAD

NSLRWMD CANAL NO. 10
125' WIDE R/W
NSLRWMD R/W MAP 1980

5 UNIT TOWNHOME BUILDING #21 (MIN FFE: 18.00)

5 UNIT TOWNHOME BUILDING #20 (MIN FFE: 17.75)

4 UNIT TOWNHOME BUILDING #19 (MIN FFE: 17.75)

4 UNIT TOWNHOME BUILDING #18 (MIN FFE: 17.75)

1-STORY SINGLE-F.FAMILY RESIDENCE F.F.E.=19.24'

5 UNIT TOWNHOME BUILDING #39 (MIN FFE: 18.00)

4 UNIT TOWNHOME BUILDING #37 (MIN FFE: 18.00)

4 UNIT TOWNHOME BUILDING #36 (MIN FFE: 18.00)

4 UNIT TOWNHOME BUILDING #35 (MIN FFE: 18.00)

4 UNIT TOWNHOME BUILDING #34 (MIN FFE: 18.00)

5 UNIT TOWNHOME BUILDING #33

4 UNIT TOWNHOME BUILDING #17 (MIN FFE: 17.75)

5 UNIT TOWNHOME BUILDING #16 (MIN FFE: 17.75)

5 UNIT TOWNHOME BUILDING #15 (MIN FFE: 17.75)

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30

CONSTRUCT 20 LF 18" ADS HP @ 0.00%

CONSTRUCT 240 LF 24" ADS HP @ 0.00%

CONSTRUCT 224 LF 24" ADS HP @ 0.00%

CONSTRUCT 20 LF 18" ADS HP @ 0.00%

CONSTRUCT 233 LF 24" ADS HP @ 0.00%

CONSTRUCT 101 LF 24" ADS HP @ 0.00%

CONSTRUCT 27 LF 18" ADS HP @ 0.00%

CONSTRUCT 26 LF 18" ADS HP @ 0.00%

INSTALL VALLEY CURB (TYP)

INSTALL D-CURB (TYP)

TRANSITION D-CURB TO VALLEY CURB

CB-16 CB-17 CB-18 CB-19 CB-24 CB-41 DMH-5 YD-1

HP 17.15 HP 16.60

40' ROADWAY (SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

PROPOSED 32' U.E. PROPOSED 15' U.E.

P-TOB P-CE P-SWALE

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

CENTERLINE EX. SWALE

STORM INLET TABLE								
STRUCTURE NAME	BOT TYPE	TOP TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:	BOTTOM ELEV.
CB-16	TYPE C	USF5105 6148	13+59.85	-10.00'	15.70		8.00 (S)	7.00
CB-17	TYPE E	USF5105 6148	13+59.85	10.00'	15.70	8.00 (N)	8.00 (W)	7.00
CB-18	TYPE C	USF 5105 6148	42+33.50	10.00'	15.85		6.00 (E)	5.00
CB-19	TYPE E	USF5105 6148	42+33.50	-10.00'	15.85	7.00 (N) 6.00 (W)	6.00 (S)	5.00
CB-24	TYPE C	USF5105 6148	10+19.32	16.00'	16.44	8.00 (N)	7.00 (E)	6.00
CB-41	TYPE C	USF5105 6148	10+19.32	-10.00'	16.56	8.00 (W)	8.00 (S)	7.00
DMH-5	5' DIA MANHOLE	USF 420	11+20.10	9.41'	17.07	8.00 (E) 7.00 (W)	7.00 (S)	6.00
YD-1	18"	YARD DRAIN INLET	32+53.63	658.89'	10.97		8.00 (E)	7.00

MIN. PAVEMENT: 15.70
MIN. FFE: 17.75
MIN. PERIMETER BERM: 15.25

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE
30 0 15 30 60 90
(IN FEET)

LEGEND

EXISTING METER		EXISTING UTILITY POLE	
PROPOSED SIGN		PROPOSED DRAINAGE INLET	
PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET	
HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT	
EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)	
EXISTING PAVEMENT		DRAINAGE FLOW ARROW	
PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)	
PROPOSED PAVEMENT	(#)	PARKING STALL COUNT	
		EXISTING DRAINAGE	
		PROPOSED DRAINAGE PIPE	

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
PAVING, GRADING, & DRAINGE PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-110 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD_(PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:06 AM

MATCH LINE SEE SHEET C-109

MATCH LINE SEE SHEET C-110

STORM INLET TABLE								
STRUCTURE NAME	BOT TYPE	TOP TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:	BOTTOM ELEV.
CB-10	TYPE C	USF5105 6148	63+49.31	10.00'	16.30	11.00 (N) 8.00 (E)	8.00 (W)	7.00
CB-11	TYPE E	USF5105 6148	63+49.31	-10.00'	16.30		11.00 (S)	10.00
CB-12	TYPE C	USF5105 6148	61+28.01	10.00'	16.05	8.00 (E)	8.00 (N) 8.00 (W)	7.00
CB-13	TYPE E	USF5105 6148	61+28.02	-10.00'	16.05	8.00 (S)		7.00
CB-14	TYPE C	USF5105 6148	47+44.00	10.00'	15.95		11.00 (E)	10.00
CB-15	TYPE E	USF5105 6148	47+44.00	-10.00'	15.95	11.00 (W) 8.00 (S)	8.00 (N)	7.00
CB-20	TYPE C	USF5105 6148	44+67.00	10.00'	15.95		11.00 (E)	10.00
CB-21	TYPE E	USF5105 6148	44+67.00	-10.00'	15.95	6.00 (N) 8.00 (S) 11.00 (W)	6.00 (E)	5.00
CB-25	TYPE E	USF 4155 6209	49+96.12	0.00'	16.83	8.00 (W)	8.00 (N)	7.00
CB-26	TYPE E	USF5105 6148	66+48.68	-79.03'	15.00		6.00 (NW) 6.00 (SE)	5.00
CB-37	TYPE C	USF 4155 6209	49+98.28	64.08'	13.00		8.00 (E)	8.00
CB-39	TYPE C	USF5105 6148	71+04.86	9.99'	15.70	8.00 (E)		7.00
CB-40	TYPE E	USF5105 6148	71+04.85	-10.01'	15.70	8.00 (N)	8.00 (W)	7.00
DMH-3	6' DIA MANHOLE	USF 420	70+09.97	-9.70'	16.77	8.00 (E)	8.00 (W) 8.00 (S)	8.00
DMH-4	5' DIA MANHOLE	USF 420	49+27.35	-9.89'	16.81	8.00 (S) 8.00 (E)	8.00 (N)	7.00

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

MIN. PAVEMENT: 15.70
MIN. FFE: 17.75
MIN. PERIMETER BERM: 15.25

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M E	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

PAVING, GRADING, & DRAINGE PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-111 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALD - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RD.DWG, 2025.06.11, 8:06 AM

SUNRISE BOULEVARD
(100' Right-of-Way per Plat Book 1, Page 11)

SHARON TERRACE
(70' Right-of-Way per Plat Book 1, Page 11)

DADE ROAD
(80' Right-of-Way per ORB 1433, Page 1930)

PROPOSED 8' ROW DEDICATION

SEE OFF-SITE IMPROVEMENT SHEET FOR TURN-LANE STRIPING

INSTALL STOP BAR & SIGN (MUTCD R1-1)

INSTALL GORE STRIPING PER FDOT INDEX 711-001

INSTALL HANDICAP STRIPING (TYP) PER HANDICAPPE SPACE DETAIL ON SHEET C-501

INSTALL STANDARD STRIPING (TYP) PER 19' PARKING STALL DETAIL ON SHEET C-501

INSTALL PEDESTRIAN CROSSWALK STRIPING (TYP) PER FDOT INDEX 711-001

INSTALL PARALLEL PARKING STANDARD STRIPING (TYP)

INSTALL STANDARD STRIPING (TYP) PER 18' PARKING STALL W/ OVERHANG DETAIL ON SHEET C-501

INSTALL PEDESTRIAN CROSSWALK STRIPING (TYP) PER FDOT INDEX 711-001

INSTALL STANDARD STRIPING (TYP) PER DETAIL ON SHEET C-501

EXISTING CANAL

EX. DIRT ROAD

NSLRWMD CANAL NO. 10
100' WIDE R/W
NSLRWMD R/W MAP
PB 5, PG 1

ST. LUCIE COUNTY DRAINAGE R/W
NSLRWMD R/W MAP- 1980
PARCEL ID:
2428-601-0002-000-4

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. NATURAL GAS MARKER

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

EX. 18" CMP W/ M.E.S.
INV (NW): 13.04
INV (SE): 13.11

EX. 10" PVC
INV (E): 13.24
INV (W): 13.45

EX. CENTERLINE OF SWALE

EX. 8" PVC
INV (E): 14.43
INV (W): 14.49

INSTALL STOP BAR & SIGN (MUTCD R1-1)

PROPOSED 15' ROW DEDICATION

INSTALL STOP BAR & SIGN (MUTCD R1-1)

INSTALL STOP BAR & SIGN (MUTCD R1-1)

× PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

BM#1
ELEV.=18.76 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1116200.55
E: 868737.76

BM#2
ELEV.=16.58 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115697.58
E: 868822.14

BM#3
ELEV.=15.67' (NAVD88)
SET MAG/D
"EDC LB 8098"
N:1115261.49
E:868468.37

BM#4
ELEV.=15.21 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115262.80
E: 868012.73

BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30

LOT 5 — ROBERT P JURKOWSKI 3320 SUNRISE BLVD REHMAN TAHIR 3321 SUNRISE BLVD ORB 3639, PG 2375 ORB 4160, PG 1071 PARCEL ID(2): 2428-601-0258-001-1 2428-601-0258-000-8

LOT 6 — BONNIE L STARLING (TR) 3325 SUNRISE BLVD ORB 3639, PG 2375 PARCEL ID: 2428-601-0258-000-8

LOT 7 — FREDERICK ROBERT PEASE JR 3327 SUNRISE BLVD ORB 3639, PG 2375 PARCEL ID: 2428-601-0260-000-5

LOT 8 — ANNE F FITZGERALD 3331 SUNRISE BLVD ORB 3639, PG 2375 PARCEL ID: 2428-601-0262-000-9

LOT 9 — FRANCISCO GODINEZ 3335 SUNRISE BLVD ORB 3639, PG 2375 PARCEL ID: 2428-601-0264-000-3

LOT 10 — BEVERLEY A BUSTIN 3339 SHARON TER ORB 3455, PG 2581 PARCEL ID: 2428-601-0266-000-7

LOT 11 — 50' INGRESS-EGRESS EASEMENT ORB 211, PG 1666 (DOCUMENT NOT PROVIDED)

BEVERLY BUSTIN 703 SHARON TER ORB 4875, PG 1303 PARCEL ID: 2428-601-0269-000-8

ERM INVESTMENT GROUP LLC 3411 SUNRISE BLVD ORB 4216, PG 2405 PARCEL ID: 2428-313-0003-000-2

MELINDA K STEWARD 3413 SUNRISE BLVD ORB 3129, PG 1121 PARCEL ID: 2428-313-0004-000-9

DELVA L FINDLAY 3415 SUNRISE BLVD ORB 4216, PG 159 PARCEL ID: 2428-313-0005-000-6

CAREY A PITTS 3417 SUNRISE BLVD ORB 1433, PG 1930 PARCEL ID: 2428-313-0007-000-7

ANDRES G RAMIREZ 1485 DADE RD ORB 2831, PG 694 PARCEL ID: 2428-313-0006-000-3

STORYBROOKE PRESCHOOL ACADEMY LLC
3366 S 25TH ST
ORB 3643, PG 933
PARCEL ID: 2428-322-0002-000-3

ANA RUIZ
3540 S 25TH ST
ORB 3179, PG 87
PARCEL ID: 2428-322-0003-000-0

GENE F LEMIRE
2210 DADE RD
ORB 1317, PG 2166
PARCEL ID: 2428-323-0006-000-4

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

STRIPING PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-112 REV.

FILE LOCATION: Z:\EDC 2024\24-237 - GARG\FALD - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:06 AM

PROPOSED 8' ROW DEDICATION

SUNRISE BOULEVARD

SHARON TERRACE

DADE ROAD

PROPOSED 15' ROW DEDICATION

EXISTING CANAL

EX. DIRT ROAD

NSLRWMD CANAL NO. 10
80' WIDE R/W
NSLRWMD R/W MAP
PB 5, PG 1

ST. LUCIE COUNTY DRAINAGE DISTRICT
NSLRWMD R/W MAP- 1980
PARCEL ID:
2428-601-0040-000-4

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. NATURAL GAS MARKER

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

ROBERT P JURKOWSKI
3325 SUNRISE BLVD
REHMAN TAHIR
3321 SUNRISE BLVD
ORB 4160, PG 1071
PARCEL ID(2):
2428-601-0258-000-1
2428-601-0258-000-8

BONNIE L STARLING (TR)
3325 SUNRISE BLVD
ORB 3536, PG 1536
PARCEL ID:
2428-601-0258-000-8

FREDERICK ROBERT PEASE JR
3327 SUNRISE BLVD
ORB 4165, PG 715
PARCEL ID:
2428-601-0260-000-5

ANNE P FITZGERALD
3331 SUNRISE BLVD
ORB 3639, PG 2375
PARCEL ID:
2428-601-0262-000-9

FRANCISCO GODINEZ
3335 SUNRISE BLVD
ORB 4166, PG 146
PARCEL ID:
2428-601-0264-000-3

BEVERLY Y BUSTIN
3337 SHARON TER
ORB 3455, PG 2581
PARCEL ID:
2428-601-0266-000-7

50' INGRESS-EGRESS EASEMENT
ORB 211, PG 1666
(DOCUMENT NOT PROVIDED)

BEVERLY BUSTIN
703 SHARON TER
ORB 4875, PG 1303
PARCEL ID:
2428-601-0269-000-8

ERM INVESTMENT GROUP LLC
3411 SUNRISE BLVD
ORB 4216, PG 2405
PARCEL ID:
2428-315-0003-000-2

MELINDA K STEWARD
3413 SUNRISE BLVD
ORB 3129, PG 1121
PARCEL ID:
2428-315-0004-000-9

DELVA L FINDLAY
3415 SUNRISE BLVD
ORB 4474, PG 169
PARCEL ID:
2428-315-0005-000-6

ANDRES G RAMIREZ
1485 DADE RD
ORB 2831, PG 694
PARCEL ID:
2428-313-0006-000-3

CAREY A PITTS
3417 SUNRISE BLVD
ORB 1433, PG 1930
PARCEL ID:
2428-313-0007-000-7

STORYBROOKE PRESCHOOL ACADEMY LLC
3366 S 25TH ST
ORB 3643, PG 933
PARCEL ID: 2428-322-0002-000-3

ANA RUIZ
3540 S 25TH ST
ORB 3179, PG 87
PARCEL ID: 2428-322-0003-000-0

GENE F LEMIRE
2210 DADE RD
ORB 1317, PG 2166
PARCEL ID: 2428-323-0006-000-4

5 UNIT TOWNHOME BUILDING #1
5 UNIT TOWNHOME BUILDING #2
5 UNIT TOWNHOME BUILDING #3
5 UNIT TOWNHOME BUILDING #4
5 UNIT TOWNHOME BUILDING #5
5 UNIT TOWNHOME BUILDING #6
4 UNIT TOWNHOME BUILDING #7
4 UNIT TOWNHOME BUILDING #8
5 UNIT TOWNHOME BUILDING #9
5 UNIT TOWNHOME BUILDING #10
5 UNIT TOWNHOME BUILDING #11
5 UNIT TOWNHOME BUILDING #12
5 UNIT TOWNHOME BUILDING #13
5 UNIT TOWNHOME BUILDING #14
5 UNIT TOWNHOME BUILDING #15
4 UNIT TOWNHOME BUILDING #16
4 UNIT TOWNHOME BUILDING #17
4 UNIT TOWNHOME BUILDING #18
5 UNIT TOWNHOME BUILDING #19
5 UNIT TOWNHOME BUILDING #20
5 UNIT TOWNHOME BUILDING #21
5 UNIT TOWNHOME BUILDING #22
5 UNIT TOWNHOME BUILDING #23
5 UNIT TOWNHOME BUILDING #24
5 UNIT TOWNHOME BUILDING #25
4 UNIT TOWNHOME BUILDING #26
4 UNIT TOWNHOME BUILDING #27
5 UNIT TOWNHOME BUILDING #28
5 UNIT TOWNHOME BUILDING #29
4 UNIT TOWNHOME BUILDING #30
5 UNIT TOWNHOME BUILDING #31
5 UNIT TOWNHOME BUILDING #32
4 UNIT TOWNHOME BUILDING #33
4 UNIT TOWNHOME BUILDING #34
4 UNIT TOWNHOME BUILDING #35
4 UNIT TOWNHOME BUILDING #36
5 UNIT TOWNHOME BUILDING #37
5 UNIT TOWNHOME BUILDING #38

BSP #1
BSP #2 FH-1
BSP #3 FH-2
BSP #4
BSP #5 FH-3
BSP #6 FH-4

500' FIRE HYDRANT COVERAGE RADIUS

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

EX. 18" CMP W/ M.E.S.
INV (NW): 13.04
INV (SE): 13.11

EX. 10" PVC
INV (E): 13.24
INV (W): 13.45

EX. CENTERLINE OF SWALE

EX. 8" PVC
INV (E): 14.43
INV (W): 14.49

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

60 0 30 60 120 180

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

OVERALL UTILITY PLAN

DATE	SCALE
2025.05.06	AS SHOWN

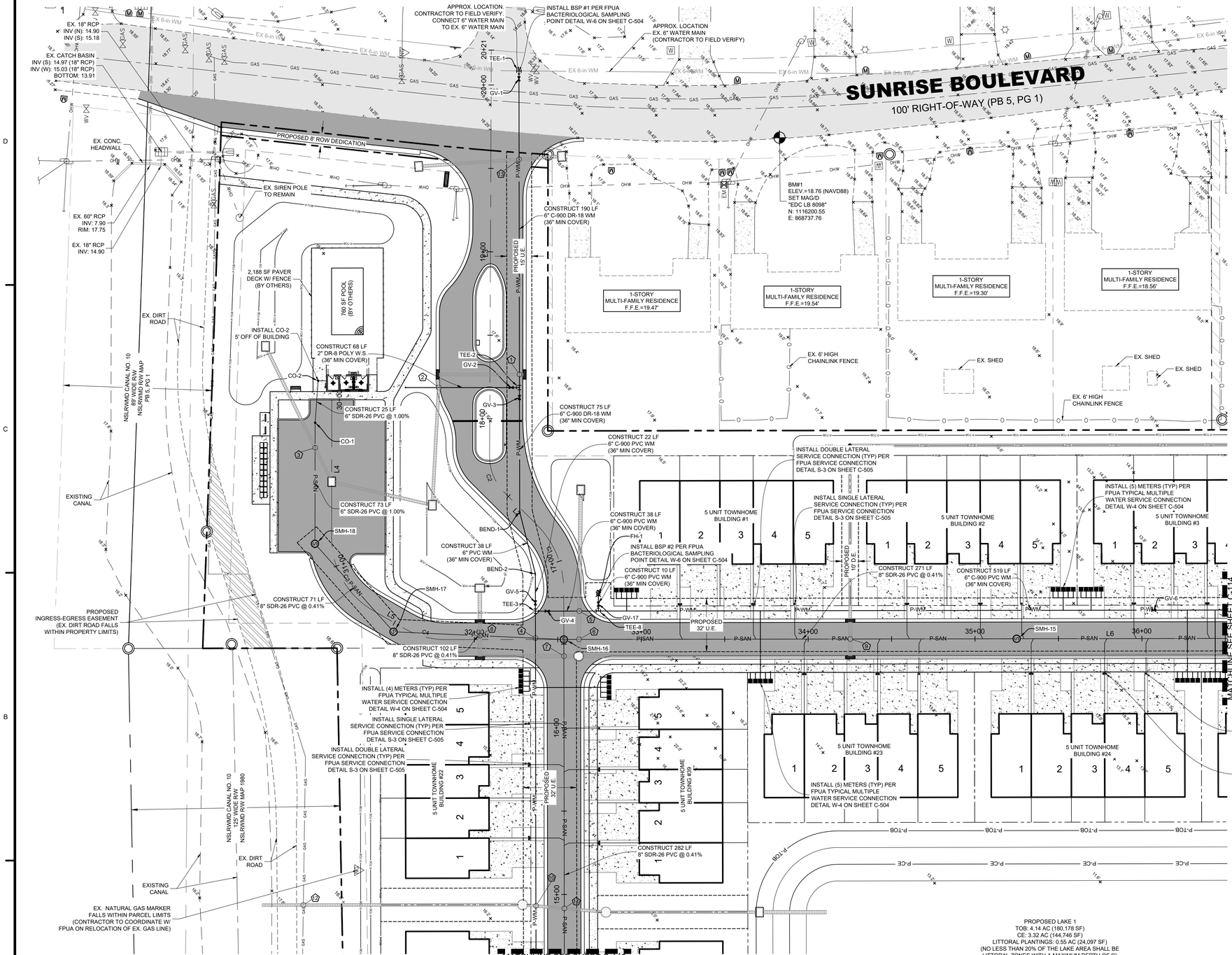
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-112B** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RS1.DWG, 2025.06.19 11:11, 8:06 AM



SEWER INLET TABLE						
STRUCTURE NAME	MANHOLE TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:
CO-1	---	30+13.76	10.00'	18.18	14.33 (E)	14.33 (W)
CO-2	---	18+22.24	-102.98'	18.69	14.58 (S)	14.58 (W)
SMH-15	STANDARD	35+24.95	0.00'	17.60	11.48 (N)	11.38 (S)
SMH-16	STANDARD	32+53.62	0.00'	17.88	12.69 (N)	12.59 (S) 12.59 (W)
SMH-17	STANDARD	31+52.20	4.91'	17.79	13.21 (NE)	13.11 (S)
SMH-18	STANDARD	30+85.74	10.09'	18.19	13.60 (E)	13.50 (SW)

FITTING TABLE			
STRUCTURE NAME	TYPE	STATION	OFFSET
BEND-1	6" 11.25° BEND	17+38.62	-1.87'
BEND-2	6" 11.25° BEND	16+96.15	-15.86'
TEE-1	6" WET TAP	???	???
TEE-2	6"x6"x2" TEE	18+18.68	17.71'
TEE-3	6"x6"x6" TEE	16+69.87	-17.01'

VALVE TABLE				
PLAN ID	STATION	OFFSET	SIZE	TYPE
GV-1	???	???	6" GV	6" GV
GV-2	18+18.67	12.74'	6" GV	6" GV
GV-3	18+12.70	17.75'	6" GV	6" GV
GV-4	16+69.87	-9.95'	6" GV	6" GV
GV-5	16+74.87	-17.01'	6" GV	6" GV
GV-6	36+07.12	-17.00'	6" GV	6" GV
GV-17	32+74.33	-21.10'	6" GV	6" GV

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

UTILITY CONFLICTS:

1. STA: 18+26.52
OFF: 17.67'
STORM CROSSES UNDER WATER MAIN (±3.80' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 18" STORM = 9.70
FG = ±17.25

2. STA: 18+18.48
OFF: -30.68'
STORM CROSSES UNDER WATER SERVICE (±3.80' SEPARATION)
BOTTOM 2" POLY W.S. = 13.50
TOP 18" STORM = 9.70
FG = ±17.04

3. STA: 30+28.71
OFF: -10.00'
STORM CROSSES UNDER SANITARY SEWER (±4.36' SEPARATION)
BOTTOM 6" SAN = 14.06
TOP 18" STORM = 9.70
FG = ±18.11

4. STA: 32+36.62
OFF: -0.80'
SANITARY SEWER CROSSES UNDER WATER MAIN (6" MIN SEPARATION - USE DUCTILE IRON PIPE)
BOTTOM 6" WATER MAIN = 14.03
TOP 8" SAN = 13.53
FG = ±17.78

5. STA: 16+69.87
OFF: 9.25'
STORM CROSSES UNDER WATER MAIN (±3.30' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 24" STORM = 10.20
FG = ±17.95

6. STA: 32+62.63
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±2.31' SEPARATION)
BOTTOM 8" SAN = 12.51
TOP 24" STORM = 10.20
FG = ±17.83

7. STA: 16+42.88
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±2.33' SEPARATION)
TOP 24" STORM = 10.20
FG = ±17.81

8. STA: 22+03.33
OFF: -2.36'
STORM CROSSES UNDER SANITARY SEWER (±2.68' SEPARATION)
BOTTOM 8" SAN = 12.88
TOP 24" STORM = 10.20
FG = ±17.58

9. STA: 34+25.25
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±1.66' SEPARATION)
BOTTOM 8" SAN = 11.86
TOP 24" STORM = 10.20
FG = ±17.00

10. STA: 14+93.21
OFF: -17.00'
STORM CROSSES UNDER WATER MAIN (±4.80' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 18" STORM = 8.70
FG = ±16.82

11. STA: 14+91.65
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±3.21' SEPARATION)
BOTTOM 8" SAN = ±11.91
TOP 18" STORM = 8.70
FG = ±16.80

12. STA: 14+93.94
OFF: -156.36'
STORM CROSSES UNDER EX. GAS LINE (MAINTAIN MIN SEPARATION)
BOTTOM EX. GAS LINE = TO BE FIELD VERIFIED
TOP 18" STORM = 8.70
FG = ±17.50

13. STA: 19+55.48
OFF: 16.92'
STORM CROSSES UNDER WATER MAIN (±3.80' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 18" STORM = 9.70
FG = ±18.09

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PLAN

DATE	SCALE
2025.05.06	AS SHOWN

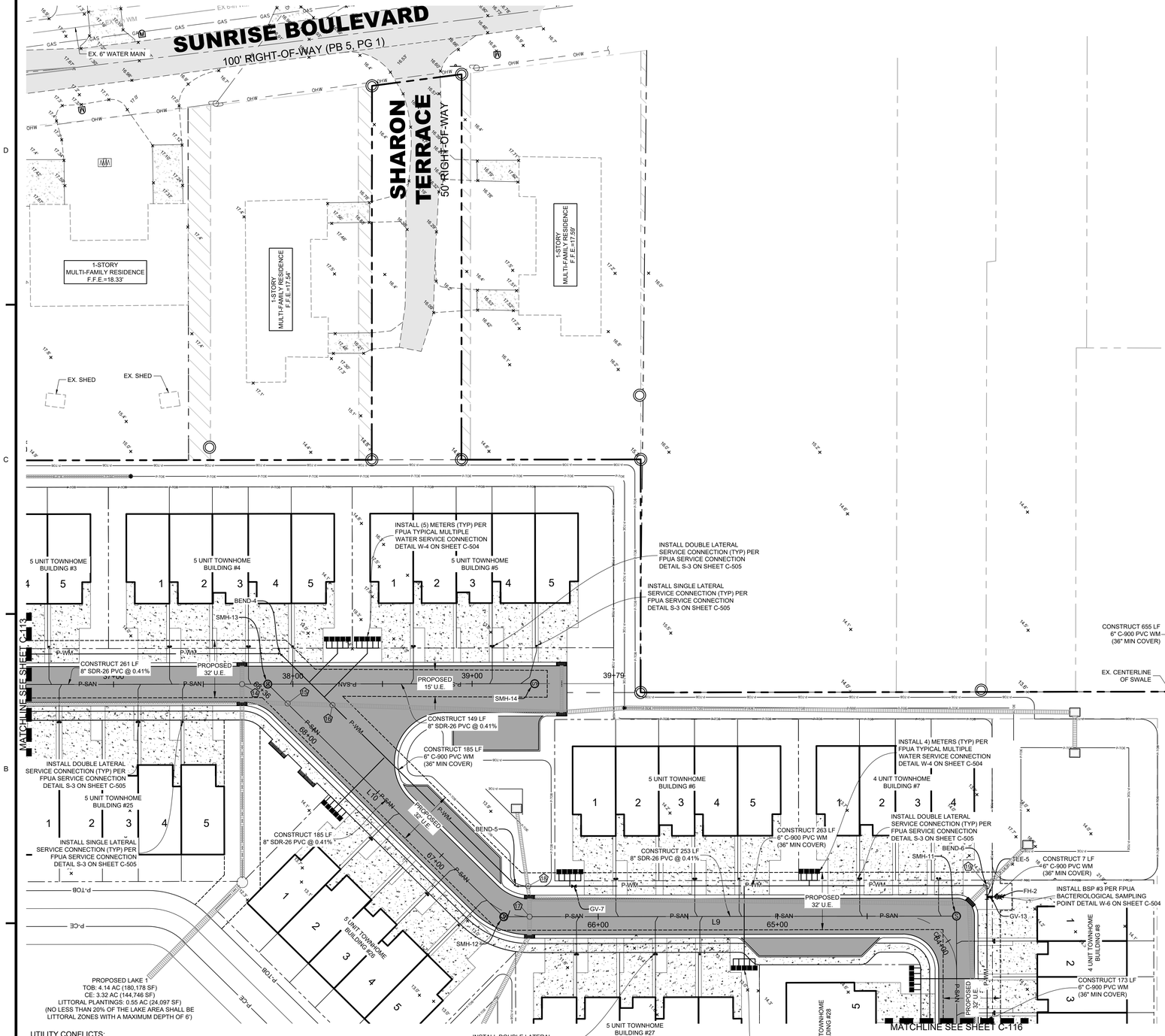
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No. 24-237 | CERTIFICATE OF AUTHORIZATION No. C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-113 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALD - SUNRISE BLVD\PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RD.DWG, 2025.06.11, 8:06 AM



SEWER INLET TABLE						
STRUCTURE NAME	MANHOLE TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:
SMH-11	STANDARD	64+06.56	12.42'	16.58	8.31 (N)	8.21 (W)
SMH-12	STANDARD	66+51.93	-2.84'	16.78	9.45 (NE)	9.35 (S)
SMH-13	INSIDE DROP	37+86.02	0.00'	17.07	10.31 (N) 12.39 (S)	10.21 (SW)
SMH-14	SHALLOW	39+34.89	0.00'	17.09		13.00 (N)

FITTING TABLE			
STRUCTURE NAME	TYPE	STATION	OFFSET
BEND-4	6" 45° BEND	37+93.01	-17.00'
BEND-5	6" 45° BEND	66+51.97	15.55'
BEND-6	6" 90° BEND	64+06.57	36.44'

VALVE TABLE				
PLAN ID	STATION	OFFSET	SIZE	TYPE
GV-7	66+13.47	17.01'	6" GV	6" GV
TEE-5	70+16.47	-153.29'	Rectangular Junction Structure NF	6"x6"x6" TEE

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

UTILITY CONFLICTS:

14 STA: 37+71.63
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±1.14' SEPARATION)
BOTTOM 8" SAN = ±10.34
TOP 24" STORM = 9.20
FG = ±17.00

15 STA: 68+20.60
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±0.92' SEPARATION)
BOTTOM 8" SAN = ±10.12
TOP 24" STORM = 9.20
FG = ±17.18

16 STA: 68+02.22
OFF: 17.00'
STORM CROSSES UNDER WATER MAIN (±4.30' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 24" STORM = 9.20
FG = ±17.59

17 STA: 66+38.29
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER (±1.07' SEPARATION)
BOTTOM 8" SAN = ±9.27
TOP 24" STORM = 8.20
FG = ±16.50

18 STA: 66+40.22
OFF: 17.00'
STORM CROSSES UNDER WATER MAIN (±3.80' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 18" STORM = 9.70
FG = ±17.00

19 STA: 64+06.55
OFF: 36.40'
STORM CROSSES UNDER WATER MAIN (±3.30' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 24" STORM = 10.20
FG = ±16.75

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-114 REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARS\FALO - SUNRISE BLVD, (PREVILEGE NORTH)\ENGINEERING\CIVIL\TOCADD\WGS\24-237 ENGINEERING RD DWG, 2025.06.11, 8:56 AM

MATCHLINE SEE SHEET C-113

MATCHLINE SEE SHEET C-116

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

5 UNIT TOWNHOME BUILDING #21

5 UNIT TOWNHOME BUILDING #38

PROPOSED 32' U.E.

P-WM

P-SAN

CONSTRUCT 577 LF 6" C-900 PVC WM (36" MIN COVER)

SMH-10

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

INSTALL (5) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

EXISTING CANAL

EX. DIRT ROAD

5 UNIT TOWNHOME BUILDING #20

4 UNIT TOWNHOME BUILDING #37

GV-8

NSLRWMD CANAL NO. 10
125' WIDE R/W
NSLRWMD R/W MAP 1980

CONSTRUCT 261 LF 8" SDR-26 PVC @ 0.41%

INSTALL (4) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

4 UNIT TOWNHOME BUILDING #19

4 UNIT TOWNHOME BUILDING #36

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

P-TOB

P-CE

BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30

4 UNIT TOWNHOME BUILDING #35

4 UNIT TOWNHOME BUILDING #34

5 UNIT TOWNHOME BUILDING #33

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

CONSTRUCT 179 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 384 LF 8" SDR-26 PVC @ 0.41%

SMH-8

SMH-7

TEE-10

BEND-11

GV-20

FH-3

GV-9

CONSTRUCT 10 LF 6" C-900 PVC WM (36" MIN COVER)

INSTALL BSP #5 PER FPUA BACTERIOLOGICAL SAMPLING POINT DETAIL W-6 ON SHEET C-504

CONSTRUCT 79 LF 8" SDR-26 PVC @ 0.41%

4 UNIT TOWNHOME BUILDING #18

4 UNIT TOWNHOME BUILDING #17

5 UNIT TOWNHOME BUILDING #16

5 UNIT TOWNHOME BUILDING #15

INSTALL (4) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL (5) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

EX. NATURAL GAS MARKER

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

CENTERLINE EX. SWALE

1-STORY SINGLE-F.FAMILY RESIDENCE F.F.E.=13.24'

STA: 40+00
STA: 41+00
STA: 42+00
STA: 43+00
STA: 11+00
STA: 12+00
STA: 13+00
STA: 14+00

SEWER INLET TABLE

STRUCTURE NAME	MANHOLE TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:
SMH-7	STANDARD	41+79.14	0.00'	16.25	9.43 (N)	9.33 (S)
SMH-8	INSIDE DROP	11+09.89	0.00'	17.15	12.18 (W) 10.26 (E)	10.16 (S)
SMH-9	SHALLOW	10+30.91	0.00'	16.75		12.50 (E)
SMH-10	SHALLOW	13+70.58	0.00'	15.97	11.43 (E)	11.33 (W)

FITTING TABLE

STRUCTURE NAME	TYPE	STATION	OFFSET
BEND-11	6" 90° BEND	10+92.88	-17.00'
TEE-10	6"x6"x6" TEE	32+90.01	560.00'

VALVE TABLE

PLAN ID	STATION	OFFSET	SIZE	TYPE
GV-8	12+74.30	-16.97'	6" GV	6" GV
GV-9	42+70.75	17.00'	6" GV	6" GV
GV-20	32+90.01	563.07'	6" GV	6" GV

UTILITY CONFLICTS:

(20) STA: 13+59.85
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER
(±1.56' SEPARATION)
BOTTOM 8" SAN = ±11.26
TOP 18" STORM = 9.70
FG = ±15.90

(21) STA: 40+10.08
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER
(±10.68' SEPARATION)
BOTTOM 8" SAN = ±10.09
TOP 24" STORM = 9.20
FG = ±17.17

(22) STA: 10+92.88
OFF: 11.19'
STORM CROSSES UNDER WATER MAIN
(±4.30' SEPARATION)
BOTTOM 6" WATER MAIN = 13.50
TOP 24" STORM = 9.20
FG = ±16.91

(23) STA: 42+33.50
OFF: 0.00'
STORM CROSSES UNDER SANITARY SEWER
(±1.38' SEPARATION)
BOTTOM 8" SAN = ±9.08
TOP 18" STORM = 7.70
FG = ±16.05

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	(#)	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-115** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BL\VD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:07 AM

MATCHLINE SEE SHEET C-115

MATCHLINE SEE SHEET C-116

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.55 AC (24,097 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

5 UNIT TOWNHOME BUILDING #27

5 UNIT TOWNHOME BUILDING #33

5 UNIT TOWNHOME BUILDING #32

5 UNIT TOWNHOME BUILDING #31

5 UNIT TOWNHOME BUILDING #30

5 UNIT TOWNHOME BUILDING #29

5 UNIT TOWNHOME BUILDING #28

4 UNIT TOWNHOME BUILDING #9

4 UNIT TOWNHOME BUILDING #10

5 UNIT TOWNHOME BUILDING #14

5 UNIT TOWNHOME BUILDING #13

5 UNIT TOWNHOME BUILDING #12

5 UNIT TOWNHOME BUILDING #11

1STORY
SINGLE FAMILY RESIDENCE
F.F.E. =15.48'

CONSTRUCT 143 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 76 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 270 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 353 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 907 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 46 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 15 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 38 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 126 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 239 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 36 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 34 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 79 LF 6" C-900 PVC WM (36" MIN COVER)

CONSTRUCT 48 LF 8" SDR-26 PVC @ 0.41%

CONSTRUCT 910 LF 6" C-900 PVC WM

INSTALL LIFT STATION IN 30'x30' EASEMENT PER FPUA LIFT STATION DETAILS

INSTALL ±61 LF 4" FORCE MAIN BY DIRECTIONAL DRILL

CONNECT 4" FORCE MAIN TO EX. 4" FORCE MAIN

APPROX. LOCATION EX. 4" FORCE MAIN (CONTRACTOR TO FIELD VERIFY)

INSTALL BSP #4 PER FPUA BACTERIOLOGICAL SAMPLING POINT DETAIL W-6 ON SHEET C-504

INSTALL BSP #6 PER FPUA BACTERIOLOGICAL SAMPLING POINT DETAIL W-6 ON SHEET C-504

INSTALL (5) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

INSTALL (4) METERS (TYP) PER FPUA TYPICAL MULTIPLE WATER SERVICE CONNECTION DETAIL W-4 ON SHEET C-504

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL DOUBLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

INSTALL SINGLE LATERAL SERVICE CONNECTION (TYP) PER FPUA SERVICE CONNECTION DETAIL S-3 ON SHEET C-505

PROPOSED 15' U.E.

PROPOSED 28.77' U.E.

PROPOSED 32' U.E.

PROPOSED 15.00' ROW DEDICATION

DADE ROAD
40' RIGHT-OF-WAY

BM#4
ELEV.=15.21 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115262.80
E: 868012.73

SMH-1 SMH-2 SMH-3 SMH-4 SMH-5 SMH-6

FH-4

TEE-4 TEE-5 TEE-6 TEE-7

GV-10 GV-11 GV-12 GV-13 GV-14 GV-15 GV-16 GV-21

BEND-7 BEND-8 BEND-9

TEE-11

P-SAN P-WM P-TOB P-CE P-SW

63+00 62+00 61+00 60+00 70+00 71+00 71+71 211+00 210+00 209+00 208+00 207+00 45+00 46+00 47+00 48+00 49+00 50+00 50+25

SEWER INLET TABLE

STRUCTURE NAME	MANHOLE TYPE	STATION	OFFSET	RIM	IN INV:	OUT INV:
SMH-1	STANDARD	70+76.08	-37.70'	16.92	4.33 (W)	4.23 (S)
SMH-2	STANDARD	70+76.08	0.00'	16.20	4.58 (N)	4.48 (E)
SMH-3	INSIDE DROP	62+70.39	0.00'	17.00	7.63 (E) 4.99 (W)	4.89 (S)
SMH-4	INSIDE DROP	49+16.34	0.00'	16.76	6.20 (N) 12.80 (S)	6.10 (E)
SMH-5	SHALLOW	49+64.49	0.00'	16.40		13.00 (N)
SMH-6	STANDARD	45+63.35	0.00'	16.39	7.75 (N)	7.65 (S)

FITTING TABLE

STRUCTURE NAME	TYPE	STATION	OFFSET
BEND-7	6" 90° BEND	49+33.35	-17.01'
BEND-8	6" 90° BEND	49+68.91	-17.01'
BEND-9	6" 90° BEND	49+68.88	17.00'
TEE-4	6"x6"X6" TEE	62+56.50	16.98'
TEE-5	6"x6"x6" TEE	70+16.47	-153.29'
TEE-6	6"x6"x6" TEE	71+43.37	13.61'
TEE-7	6"x6"x6" TEE	71+68.86	-37.59'

VALVE TABLE

PLAN ID	STATION	OFFSET	SIZE	TYPE
GV-10	46+90.93	17.00'	6" GV	6" GV
GV-11	62+52.31	16.98'	6" GV	6" GV
GV-12	62+56.49	21.72'	6" GV	6" GV
GV-13	70+18.25	-153.30'	6" GV	6" GV
GV-14	71+38.98	13.63'	6" GV	6" GV
GV-15	71+43.38	17.71'	6" GV	6" GV
GV-16	71+64.47	-37.60'	6" GV	6" GV

UTILITY CONFLICTS:

(25) STA: 44+67.00
OFF: 0.00'
STORM CROSSES OVER SANITARY SEWER (±1.80' SEPARATION)
BOTTOM 18" STORM = ±10.80
TOP 8" SAN = ±9.00
FG = ±16.15

(26) STA: 47+44.00
OFF: 0.00'
STORM CROSSES OVER SANITARY SEWER (±3.21' SEPARATION)
BOTTOM 18" STORM = ±10.80
TOP 8" SAN = ±7.59
FG = ±16.15

(27) STA: 49+68.90
OFF: -3.91'
STORM CROSSES UNDER WATER MAIN (±3.30' SEPARATION)
BOTTOM 8" WATER MAIN = ±13.50
TOP 24" STORM = 10.20
FG = ±17.31

(28) STA: 61+28.01
OFF: 0.00'
STORM CROSSES OVER SANITARY SEWER (±1.54' SEPARATION)
BOTTOM 18" STORM = ±7.80
TOP 8" SAN = ±6.24
FG = ±16.25

(29) STA: 70+10.00
OFF: 0.00'
STORM CROSSES OVER SANITARY SEWER (±2.27' SEPARATION)
BOTTOM 24" STORM = ±7.80
TOP 8" SAN = ±5.53
FG = ±16.90

(30) STA: 70+16.98
OFF: 0.00'
WATER MAIN CROSSES OVER SANITARY SEWER (±7.49' SEPARATION)
BOTTOM 8" WATER MAIN = ±13.00
TOP 8" SAN = ±5.51
FG = ±16.82

(31) STA: 63+49.31
OFF: 0.00'
STORM CROSSES OVER SANITARY SEWER (±2.16' SEPARATION)
BOTTOM 18" STORM = ±10.80
TOP 8" SAN = 8.64
FG = ±16.50

(32) STA: 70+76.08
OFF: -10.00'
STORM CROSSES OVER SANITARY SEWER (±2.68' SEPARATION)
BOTTOM 18" STORM = ±7.80
TOP 8" SAN = ±5.12
FG = ±15.95

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PLAN

DATE	SCALE
2025.05.06	AS SHOWN

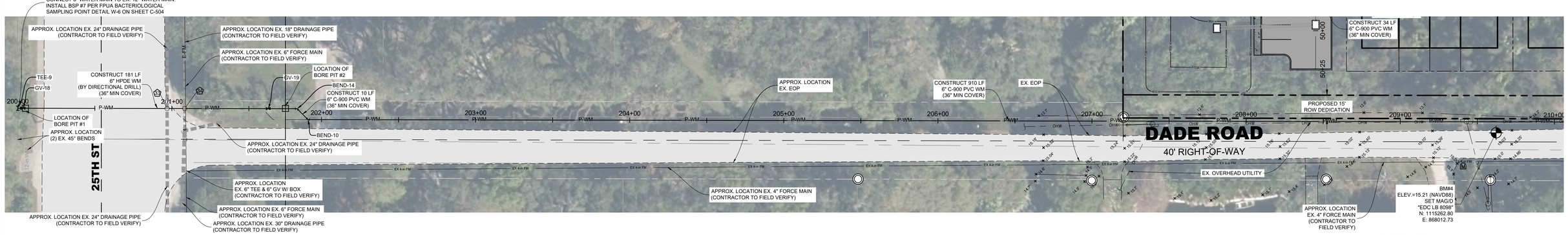
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

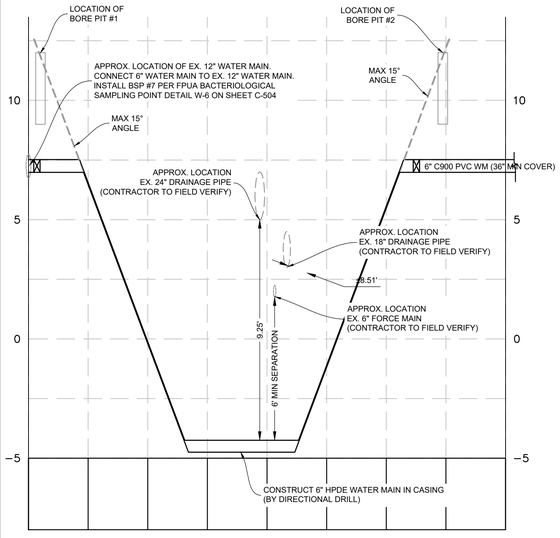
PROJECT No. 24-237 | CERTIFICATE OF AUTHORIZATION No. C.O.A. No.

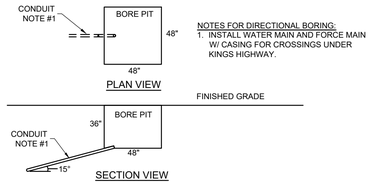
MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-116 | REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GAROFALO - (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\SHEETS\24-237 ENGINEERING RD.DWG, 2025.06.11, 8:07 AM







NOTES FOR DIRECTIONAL BORING:
1. INSTALL WATER MAIN AND FORCE MAIN W/ CASING FOR CROSSINGS UNDER KINGS HIGHWAY.

TYPICAL DIRECTIONAL BORE SETUP
NOT TO SCALE

UTILITY CONFLICTS:

(53) STA: 200+96.90
OFF: 0.00'
WATER MAIN CROSSES UNDER EX. STORM
(±9.25' SEPARATION)
BOTTOM EX. 24" STORM = ±5.00
TOP 6" WATER MAIN = MAINTAIN 18" MIN SEPARATION
FG = UNKNOWN

(54) STA: 201+08.25
OFF: 0.00'
WATER MAIN CROSSES UNDER EX. STORM & EX. FORCE MAIN
(MAINTAIN 6' MIN SEPARATION FROM EX. FORCE MAIN)
BOTTOM EX. 18" STORM = ±3.00
BOTTOM EX. 6" FORCE MAIN = UNKNOWN
TOP 6" WATER MAIN = TBD
FG = UNKNOWN

(55) STA: 211+52.76
OFF: 0.00'
WATER MAIN CROSSES OVER FORCE MAIN
(MAINTAIN 18" MIN SEPARATION)
BOTTOM 6" WATER MAIN = ±11.50
TOP 4" FORCE MAIN = ±10.00
FG = ±15.40

(56) STA: 213+97.59
OFF: 0.00'
EX. STORM CROSSES OVER WATER MAIN
(MAINTAIN 18" MIN SEPARATION)
BOTTOM EX. 18" STORM = ±12.80
TOP 6" WATER MAIN = 11.30
FG = ±14.23

VALVE TABLE				
PLAN ID	STATION	OFFSET	SIZE	TYPE
GV-14	71+38.98	13.63'	6" GV	6" GV
GV-15	71+43.38	17.71'	6" GV	6" GV
GV-18	200+03.48	0.00'	6" GV	6" GV
GV-19	201+61.37	-2.83'	6" GV	6" GV

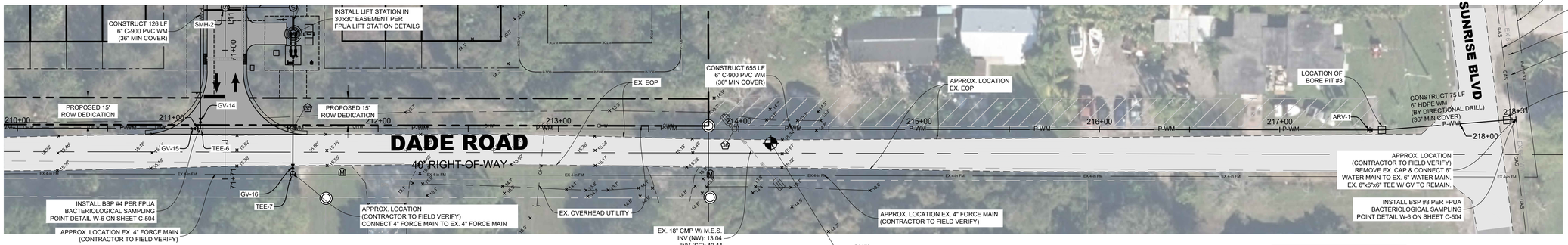
FITTING TABLE			
STRUCTURE NAME	TYPE	STATION	OFFSET
BEND-10	6" 45° BEND	201+91.20	0.00'
BEND-14	6" 45° BEND	201+84.15	-7.04'
TEE-6	6"x6"x6" TEE	71+43.37	13.61'
TEE-9	12"x12"x6" TEE	200+00.00	0.00'

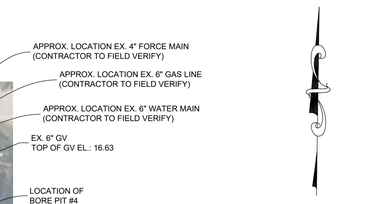
CONSTRUCTION NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

PLAN REFERENCE:
INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

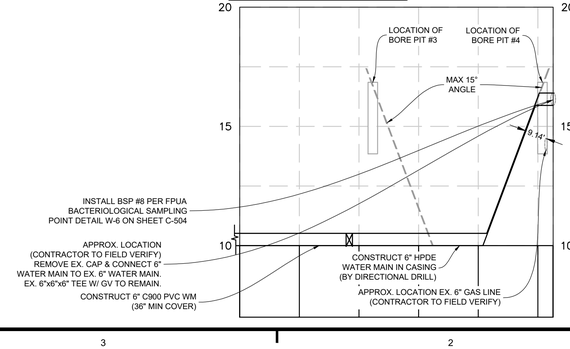
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com





OFF-SITE WATER MAIN PROFILE
217+00.00 TO 218+31.39
SCALE: 1" = 30'H 3'V



REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
OFF-SITE UTILITY IMPROVEMENTS

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

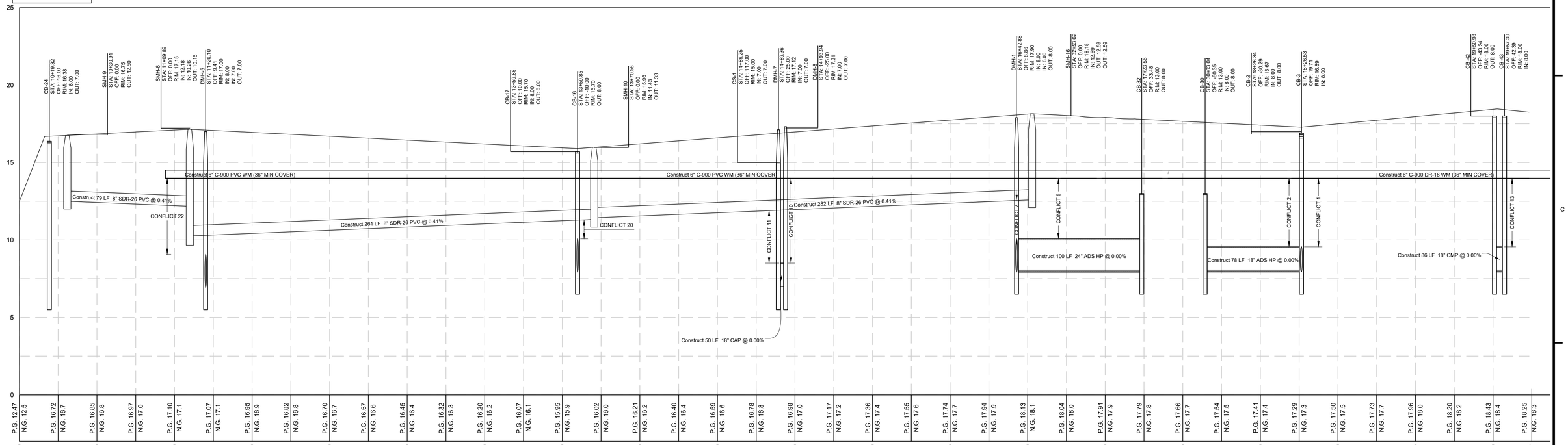
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. C-117 REV.

FILE LOCATION: Z:\EDC-202424-237 - GAROFALO - SUNRISE BLVD_IPRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING RLDWG, 2025.06.11, 8:07 AM

ROADWAY 1
10+00.00 TO 20+20.91
SCALE: 1" = 30'H 3'V



PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

LEGEND

M	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PROFILES

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

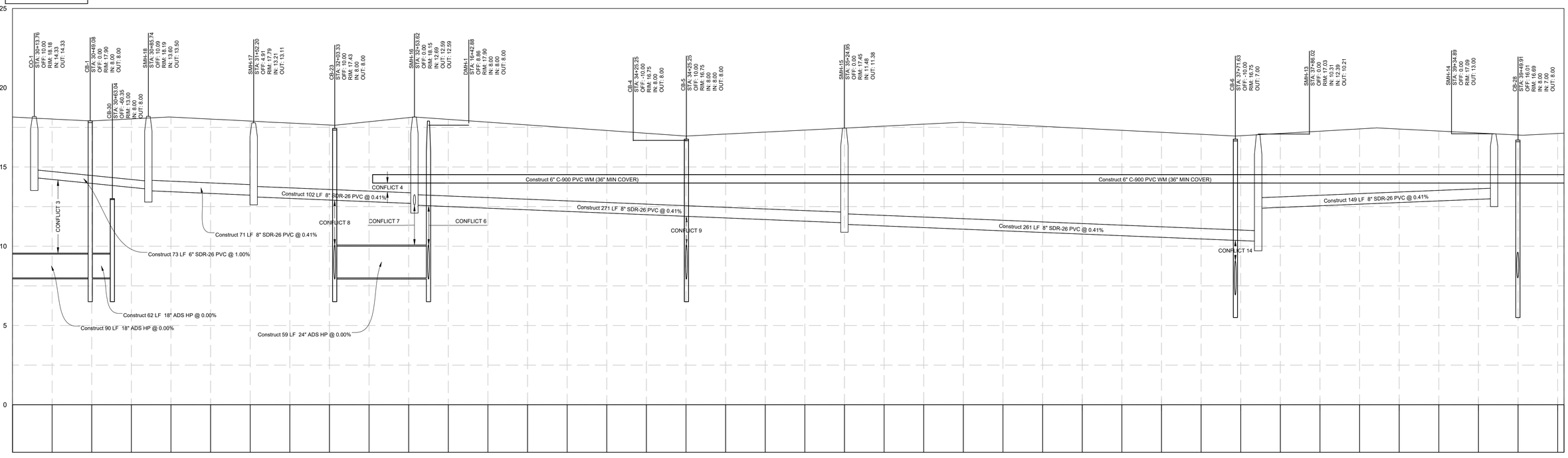
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-118** REV:

FILE LOCATION: Z:\EDC-2024\24-237 - OAROFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING RS.DWG, 2025.06.11, 8:07 AM

ROADWAY 2
30+00.00 TO 39+79.03
SCALE: 1" = 30'H 3'V



PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PROFILES

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-119** REV.

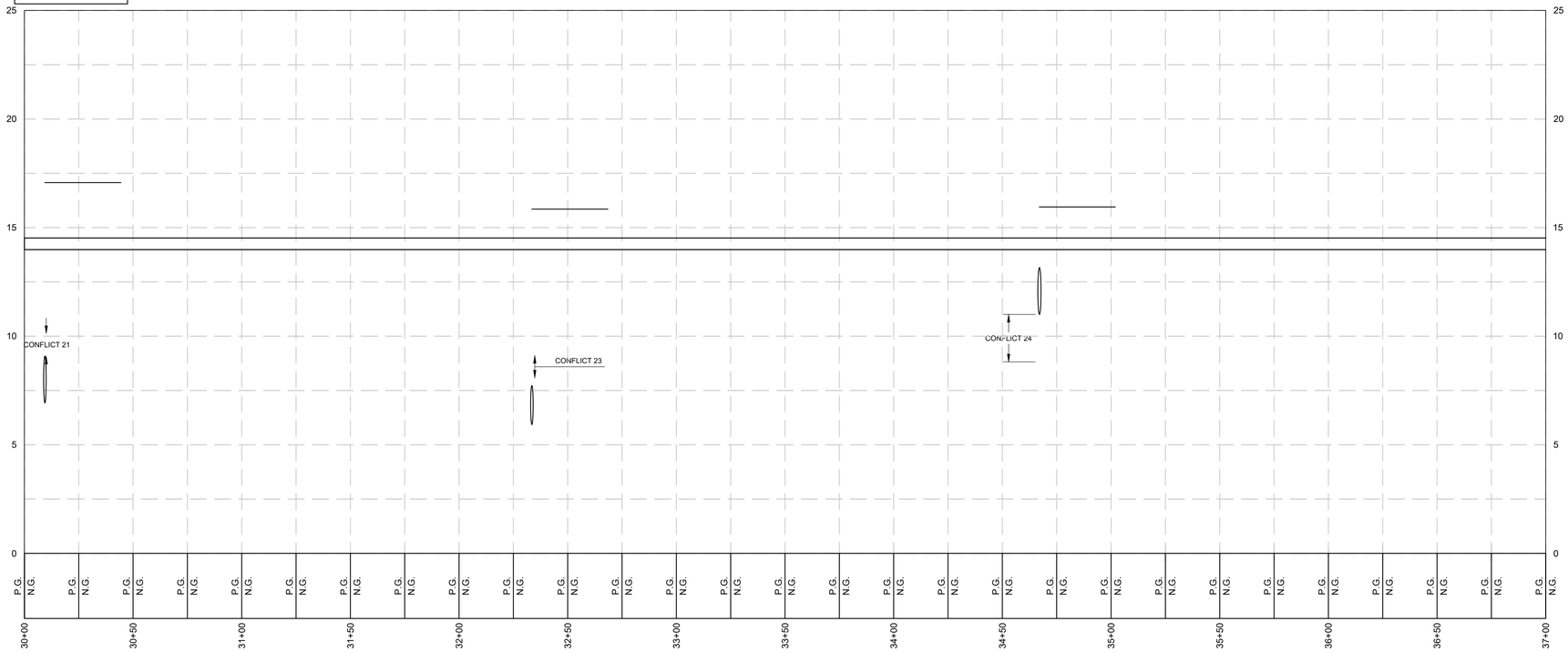
LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	(#)	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

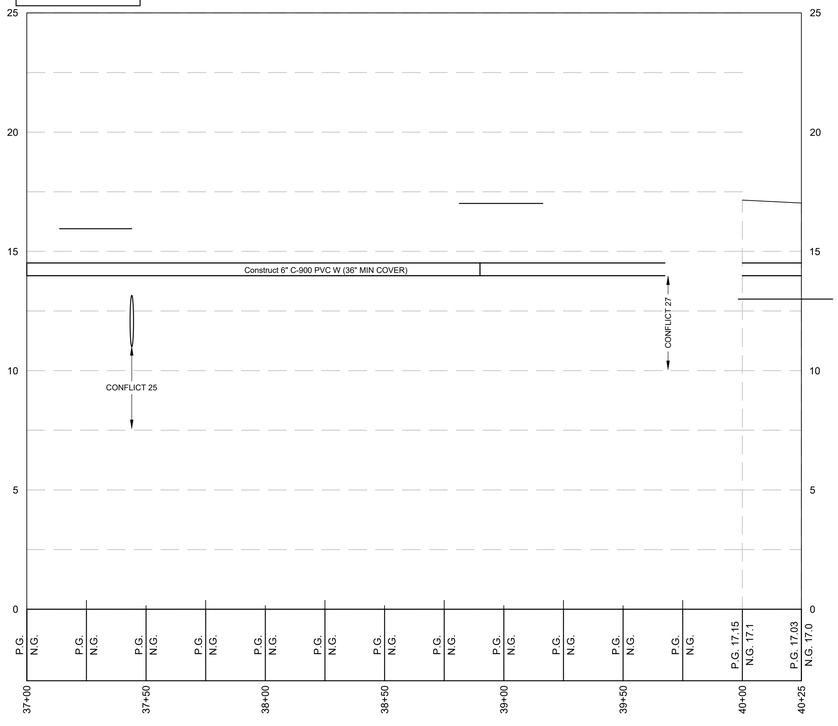
811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\SR24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

ROADWAY 3
30+00.00 TO 37+00.00
SCALE: 1" = 30'H 3'V



ROADWAY 3
37+00.00 TO 40+24.75
SCALE: 1" = 30'H 3'V



LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	(#)	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PROFILES

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

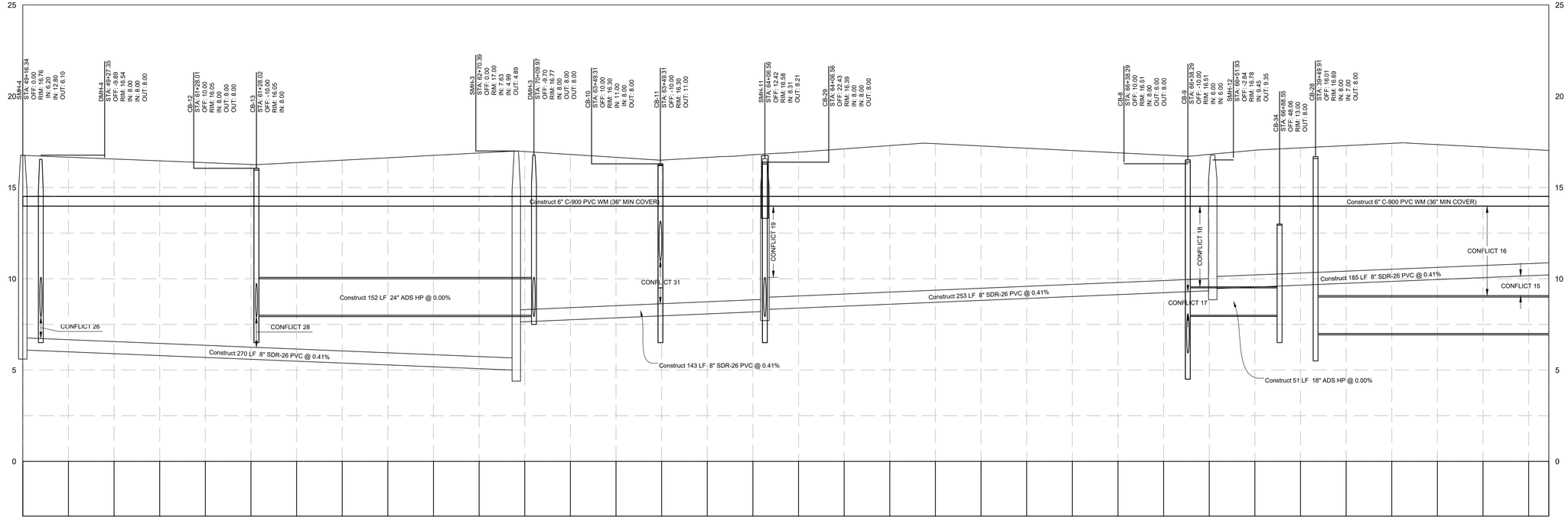
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

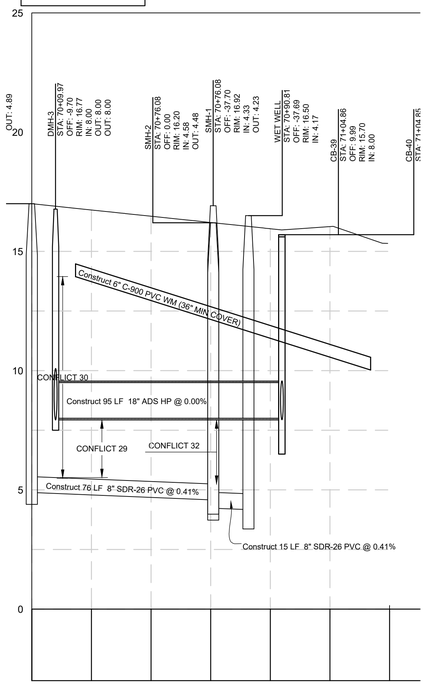
DRAWING No. **C-120** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\R3\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

ROADWAY 4
60+00.00 TO 68+36.04
SCALE: 1" = 30'H 3'V



ROADWAY 5
70+00.00 TO 71+71.36
SCALE: 1" = 30'H 3'V



PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY PROFILES

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-121** REV.

LEGEND

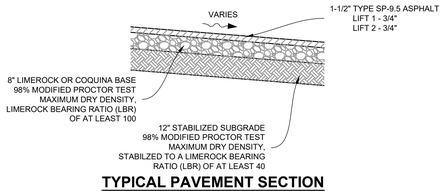
	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	HANDICAP PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

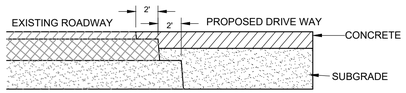
FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\R24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

SPACING OR REQUIRED ROADWAY / PARKING AREA TESTS						
ITEMS TO BE TESTED	DENSITY		L.B.R.		THICKNESS	
	MAX. SPACING		MAX. SPACING		MAX. SPACING	
	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.	LIN.FT.	SQ.FT.
COMPACTED OR STABILIZED SUBGRADE	300	10,000	300	10,000	300	10,000
LIMEROCK BASE	300	10,000	300	10,000	300	10,000
SHELLROCK BASE	300	10,000	300	10,000	300	10,000
ASPHALT	—	—	—	—	PER INSP.	PER INSP.

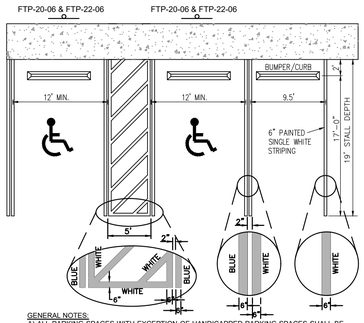
NOTE: ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 12" INSIDE THE LEFT EDGE OF THE ITEM TESTED, TO THE CENTER, TO A POINT 12" INSIDE



TYPICAL PAVEMENT SECTION
NTS



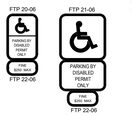
MATERIAL BENCHING DETAIL (TO EXISTING ROADWAY)
NTS



GENERAL NOTES:
A) ALL PARKING SPACES WITH EXCEPTION OF HANDICAPPED PARKING SPACES SHALL BE MARKED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,2010 SECTION 710.

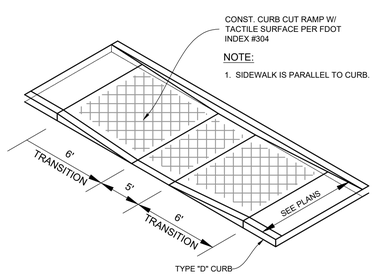
B) ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 17346, FY 2017-18.

C) ALL COMPACT SPACES SHALL BE MARKED "COMPACT" ON THE STALL OR TIRE STOP.



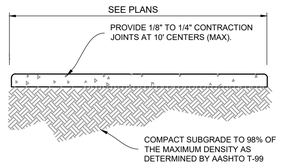
NOTES:
1. FTP 20-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
2. FTP 21-06: TOP PORTION SHALL HAVE REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 IS FOR USE IN AREAS WHERE SPACE IS LIMITED.
4. FTP 22-06 IS SUPPLEMENTAL PANEL FOR THE FTP 20-06 & FTP 21-06 SIGNS.
5. HEIGHT SHALL BE 7 FEET MEASURED FROM THE GROUND OR SIDEWALK TO THE BOTTOM OF "PERMIT ONLY" SIGN OR 6 FEET TO THE BOTTOM OF "$250 FINE" SIGN.
6. REFER TO FDOT INDEX No. 711-001 FOR PAVEMENT MARKING DETAILS & FDOT INDEX No. 700-102 SIGN DETAILS PER THE LATEST FDOT DESIGN STANDARDS.

HANDICAP AND TYPICAL PARKING DETAIL
NTS



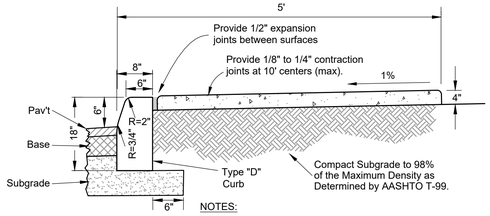
NOTE:
1. SIDEWALK IS PARALLEL TO CURB.

HANDICAP RAMP DETAIL
NTS



NOTES:
1. USE 3,000 P.S.I. CONCRETE AT 28 DAYS FOR SIDEWALK CONSTRUCTION.
2. SIDEWALK THICKNESS TO BE INCREASED TO 6" THICK AT DRIVEWAY LOCATIONS.
3. ALL REPAIRS REQUIRED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED 10' MINIMUM TO NEXT FULL JOINT.
4. ALL SIDEWALK WITHIN FDOT RIGHT-OF-WAY TO BE CONSTRUCTED PER STANDARD PLANS 522-001.

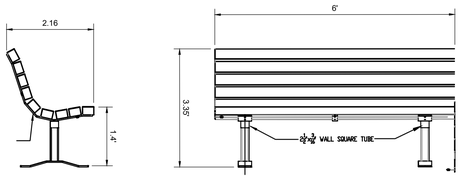
TYPICAL SIDEWALK DETAIL
NTS



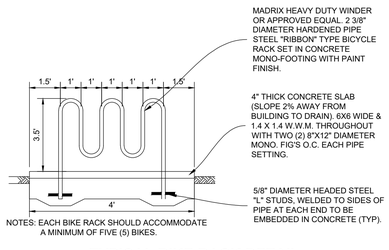
NOTES:
1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.

TYPE "D" CURB & SIDEWALK COMBINATION
NTS



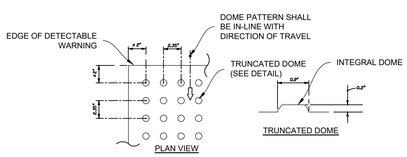


6' CONTOUR BENCH DETAIL
NTS



NOTES: EACH BIKE RACK SHOULD ACCOMMODATE A MINIMUM OF FIVE (5) BIKES.

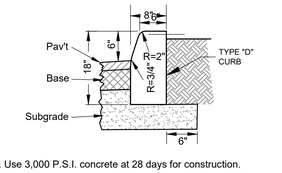
TYPICAL BIKE RACK DETAIL
NTS



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB

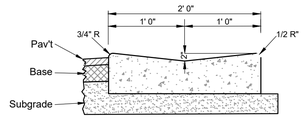
NOTES:
REFER TO FDOT INDEX 304 FOR FURTHER DETAILS
CAST IN PLACE

DETECTABLE WARNING SURFACE DETAIL
NTS



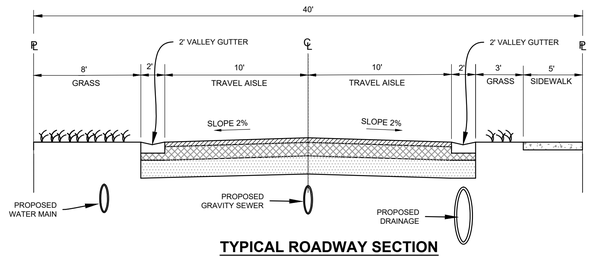
1. Use 3,000 P.S.I. concrete at 28 days for construction.
2. Subgrade to extend an additional 6" beyond Type "D" Curb.
3. Type "D" Curb to be constructed in accordance with FDOT Index #522-001.

TYPE "D" CURB DETAIL
NTS

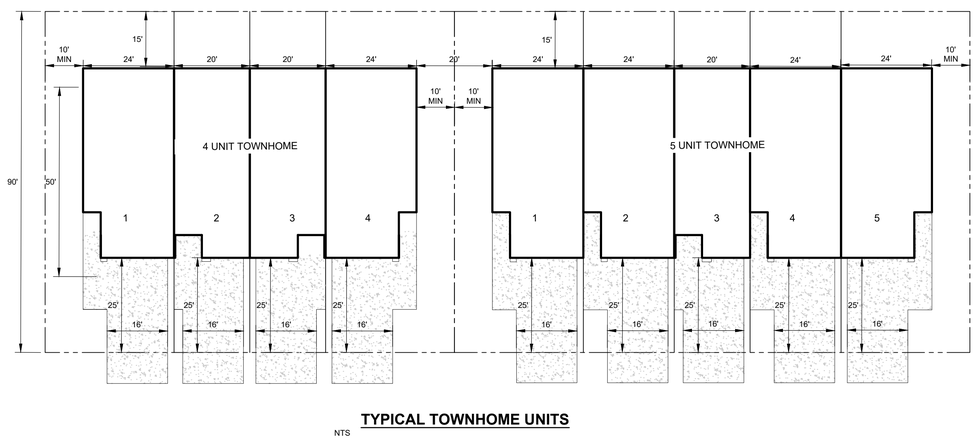


NOTES:
3,000 P.S.I. CONCRETE AT 28 DAYS

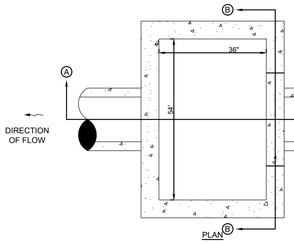
VALLEY GUTTER DETAIL
NTS

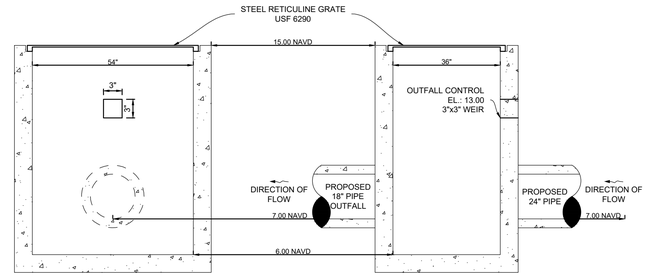


TYPICAL ROADWAY SECTION
NTS



TYPICAL TOWNHOME UNITS
NTS





NOTES:
1. REFER TO F.D.O.T. STANDARD INDEX FOR ADDITIONAL PLANS 425-001, 425-010, AND 425-052 FOR INFORMATION.
2. SOD ALL DISTURBED AREAS AND POND SIDE BANKS.

(CS-1) CONTROL STRUCTURE MODIFIED E TYPE INLET
NTS

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
PAVING, GRADING, & DRAINGE DETAILS

DATE	SCALE
2025.05.06	AS SHOWN

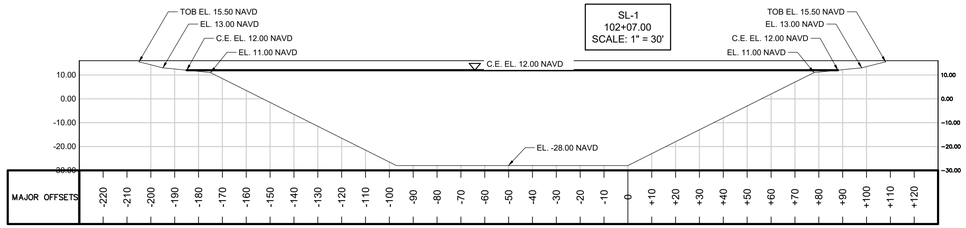
DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

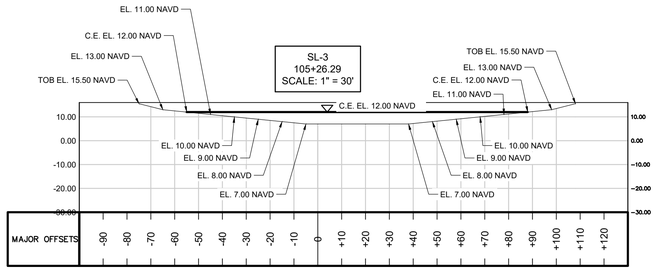
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

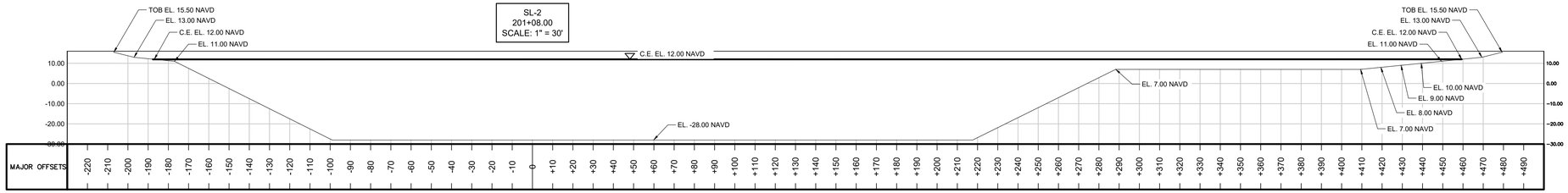
MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

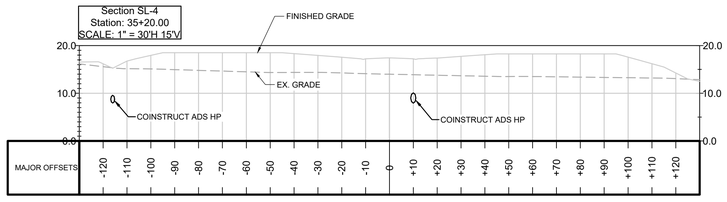
DRAWING No. **C-501** REV.

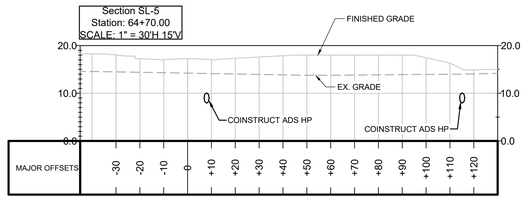
FILE LOCATION: Z:\EDC-2024\24-237 - GARZALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

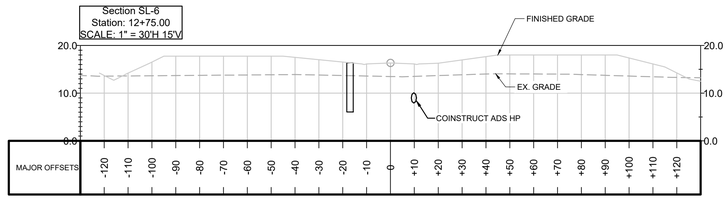


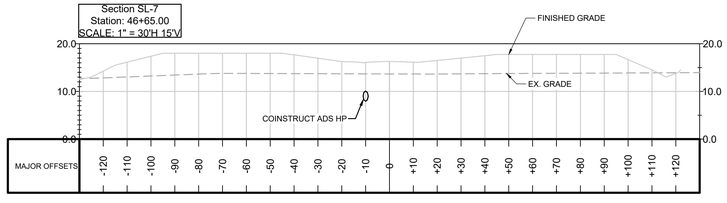


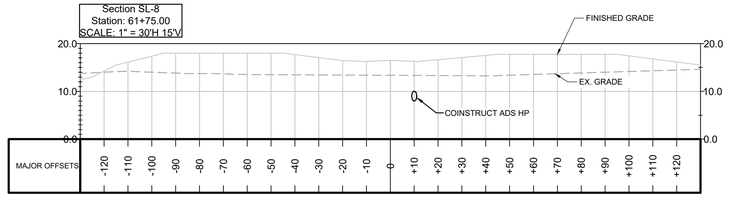












REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

LAKE SECTIONS

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-502** REV.

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

FILE LOCATION: Z:\EDC-2024\24-237 - GARDALO - SUNRISE BLVD, (PRIVATE)\E NORTH\ENGINEERING\AUTOCAD\DWG\R24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.
5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED
6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/ COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/ COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION		G-1 NOTES
02-06 DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 2

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITIES AUTHORITY SPECIFICATIONS.
20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE, CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. – 2 HR MINIMUM TEST

$$L = \frac{SD(P)\ 1/2}{148{,}000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45% AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED, WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION		G-1 NOTES
02-06 DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 2 OF 2

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS		G-2 CONSTRUCTION NOTES
02-06 DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

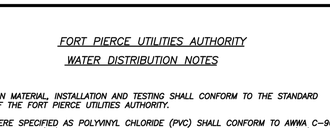
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT
02-06 DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

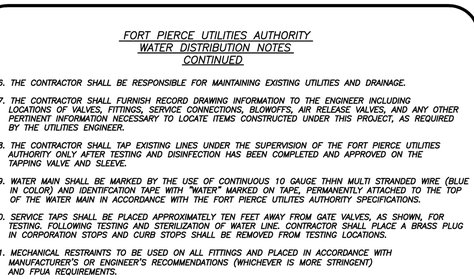


DENSITY REQUIREMENTS:
- 100% T-99, EXCAVATION & EMBANKMENT
- 100% T-99, COMPACTED SUBGRADE
- 98% T-180, STABILIZED SUBGRADE
- 98% T-180, ROADWAY (65% T-180, BYLD. PAVM'T.) } LIMEROCK SHELL
- 98% T-180, DRIVEWAYS
- 95% T-180, UNPAVED AREAS BEYOND THE 2 TO 1 SLOPE FROM EDGE OF PAVEMENT

NOTES:
1. PAVEMENT RESTORATIONS FOR LONGITUDINAL CUTS IN ALL STREETS SHALL BE FULL LANE WIDTH, WITH FULL LANE WIDTH RESURFACING FOR EACH LANE WITHIN THE LIMITS OF THE CUT.
2. WHEN AN ARTERIAL OR MAJOR COLLECTOR STREET IS OPEN CUT WITHIN THE LIMITS OF THE ROADWAY INTERSECTION, THE ENTIRE INTERSECTION SHALL BE OVERLAID WITH ASPHALTIC CONCRETE.
3. WHEN STREETS OTHER THAN ARTERIALS OR MAJOR COLLECTIONS ARE OPEN CUT MORE THAN TWO TIMES AT THE INTERSECTION, THE ENTIRE INTERSECTION SHALL BE OVERLAID WITH ASPHALTIC CONCRETE. TWO OPEN CUTS OR LESS AT THE INTERSECTION WILL REQUIRE OVERLAYING WITH ASPHALT ONLY IN THE OPEN CUT AREA.
4. THE CONTRACTOR SHALL BE REQUIRED TO DOCUMENT ALL PAVEMENT MARKINGS PRIOR TO OVERLAY. THE CONTRACTOR SHALL THEN PLACE NEW PAVEMENT MARKINGS AT THE SAME LOCATIONS. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE TO F.D.O.T. SECTION 711.
5. 2500 PSI CONCRETE SHALL MATCH EXISTING BASE (6" MIN.)

ST. LUCIE COUNTY WATER & WASTEWATER CONSTRUCTION STANDARDS	UTILITY ROAD CUT PAVEMENT RESTORATION
	DRAWING NUMBER G-13

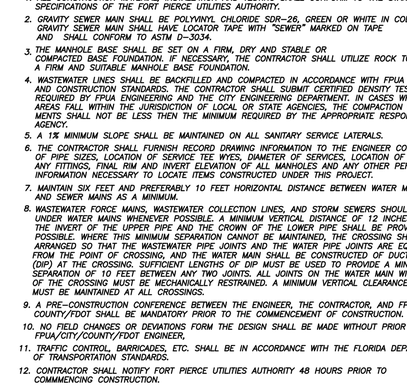
PAVEMENT RESTORATION (COUNTY)		R-2
DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1



* INITIAL BACKFILL SHALL BE PLACED TO 12" ABOVE THE PIPE IN 6" LIFTS. BACFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO METHOD T-99. UPPERMOST 12" BE COMPACTED TO 98% OF T-99.

** LIMEROCK OR CRUSHED COQUINA COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO METHOD T-180

PAVEMENT RESTORATION DETAIL WITH TRENCH CITY REQUIREMENTS		R-3
DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1



(A) OVERLAY 2IN FEET FROM CENTER LINE OF TRENCH, BOTH SIDES OF OPEN CUT WITH 1" MINIMUM TYPE S-III ASPHALT OR MATCH EXISTING SURFACE MATERIAL WHEN POSSIBLE.

(B) CONSTRUCT 2.0' DEEP X WIDTH AND LENGTH OF TRENCH WITH CEMENTED COQUINA OR LIMEROCK. SEE SPECIFICATIONS NOTE #5 BELOW FOR COMPACTION REQUIREMENTS.

(C) PROVIDE CLEAN BACKFILL. BACKFILL SHALL BE REPLACED IN 8" LAYERS. EACH LAYER SHALL BE MECHANICALLY COMPACTED TO A MINIMUM 100% DENSITY AS DETERMINED BY AASHTO T-99, METHOD "D".

(D) DITCH WIDTH (W)+12", MATCH EXISTING TYPE AND THICKNESS OF ASPHALT OR TYPE S-III.

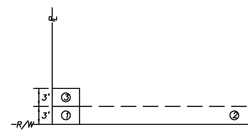
NOTES:
1. REPLACED BASE MATERIAL OVER DITCH SHALL BE AS SHOWN ABOVE.
2. BASE MATERIAL SHALL BE PLACED IN 8" LAYERS OR AS OTHERWISE APPROVED AND EACH LAYER THOROUGHLY MECHANICALLY COMPACTED TO (98%) DENSITY AS DETERMINED BY AASHTO T-180.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
4. ALL PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
5. SURFACE MATERIAL WILL BE CONSISTENT WITH EXISTING SURFACE OR AS DIRECTED BY ENGINEER (TYPE S-III) AND PLACED IN ACCORDANCE WITH FDOT REQUIREMENTS.
6. A MINIMUM OF TWO DENSITY TESTS SHALL BE TAKEN FOR EACH 500 (S) INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. WHEN THE SPECIFIED COMPACTED BASE IS GREATER THAN SIX AND ONE-HALF (6-1/2) INCHES THE BASE SHALL BE CONSTRUCTED IN TWO OR MORE COURSES. PROCTORS FOR MATERIALS USED IN BACK-FILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED SOILS TECHNICIAN. ALL TESTING SHALL BE IN ACCORDANCE WITH THE SPECIFIED CODE OF MINIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO THE ENGINEER'S OFFICE PRIOR TO FINAL INSPECTION.

ST. LUCIE COUNTY WATER & WASTEWATER CONSTRUCTION STANDARDS	FLEXIBLE PAVEMENT REPLACEMENT DETAIL
	DRAWING NUMBER G-12

FLEXIBLE PAVEMENT REPLACEMENT DETAIL		R-4
DATE:	REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY, DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.



NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. WATER METER, AREA (1) SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE WATER METER. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO WATER SERVICES AND METERS CAN BE CONNECTED.
2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. WATER SERVICE, WITHIN AREA (1) , THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA (2) , OR ALONG THE PROPERTY LINES MARKED AREA (3) .
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF 6 FEET AND PREFERABLY 10 FEET.
4. ALL METERS SHALL BE INSTALLED IN AN UNRESTRICTED AREA FOLLOWING EASE OF ACCESS AND PROVIDING ADEQUATE PROTECTION.
5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WATER METER PLACEMENT
(N.T.S.)

FPUA COMMUNITY OWNED	WATER METER PLACEMENT POLICY		W-1
FT. PIERCE UTILITIES AUTHORITY 921 SOUTH 8TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	03-09 DATE:	02-15 REVISION: SLL BY: APPD:	WATER/WASTEWATER ENGINEERING
	DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
	DRAWN BY: SLL	SCALE: N.T.S.	
	APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

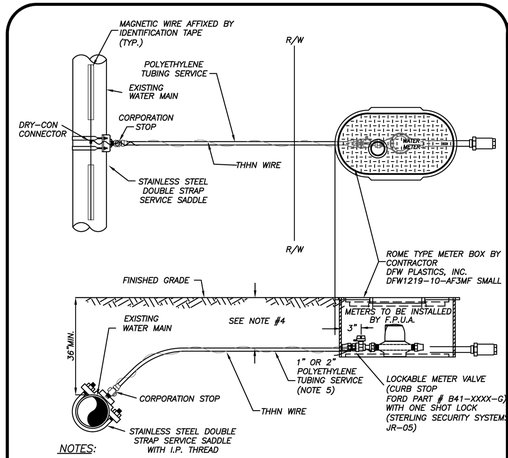
PROJECT
SUNRISE BLVD
FORT PIERCE

TITLE
UTILITY DETAILS

DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL / CHECKED BY: MDL
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.
DRAWING No.: C-503	REV.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

FILE LOCATION: Z:\EDC-2024\24-237 - GARDAFALO - SUNRISE BLVD, (PRIVATE ELGE NORTH)\ENGINEERING\AUTOCAD\DWG\R24-237 ENGINEERING R3.DWG, 2025.06.11, 8:07 AM

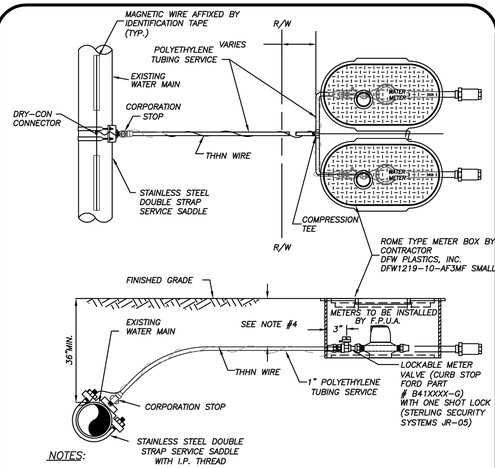


NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".
5. FOR 2" COMMERCIAL SERVICE INSTALLATIONS, FPUA WILL INSTALL ABOVE GROUND METER PER DETAIL W-8.

TYPICAL SINGLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	TYPICAL SINGLE WATER SERVICE CONNECTION				W-2
03-09 DESIGN		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATER DETAIL 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2020			SHEET 1 OF 1	

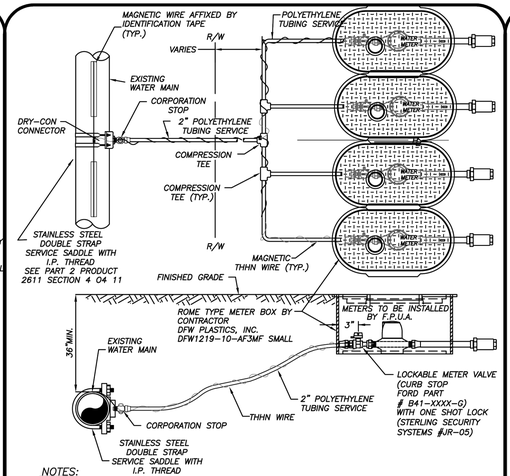


NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

TYPICAL DOUBLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	TYPICAL DOUBLE WATER SERVICE CONNECTION				W-3
03-09 DESIGN		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2020			SHEET 1 OF 1	

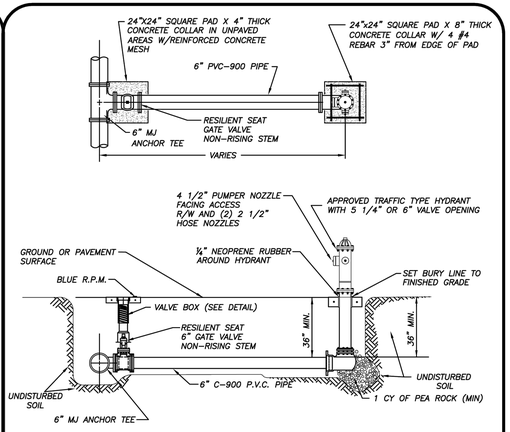


NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RAN TO OUTER METERS ONLY.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

TYPICAL MULTIPLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	TYPICAL MULTIPLE WATER SERVICE CONNECTION				W-4
03-09 DESIGN		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2020			SHEET 1 OF 1	

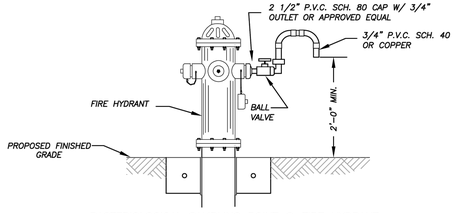


NOTES:

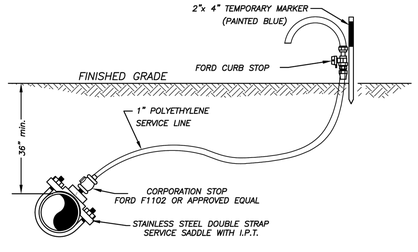
1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: MUELLER SUPER CENTURION 250 OR AMERICAN DARLING B-84-B-5.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE MECHANICAL JOINT.
7. ENTIRE ASSEMBLY TO BE MECHANICALLY RESTRAINED.
8. BLUE LOCATOR SHALL BE PLACED IN CENTER OF TRAVEL LANE CLOSEST TO HYDRANT.
9. ALL HYDRANT VALVE BOX COVERS SHALL BE PAINTED CARNIVAL RED.
10. LOCATE WIRE SHALL TERMINATE AT HYDRANT ISOLATION VALVE
11. HYDRANTS SHALL BE NO MORE THAN FIFTEEN FEET (15 FT.) FROM THE CURB OF ROADWAYS OR FROM THE EDGE OF PAVEMENT. CLEARANCES OF SEVEN AND ONE HALF FEET (7FT-6IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANTS, WITH FOUR FOOT (4 FT.) CLEARANCE TO THE REAR OF HYDRANTS SHALL BE MAINTAINED.

TYPICAL FIRE HYDRANT ASSEMBLY
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	TYPICAL FIRE HYDRANT ASSEMBLY				W-5
03-09 DESIGN		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1	



BACTERIOLOGICAL SAMPLING POINT @ FIRE HYDRANT
(N.T.S.)

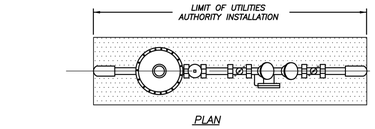


BACTERIOLOGICAL SAMPLING POINT @ WATER MAIN
(N.T.S.)

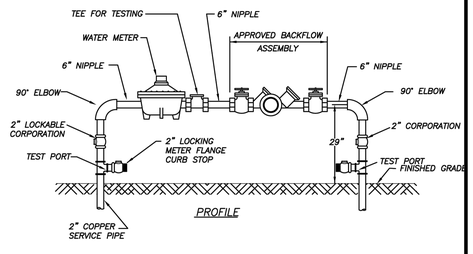
NOTE:

AFTER TESTING REMOVE 1" P.E. LINE AND CAP WITH BRASS PLUG AT CORPORATION STOP.

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	BACTERIOLOGICAL SAMPLING PONIT DETAIL				W-6
03-09	02-15	SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1	



PLAN



PROFILE

NOTES:

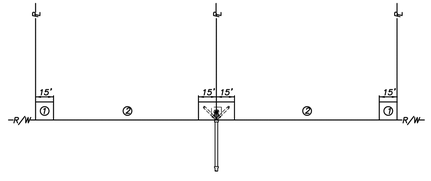
1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	WATER METER/BACKFLOW PREVENTER ASSEMBLY-DOMESTIC SERVICES (METER SIZE 2" OR LESS)				W-8
03-09 DESIGN		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1	

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY. DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.

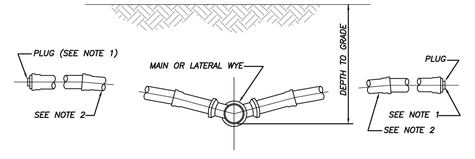


NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. SEWER LATERAL, AREA ① , SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE LATERAL. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO LATERALS CAN BE CONNECTED IN A "Y" CONFIGURATION AS SHOWN.
2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. SEWER LATERAL, WITHIN AREA ① , THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ② .
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF SIX FEET AND PREFERABLY 10 FEET.
4. THE WASTEWATER LATERAL SHALL BE LOCATED WITHIN RIGHT-OF-WAY AND TERMINATE AT THE PROPERTY LINE.
5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WASTEWATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WASTEWATER SERVICE PLACEMENT
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	WASTEWATER SERVICE PLACEMENT POLICY				S-1
02-06	02-15	SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLM	COMPUTER FILE # SEWER DETAIL 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1	



NOTES:

1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD — FT. PIERCE UTILITIES AUTHORITY, WATER/WASTEWATER/ENGINEERING, 1701 SOUTH 5TH STREET, FT. PIERCE, FLORIDA 34947, 772-466-1600	SERVICE CONNECTION WASTEWATER				S-2
02-06		SLL	JLC		
DATE:	REVISION:	BY:	APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG				FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.				
APPROVED: JLC	DATE: 2015			SHEET 1 OF 1	

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

UTILITY DETAILS

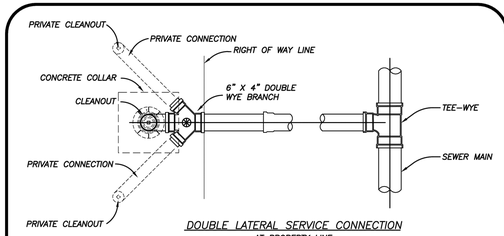
DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY / DESIGNED BY / CHECKED BY	
JLW / MDL / MDL	
PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

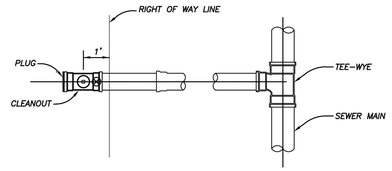
DRAWING No. C-504 REV.

811 Know what's below. Call before you dig. www.callsunshine.com — It's fast. It's free. It's the law.

FILE LOCATION: Z:\EDC-2024\24-237 - GM\DP\ALO - SUNRISE BLVD_(PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:09 AM



DOUBLE LATERAL SERVICE CONNECTION
AT PROPERTY LINE



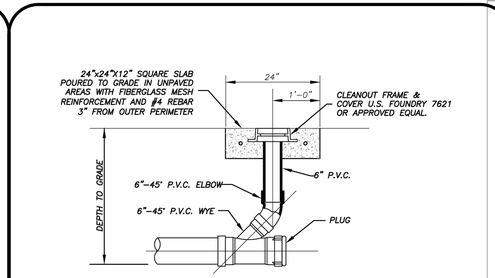
SINGLE SERVICE LATERAL CONNECTION

⊛ = BALL TYPE WASTEWATER LOCATOR INSTALLED ABOVE THIS POINT
BALL BY 3M CORP. OR APPROVED EQUAL

SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT

SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	SERVICE CONNECTION WASTEWATER	S-3
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	02-06 DATE: REVISION: BY: APPD: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC COMPUTER FILE # SEWER DET-IL 2006O2.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



SECTION

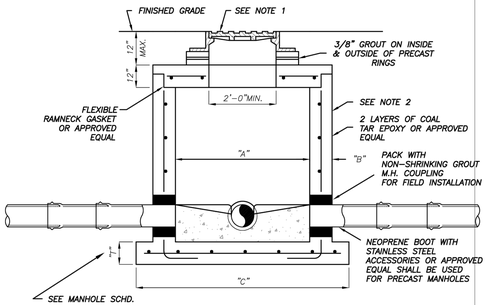
PLAN

NOTES:

1) SEE DETAIL S-3 FOR DOUBLE SERVICE CONNECTION.

RESIDENTIAL CLEANOUT DETAIL
(N.T.S.)

FPUA COMMUNITY PROUD	TERMINAL CLEANOUT DETAIL RESIDENTIAL	S-4A
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	10-06 DATE: REVISION: RRK BY: APPD: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC COMPUTER FILE # SEWER DETAIL 2006O2.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 3



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"8"	76"	8"
30"-36"	5'-0"	"8"	88"	10"
42"-48"	6'-0"	"8"	100"	12"

TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.

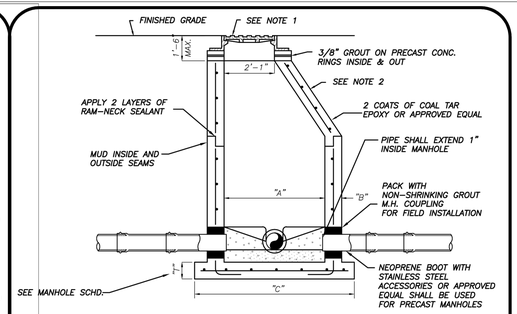
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.

3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.

4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

SHALLOW MANHOLE
DEPTH OF LESS THAN 5'-0"
(N.T.S.)

FPUA COMMUNITY PROUD	PRECAST MANHOLE DEPTH OF LESS THAN 5'-0"	S-6
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	02-06 DATE: REVISION: BY: APPD: DESIGNED: JLM DRAWN BY: JLM APPROVED: JLC COMPUTER FILE # SEWER DETAIL 2006O2.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"8"	76"	8"
30"-36"	5'-0"	"8"	88"	10"
42"-48"	6'-0"	"8"	100"	12"

TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.

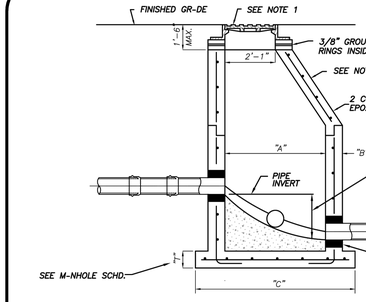
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.

3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.

4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

STANDARD MANHOLE
DEPTH 5'-0" AND GREATER
(N.T.S.)

FPUA COMMUNITY PROUD	PRECAST MANHOLE DEPTH 5'-0" & GREATER	S-7
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	02-06 DATE: REVISION: BY: APPD: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC COMPUTER FILE # SEWER DETAIL 2006O2.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



PIPE DI-.	"-"	"B"	"C"	BOT. SL-B "T"
8"-24"	4'-0"	"8"	76"	8"
30"-36"	5'-0"	"8"	88"	10"
42"-48"	6'-0"	"8"	100"	12"

TYPIC-L M-NHOLE DIMENSIONS

NOTES:

1) M-NHOLE FR-ME & COVER WITH THE WORDS " S-NIT-RY SEWER" C-ST IN THE COVER. U.S. FOUNDRY 170 OR -PPROVED EQU-L.

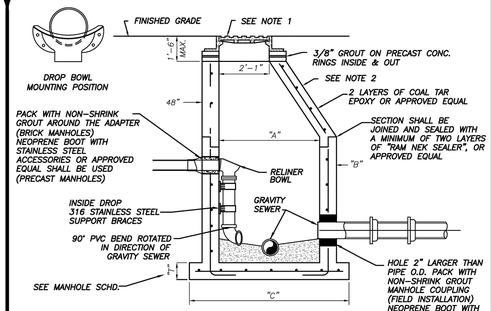
2) -LL CONCRETE M-NHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED -STM C478 -LL CEMENT TO BE TYPE II -CID RESIST-NT. REINFORCING -RE- OF 0.02 SQ. IN/FT FOR W-LL SECTION MIN. TO MEET OR EXEED -STM - 185.

3) - M-XIMUM OF 2 L-YERS OF PREC-ST CONCRETE RINGS, IF REQUIRED.

4) R-INGU-RDS SH-LL BE INST-LLED IN M-NHOLES TH-T H-VE GR-VITY M-INS 12" OR LESS.

INSIDE DROP M-NHOLE
(TO BE USED WHERE DROP IS LESS TH-N 2')
(N.T.S.)

PORT PIERCE UTILITIES AUTHORITY	INSIDE DROP MANHOLE (TO BE USED WHERE DROP IS LESS TH- 2')	S-9
	02-06 D-TE: REVISION: BY: -PPD: DESIGNED: JLC DR-WN BY: SLL -PPROVED: JLC COMPUTER FILE # SEWER DET-IL 2006O2.DWG SCALE: N.T.S. D-TE: 2010	W-TER/W-STEW-TER ENGINEERING FT. PIERCE UTILITIES -UTHORITY SHEET 1 OF 1



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	5'-0"	"8"	70"	8"
30"-36"	6'-0"	"8"	84"	10"
42"-48"	7'-0"	"8"	96"	12"

TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.

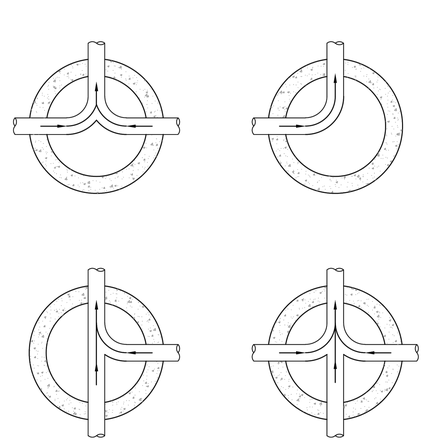
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.20IN/FT FOR WALL SECTION MIN. TO MEET OR EXEED ASTM A 185.

3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.

4) ONLY RELINER/DURAN, INC. PRODUCTS ARE APPROVED FOR CONSTRUCTING INSIDE DROP ASSEMBLIES.

INSIDE DROP MANHOLE
(TO BE USED WHERE DROP IS GREATER THAN 2')

PORT PIERCE UTILITIES AUTHORITY	INSIDE DROP MANHOLE	S-9A
	07-09 INSIDE DROP MANHOLE SLL JLC DATE: REVISION: BY: APPD: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC COMPUTER FILE # SEWER DETAIL 2006O2.DWG SCALE: N.T.S. DATE: 2014	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



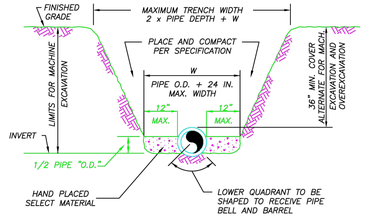
NOTES:

1) INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.

2) SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.

FLOW PATTERNS
FOR INVERT CHANNELS

FPUA COMMUNITY PROUD	FLOW PATTERNS FOR INVERT CHANNELS	S-12
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	DATE: REVISION: BY: APPD: DESIGNED: JLM DRAWN BY: JLM APPROVED: JLC COMPUTER FILE # SEWER DETAIL 2006O2.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.

2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

FPUA COMMUNITY PROUD	TYPICAL TRENCH DETAIL	M-1
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 5TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600	13-09 CONCRETE SLAB SLL JLC DATE: REVISION: BY: APPD: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC COMPUTER FILE # MISC DETAILS 2006O2.DWG SCALE: DATE: 2015	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT
SUNRISE BLVD
FORT PIERCE

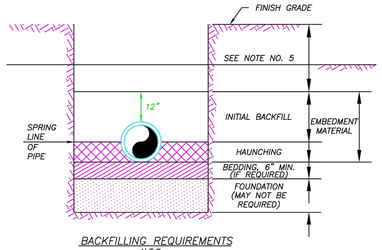
TITLE
UTILITY DETAILS

DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL / CHECKED BY: MDL
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No.: C-505
REV.:

FILE LOCATION: Z:\EDC-2024\24-237 - GM\DP\ALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:09 AM

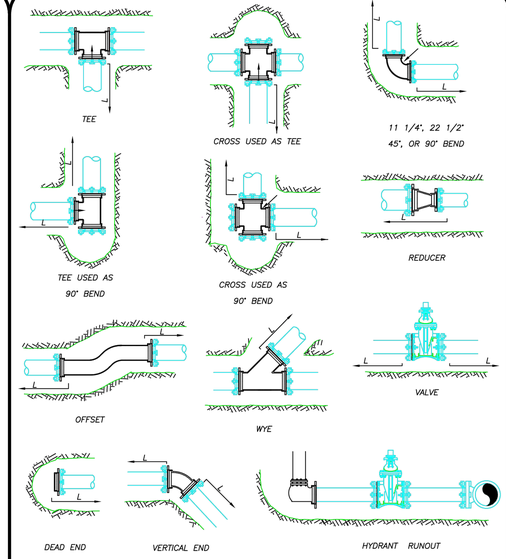


BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)
5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.
7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

BACKFILLING REQUIREMENTS			M-2
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	



MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

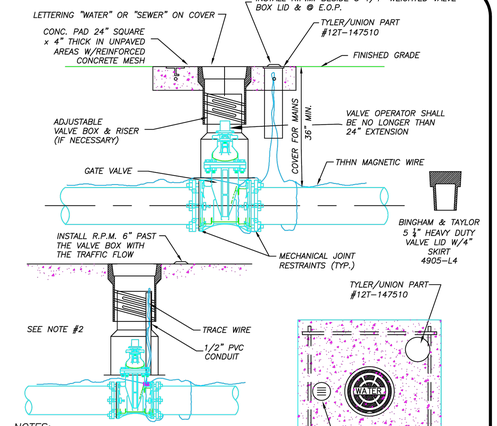
MECHANICAL JOINT ANCHORING REQUIREMENTS			M-3
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	

MECHANICAL JOINT RESTRAINT NOTES

NOTES:

1) THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIRED LENGTH TO BE RESTRAINED BASED UPON THE PROJECT AREA SOIL TYPE, PROPOSED TRENCH CONDITIONS AND DEPTH, PRESSURE OF 150 PSI, AND A SAFETY FACTOR OF TWO (2). A DRAWING OF EVERY TYPICAL FITTING ASSEMBLY WITHIN THE PROJECT SHALL BE SUBMITTED WHICH REFLECTS THE RESTRAINT DETAIL PROPOSED FOR USE, INCLUDING LENGTH OF PIPE RESTRAINT.
2) REQUIRED RESTRAINED LENGTH CALCULATIONS SHALL ALSO CONSIDER THE CONDITIONS OF OTHER BENDS OR FITTINGS THAT WILL BE LOCATED WITHIN THE CALCULATED RESTRAINED LENGTH (L) OF THE BEND OR FITTING IN QUESTION.
3) EVERY JOINT OR FITTING MUST BE RESTRAINED ON BOTH SIDES OF THE BEND AND FOR TEES ALONG THE BEND ALSO.

MECHANICAL JOINT RESTRAINT NOTES			M-4
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	

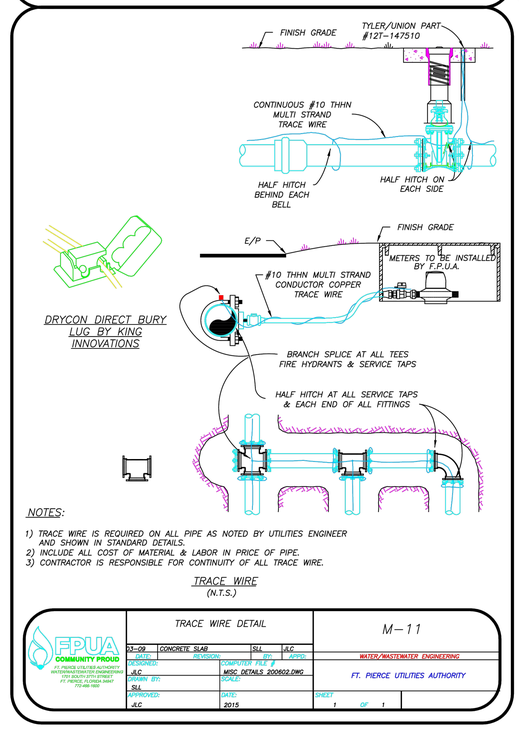


NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL
N.T.S.

TYPICAL GATE VALVE & VALVE BOX DETAIL			M-6
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	



NOTES:

1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER AND SHOWN IN STANDARD DETAILS.
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

TRACE WIRE DETAIL			M-11
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1	

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

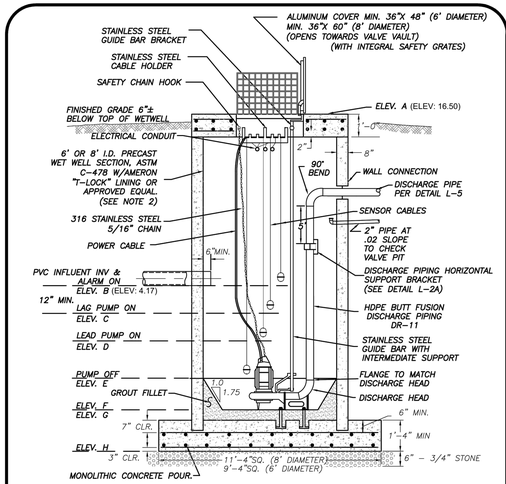
UTILITY DETAILS

DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL / CHECKED BY: MDL
PROJECT No.: 24-237	CERTIFICATE OF AUTHORIZATION No.: C.O.A. No.
DRAWING No.: C-506	REV.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

811 It's fast. It's free. It's the law.
Know what's below. Call before you dig.
www.callsunshine.com

FILE LOCATION: Z:\EDC-2024\24-237 - OAKOFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:08 AM

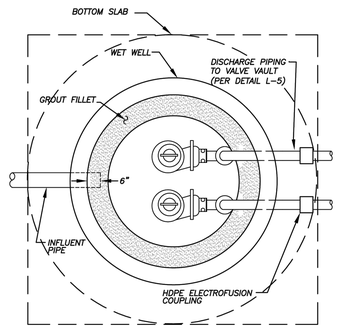


NOTES:

1. ALL INTERIOR CONCRETE SURFACES OF WET WELL NOT COVERED WITH AMERON "T-LOCK" SHALL HAVE 2 COATS OF COAL TAR EPOXY IN INSTANCES WHERE FPUA ENGINEERING DIRECTS.
2. "T-LOCK" OR APPROVED EQUAL SHALL ALSO BE REQUIRED ON ALL STRUCTURE PENETRATIONS AND THE INTERIOR OF THE TOP SLAB.
3. TRIPLEX MASTER LIFT STATIONS SHALL HAVE 12' DIAMETER WETWELL.
4. MINIMUM SIZE DISCHARGE PIPING SHALL BE AS FOLLOWS: 4" FOR 6' DIA WETWELL, 6" FOR 8' DIA WETWELL AND 8" FOR 12' DIA WETWELL.
5. STRUCTURAL DESIGN-- PER MANUFACTURERS SHOP DRAWINGS.
6. FLOATATION PER DESIGN ENGINEER.

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

LIFT STATION SECTION VIEW	L-1
2018 DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JMM	COMPUTER FILE # LIFT STATION DETAILS2006D2.DWG
DRAWN BY: JMM	SCALE: N.T.S.
APPROVED: JLC	DATE: FEBRUARY 2017
	FT. PIERCE UTILITIES AUTHORITY
	SHEET 1 OF 1

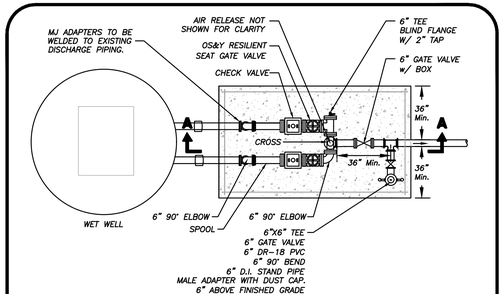


NOTE:

TOP SLAB NOT SHOWN FOR CLARITY

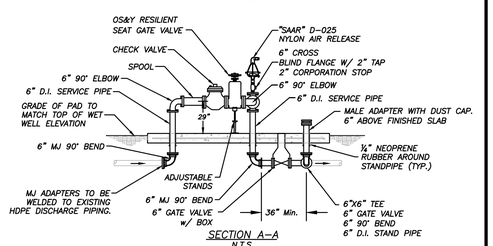
FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

LIFT STATION PLAN VIEW	L-3
DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLM	COMPUTER FILE # LIFT STATION DETAILS2006D2.DWG
DRAWN BY: JLM	SCALE: N.T.S.
APPROVED: JLC	DATE: DECEMBER 2007
	FT. PIERCE UTILITIES AUTHORITY
	SHEET 1 OF 1



TYPICAL CHECK VALVE & BY-PASS PIPING

N.T.S.

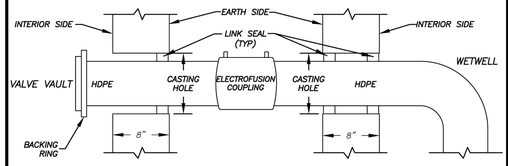


SECTION A-A

N.T.S.

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

LIFT STATION CHECK VALVE & BY-PASS PIPING	L-4
2025 DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # LIFT STATION DETAILS2006D2.DWG
DRAWN BY: SLL	SCALE: N.T.S.
APPROVED: JLC	DATE: 2025
	FT. PIERCE UTILITIES AUTHORITY
	SHEET 1 OF 1



HDPE

NOTE:

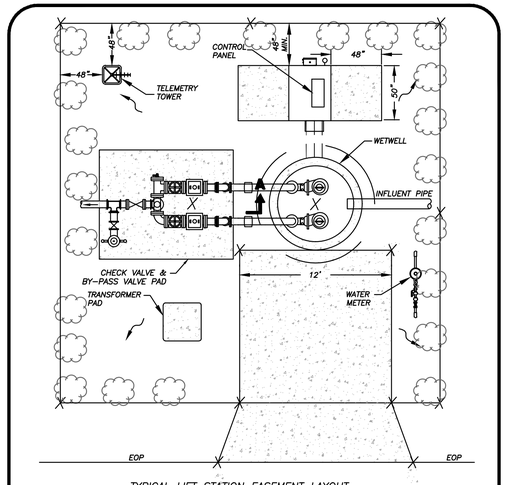
1) MODEL "OS-316" LINK-SEAL MODULAR SEALS WITH NITRILE ELEMENTS OR APPROVED EQUAL.

2) CASTING HOLE DIAMETER VARIES WITH THE SIZE OF WET-WELL DISCHARGE PIPE.

DISCHARGE PIPE	CASTING HOLE DIAMETER
4" HDPE DR-11	8 INCHES
6" HDPE DR-11	10 INCHES

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

LIFT STATION TO VALVE VAULT PIPING CONNECTION DETAIL	L-5
DATE: REVISION: BY: APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLM	COMPUTER FILE # LIFT STATION DETAILS2006D2.DWG
DRAWN BY: JLM	SCALE: N.T.S.
APPROVED: JLC	DATE: DECEMBER 2007
	FT. PIERCE UTILITIES AUTHORITY
	SHEET 1 OF 1



TYPICAL LIFT STATION EASEMENT LAYOUT

N.T.S

NOTES:

1) ONLY TO BE USED FOR GENERAL SITE LAYOUT. REFER TO FPUA'S LIFT STATIONS, PUMPS, AND CONTROL DESIGN AND CONSTRUCTION STANDARDS 02735 FOR SPECIFIC CONSTRUCTION REQUIREMENTS.
2) LANDSCAPE AROUND LIFT STATION PER LOCAL ORDINANCE. (COCO PLUM)
3) AREA TO BE LAID WITH SOD.
4) BOLD "X" REPRESENTS ELEVATIONS NECESSARY TO CONFIRM DRAINAGE AND INSTALLATION REQUIREMENTS.
5) LIFT STATION EASEMENT SHALL MEASURE 30' x 30' (MINIMUM)

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

LIFT STATION SITE LAYOUT PLAN	L-6
2018 DATE: CONCRETE PAD REVISION: SLL BY: JLC APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # LIFT STATION DETAILS2006D2.DWG
DRAWN BY: SLL	SCALE: N.T.S.
APPROVED: JLC	DATE: 2025
	FT. PIERCE UTILITIES AUTHORITY
	SHEET 1 OF 1

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD

FORT PIERCE

TITLE

UTILITY DETAILS

DATE	SCALE
2025.05.06	AS SHOWN
DRAWN BY: JLW	DESIGNED BY: MDL / CHECKED BY: MDL
PROJECT No. 24-237	CERTIFICATE OF AUTHORIZATION No. C.O.A. No.
DRAWING No. C-507	REV.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

811 Know what's below. Call before you dig. www.callsunshine.com
It's fast. It's free. It's the law.

FILE LOCATION: Z:\EDC-2024\24-237 - GARDFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWGS\24-237 ENGINEERING R3.DWG, 2025.06.11, 8:09 AM

GENERAL NOTES

1. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.

2. THE CONTRACTOR SHALL CONTACT ENGINEER OF RECORD, THE APPROPRIATE GOVERNMENTAL JURISDICTIONAL AGENCY AND ALL OTHER CONCERNED UTILITIES AT LEAST 2 FULL BUSINESS DAYS IN ADVANCE OF CONSTRUCTION OPERATIONS.

3. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PHYSICALLY LOCATING ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

4. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTIONMEETING. THE CONTRACTOR SHALL NOTIFY THE OWNER BY LETTER, PRIOR TO THE PRE-CONSTRUCTION MEETING, APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS.

5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.

6. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENHANCED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.

7. AS-BUILT PLANS: THE CONTRACTOR SHALL PROVIDE ONE (1) REPRODUCIBLE MYLAR COPY, TWO (2) BLACK LINE COPIES AND ONE (1) DIGITAL FORMAT (CAD & PDF) OF A CERTIFIED AS-BUILT SURVEY. DRAWINGS SHALL BE IN STATE PLANE COORDINATES AND MEET FPUA REQUIREMENTS. DRAWINGS SHALL BEAR THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE SURVEYOR AND SHALL BE SUBMITTED AFTER THE COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL APPROVAL. THE AS-BUILT SURVEY SHALL BE PREPARED IN PLAN AND PROFILE FORMAT BY A LICENSED PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA AND SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE FLORIDA ADMINISTRATIVE CODE AND CHAPTER 472 OF THE FLORIDA STATUES. THE DRAWINGS SHALL BE AT A SCALE COMPARABLE TO THE DESIGN DRAWINGS PREPARED BY THE ENGINEER AND SHALL REFERENCE THE BASE LINE OF SURVEY APPEARING ON THE ENGINEERING DRAWINGS. THE HORIZONTAL AND VERTICAL LOCATION OF THE ROADWAYS, DRAINAGE FACILITIES AND ALL APPURTENANCES SHALL BE ACCURATELY DEPICTED TO SCALE AND SHALL BE IDENTIFIED RELATIVE TO THE BASE LINE AND TO READILY IDENTIFIABLE PERMANENT OR SEMI-PERMANENT REFERENCE POINTS EXISTING AFTER THE COMPLETION OF CONSTRUCTION. LOCATIONS SHALL BE SHOWN FOR ALL FITTINGS, VALVES, HYDRANTS, MANHOLES, SAMPLE POINTS, AIR RELEASES, ETC., BOTH HORIZONTAL AND VERTICAL, AND THE LOCATION OF THE MAIN AT EACH BASELINE STATION AS SHOWN ON THE PLANS (100 FEET MAXIMUM) BOTH HORIZONTAL AND VERTICAL. UNDERGROUND FACILITIES (I.E., DRAINAGE, GAS, ELECTRIC, TELEPHONE, ETC.) CROSSING THE MAINS SHALL BE ACCURATELY SHOWN BOTH HORIZONTAL AND VERTICAL AND SHALL IDENTIFY SIZE, TYPE, FACILITY, MATERIAL AND CLEARANCE. ALL INFORMATION SHALL BE BASED UPON MEASUREMENTS AND OBSERVATIONS MADE IN THE FIELD BY THE SURVEYOR CERTIFYING THE SURVEY OR BY PERSONNEL UNDER HIS EMPLOYMENT, DIRECTION AND SUPERVISION. THE COST FOR PREPARING AND MAINTAINING THE AS-BUILT PLANS SHALL BE COVERED UNDER PAY ITEM 102-2A.

8. THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION WHICH WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION. THIS PLAN SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC AND STAGING PLAN.

9. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2025-2026, AND STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION DATED 2018. UTILITY CONSTRUCTION TO CONFORM TO THE FPUA UTILITY STANDARDS MANUAL.

10. ALL UNDERGROUND MUNICIPAL UTILITIES, FIBER OPTIC, TELEPHONE, FPL, LOCAL CABLE AND ALL OTHER LOCAL UTILITY COMPANY LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL EXPOSE ALL CROSSINGS WITH PUBLIC & PRIVATE UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR SHALL USE EXTREME CAUTION WITHIN THE VICINITY OF PUBLIC & PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST THE PRESENCE OF THE RESPECTIVE UTILITY REPRESENTATIVES DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES EVEN IF A PROFILE OF THE UTILITY FACILITIES IS PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PUBLIC & PRIVATE UTILITIES AND VERIFYING / OBTAINING THE LOCATION(S) OF THESE FACILITIES.

11. ANY NGVD 29 AND NAVD 88 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY:

    GEODETIC INFORMATION CENTER
    ATTN: MARK MAINTENANCE CENTER
    ATTN: M/CG - 162
    6001 EXECUTIVE BOULEVARD
    ROCKVILLE, MD 20852
    TELEPHONE: (301) 443-8319

    CITY OF FORT PIERCE
    ATTN: JACK ANDREWS, P.E.
    PUBLIC WORKS DEPARTMENT
    100 N. U.S. HIGHWAY 1
    FORT PIERCE, FL 34950
    TELEPHONE: (772) 467-3773

12. CONTRACTOR TO UTILIZE "APPROVED FOR CONSTRUCTION" PLANS ONLY. ANY PLANS NOT "APPROVED FOR CONSTRUCTION" SHALL BE CONSIDERED PRELIMINARY AND SHOULD NOT BE USED FOR BIDDING OR CONSTRUCTION.

13. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING.

14. SHOP DRAWINGS ARE REQUIRED ON ALL STRUCTURES. THE ENGINEER REQUIRES FIVE (5) BUSINESS DAYS TO REVIEW SHOP DRAWINGS AFTER RECEIPT. ADDITIONAL TIME MAY BE REQUIRED IF LOCAL GOVERNMENT OR MUNICIPALITIES REQUIRE AN INTERNAL REVIEW AND APPROVAL PROCESS.

15. CONCRETE SHALL BE CLASS I - 3,000 PSI MINIMUM COMPRESSIVE STRENGTH UNLESS NOTED OTHERWISE. REINFORCING SHALL BE GRADE 60 DEFORMED STEEL BARS IN ACCORDANCE ASTM A-615.

16. CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, LANDSCAPE FEATURES, TREES AND UTILITIES NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY ITEM DAMAGED BY CONSTRUCTION ACTIVITY TO MEET ALL APPLICABLE CURRENT CODES. ANY REPAIRED / REPLACED ITEMS ARE SUBJECT TO REVIEW AND APPROVAL BY APPLICABLE LOCAL JURISDICTIONAL AGENCY.

17. ALL PROPOSED UTILITY MATERIALS, CONSTRUCTION METHODS, TESTING AND DISINFECTION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT LOCAL UTILITY COMPANY STANDARDS AND AWWA CURRENT STANDARD. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AND UTILIZE A CURRENT COPY OF THE ST. LUCIE COUNTY UTILITIES DESIGN AND CONSTRUCTION STANDARDS AND/OR FPUA WATER AND WASTEWATER DESIGN AND CONSTRUCTION STANDARDS AND ENSURE ALL CONSTRUCTION IS IN ACCORDANCE WITH THEIR STANDARDS. ANY CONFLICT WITH THE CONSTRUCTION DRAWINGS AND THE LOCAL UTILITY COMPANY SHALL BE RESOLVED UTILIZING THE MOST STRINGENT DIRECTIONS.

18. ALL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS SHALL BE PROTECTED AND UNDISTURBED. IN THE EVENT THAT A CONTROL POINT IS DISTURBED OR DESTROYED, THE POINT SHALL BE RE-ESTABLISHED BY A FLORIDA REGISTERED LAND SURVEYOR. THE METHOD TO RE-ESTABLISH THE POINT SHALL BE APPROVED BY THE CITY / COUNTY ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

19. THE CONTRACTOR SHALL PREPARE A COMPLETE VIDEO RECORD OF THE PROJECT SITE BEFORE BEGINNING ANY WORK. THE VIDEO RECORD SHALL INCLUDE ALL ROADWAY, DRAINAGE AND UTILITIES POINTS OF CONNECTION AND SHALL EXTEND A MINIMUM OF 1800 FEET BEYOND THE WORK LIMITS TO DOCUMENT THE EXISTING CONDITIONS. THE CONTRACTOR SHALL ALSO VIDEO DOCUMENT ALL HAUL ROUTES NEEDED FOR THE OFF-SITE MOVEMENT OF EARTHWORK. COPIES OF THE VIDEO RECORD SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO SUBMITTAL OF THE FIRST PAY REQUEST. IF DAMAGE TO EXISTING INFRASTRUCTURE IS RECOGNIZED DURING THE COURSE OF THE PROJECT AND CANNOT BE IDENTIFIED AS A PRE-CONSTRUCTION CONDITION ON THE VIDEO RECORD, THE CONTRACTOR MAY BE REQUIRED TO MAKE PROPER REPAIRS.

20. THE CONTRACTOR SHALL VIDEO TAPE THE EXTERIOR AND REAR YARDS OF ALL HOUSES / BUSINESSES IN THE PROJECT AREA.

PAVING, GRADING AND DRAINAGE NOTES

1. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M-145, FOUND SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12 INCH LIFTS COMPACTED TO NOT LESS THAN 100% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-99. THICKNESS OF LAYERS MAY BE INCREASED, PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.

2. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE (1) FOOT. ITEMS DESIGNATED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.

3. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC. DENSITY TESTS SHALL BE PERFORMED AT THREE (3) LOCATIONS AROUND ANY STRUCTURE. BEGIN TESTING IN THE FIRST FOOT ABOVE THE BOTTOM OF THE STRUCTURE AND THEN EVERY TWO FEET TO WITHIN TWO FEET OF THE FINISH GRADE; THESE DENSITY REQUIREMENTS ARE THE MINIMUM. THE CONTRACTOR SHALL VERIFY DENSITY REQUIREMENTS AND PROTOCOLS WITH THE LOCAL APPROVING AUTHORITY PRIOR TO CONSTRUCTION OR BIDDING OF THE PROJECT.

5. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEMS SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE. ALL CONCRETE SHALL BE A MINIMUM 3,000 PSI. SOME LOCAL GOVERNMENT STORMWATER PROJECTS MAY REQUIRE TELEVISING OF THE STORM SEWER. CONTRACTOR SHOULD BE KNOWLEDGEABLE OF THIS REQUIREMENT PRIOR TO BIDDING OF THE PROJECT.

6. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.

7. THE CONTRACTOR MUST OBTAIN A WATER USE PERMIT PRIOR TO CONSTRUCTION DEWATERING UNLESS THE WORK QUALIFIES FOR A GENERAL PERMIT PURSUANT TO SUBSECTION 40E-20 302(4), F. A. C.

STORM SEWER NOTES

1. STANDARD SEPARATION FOR ALL WATER AND/OR WASTEWATER MAINS, HORIZONTAL AND VERTICAL, SHALL BE PER FDEP REQUIREMENTS, PROVISIONS OF F.A.C. RULE 62.604 AND TEN STATES STANDARD OR LOCAL MUNICIPALITIES, WHICHEVER IS MORE STRINGENT.

2. ALL DISTURBED OUTFALL DRAINAGE AREAS SHALL BE SODDED UPON COMPLETION OF GRADING AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER.

3. PRIOR TO FINAL PAYMENT FOR RETENTION, DETENTION AND DRAINAGE DITCH QUANTITIES, ALL SLOPES AND SWALES SHALL BE SODDED TO AVOID EROSION.

4. THERE IS TO BE NO OFF-SITE HAULING WITHOUT PRIOR APPROVAL AND ALL EXCAVATED MATERIAL SHALL BE USED ON-SITE. COORDINATION WITH THE OWNER IS REQUIRED FOR THE REMOVAL OF ANY UNSUITABLE MATERIALS.

5. THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER MANAGEMENT SYSTEM IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES AND WATER QUALITY ON OR OFF-SITE. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.

6. WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE CONTRACTOR SHALL ASSIST THE DESIGN ENGINEER TO PROVIDE A WRITTEN STATEMENT OF COMPLETION AND CERTIFICATION BY A FLORIDA PROFESSIONAL ENGINEER. THESE STATEMENTS MUST SPECIFY THE ACTUAL DATE OF CONSTRUCTION COMPLETION AND MUST CERTIFY THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. THE CONSTRUCTION COMPLETION CERTIFICATION MUST INCLUDE, AT A MINIMUM EXISTING ELEVATIONS, LOCATIONS AND DIMENSIONS OF THE COMPONENTS OF THE SURFACE WATER MANAGEMENT FACILITIES. ADDITIONALLY, IF DEVIATIONS FROM THE APPROVED DRAWINGS ARE DISCOVERED DURING THE CERTIFICATION PROCESS, THE CERTIFICATION MUST BE ACCOMPANIED BY A COPY OF THE APPROVED PERMIT DRAWINGS WITH DEVIATIONS NOTED. SEE ALSO AS-BUILT REQUIREMENTS.

7. A STABLE PERMANENT AND ACCESSIBLE ELEVATION REFERENCE SHALL BE ESTABLISHED ON OR WITHIN ONE HUNDRED (100) FEET OF ALL PERMITTED DISCHARGE STRUCTURES NO LATER THAN THE SUBMISSION OF THE CERTIFICATION TO THE WATER MANAGEMENT DISTRICT. THE LOCATION OF THE ELEVATION REFERENCE MUST BE NOTED ON OR WITHIN THE CERTIFICATION REPORT.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE WATER QUALITY MANAGEMENT SYSTEM.

9. INLETS (PER FDOT ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS 425 / 430): INCLUDES THE LIST OF MATERIALS / INSTALLATION / DEWATERING STABILIZATION / AS-BUILT SURVEYING / TESTING. ALL STRUCTURES WILL REQUIRE THREE (3) COMPACTION TESTS AT DIFFERENT LOCATIONS AND UNDER STRUCTURES OR PER LOCAL APPROVING AUTHORITY, WHICHEVER IS MORE STRINGENT.

10. PIPE CULVERTS AND STORM SEWERS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTION 430 FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

11. HDPE (HIGH DENSITY POLYETHYLENE) CULVERT SHALL BE N-12 INSTALLED PER MANUFACTURER RECOMMENDATIONS. MANUFACTURER IS ADS (ADVANCED DRAINAGE SYSTEMS, INC.) AIR ENTRENCHED PIPE.

12. REINFORCED CONCRETE PIPE SHALL BE ASTM C-76 CLASS III IN ACCORDANCE WITH SECTION 941 OF THE FDOT STANDARD SPECIFICATIONS.

FILTER FABRIC (STORM PIPE JOINTS)

THE CONTRACTOR SHALL WRAP ALL STORM PIPE JOINTS. CONSTRUCTION SHALL BE PER F.D.O.T. INDEX NO. 430-001 WITH WOVEN GEOTEXTILE TYPE D-3 (F.D.O.T. SECTION 985), SECURED W / STRAPPING. ALL JOINTS SHALL BE WRAPPED FOR A MINIMUM OF 18 INCHES FROM THE BAND OR JOINT OR BELL AND SPIGOT AS APPLICABLE.

DEWATERING

STORM SEWER PIPES AND STRUCTURES AND UTILITIES SHALL BE LAID "IN THE DRY", UNLESS OTHERWISE APPROVED IN WRITING BY THE UTILITY AND ENGINEER OF RECORD. THE CONTRACTOR, AT NO DIRECT COST TO THE OWNER, SHALL PERFORM ALL DEWATERING ACTIVITY. TRENCH EXCAVATIONS SHALL BE DEWATERED BY USING ONE OR MORE OF THE FOLLOWING METHODS: SOCK DRAINS, WELL POINT SYSTEM, SUMP PUMPS OR OTHER METHOD(S) AS APPROVED BY THE ENGINEER. DEWATERING SYSTEMS SHALL BE UTILIZED IN ACCORDANCE WITH GOOD STANDARD PRACTICE AND MUST BE EFFICIENT ENOUGH TO LOWER THE WATER LEVEL IN ADVANCE OF THE EXCAVATION AND MAINTAIN IT CONTINUOUSLY TO KEEP THE TRENCH BOTTOM AND SIDES FIRM AND DRY. IF THE MATERIAL ENCOUNTERED AT TRENCH GRADE IS SUITABLE FOR THE PASSAGE OF WATER WITHOUT DESTROYING THE SIDES OR UTILITY FOUNDATION OF THE TRENCH, SUMPS MAY BE PROVIDED AT INTERVALS AT THE SIDE OF THE MAIN TRENCH EXCAVATION, WITH PUMPS USED TO LOWER THE WATER LEVEL BY TAKING THEIR SUCTION FROM SAID SUMPS. DISCHARGE FROM DEWATERING SHALL BE DISPOSED OF IN SUCH A MANNER THAT IT WILL NOT INTERFERE WITH NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED, CREATE A PUBLIC NUISANCE OR FORM PONDING. ALL DISCHARGE SHALL BE IN ACCORDANCE WITH ANY SFWMD ISSUED PERMITS. THE OPERATIONS SHALL NOT CAUSE INJURY TO ANY PORTION OF THE WORK COMPLETED OR IN PROGRESS OR TO THE SURFACE OF STREETS OR TO PRIVATE PROPERTY. THE ENGINEER OF RECORD AND NECESSARY REGULATORY AGENCIES, PRIOR TO CONSTRUCTION, SHALL APPROVE THE PROPOSED DEWATERING METHOD(S) AND SCHEDULE. ADDITIONALLY, WHERE PRIVATE PROPERTY WILL BE INVOLVED, THE CONTRACTOR SHALL OBTAIN ADVANCE PERMISSION FROM THE PROPERTY OWNER.

CONFLICTS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME ACQUAINTED WITH EXISTING CONDITIONS AND TO LOCATE STRUCTURES AND STORM PIPES ALONG THE PROPOSED STORM PIPE ALIGNMENT IN ORDER TO AVOID CONFLICTS. WHERE ACTUAL CONFLICTS ARE UNAVOIDABLE, WORK SHALL BE COORDINATED WITH THE FACILITY OWNER AND PERFORMED SO AS TO CAUSE AS LITTLE INTERFERENCE AS POSSIBLE WITH THE SERVICE RENDERED BY THE FACILITY DISTURBED. ALL AFFECTED UTILITIES SHALL BE NOTIFIED PRIOR TO EXCAVATION IN THEIR VICINITY. CONTRACTOR TO POTHOLE ALL CONFLICTS OF EXISTING UTILITIES AND PROPOSED IMPROVEMENTS AT LEAST 10 DAYS PRIOR TO CONSTRUCTION TO CONFIRM CONFLICT RESOLUTION SHOWN ON THE PLANS.

SOD

1. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE AND FREE FROM WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND. ALL SODDED AREAS SHALL BE GRASSED AS SPECIFIED ON PLANS AND SURVIVAL GUARANTEED FOR NINETY DAYS FROM DATE OF REPLACEMENT. SURVIVAL OF ALL RELOCATED TREES SHALL BE GUARANTEED FOR 1 YEAR AFTER TRANSPLANTING.

2. SODDING SHALL CONSIST OF SITE PREPARATION, FURNISHING AND PLACING SOD, STAPLES AND FERTILIZER AND IRRIGATING AT THE RATES AND MANNER DESCRIBED IN THIS SPECIFICATION FOR THE DESIGNATED AREAS.

3. UNLESS NOTED OTHERWISE ON LANDSCAPE PLANS, SOD SHALL BE ARGENTINE BAHIA GRASS AND SHALL BE 12-INCH BY 12-INCH SQUARES OR OTHER COMMERCIALLY AVAILABLE RECTANGLES. THE SOD SHALL BE SUFFICIENTLY THICK (MINIMUM THICKNESS OF 2 INCHES) TO PROVIDE A DENSE STAND OF LIVE GRASS. THE SOD SHALL HAVE BEEN GROWN ON MINERAL SOIL. SOD SHALL BE LIVE, FRESH, AND UNINJURED AT THE TIME OF PLANTING AND SHALL BE PROTECTED FROM DRYING OUT BY SHADING AND WATERING FROM THE TIME IT IS DUG UNTIL PLANTING.

4. FERTILIZER SHALL BE EITHER IN THE LIQUID OR DRY FORM. FERTILIZER SHALL BE UNIFORM IN COMPOSITION, FREE-FLOWING AND SUITABLE FOR APPLICATION WITH STANDARD EQUIPMENT. THE FERTILIZER SHALL CONFORM TO THE FLORIDA FERTILIZER LAWS IN EFFECT ON THE DATE OF IT BEING PLACED AND SHALL BE DELIVERED IN BAGS, BOTTLES, DRUMS, OR OTHER CONVENIENT CONTAINERS, EACH FULLY LABELED AND BEARING THE NAME, TRADEMARK, ANALYSIS, AND WARRANTY OF THE PRODUCT. FERTILIZER SHALL HAVE AN AVAILABLE PLANT FOOD ANALYSIS OF 18-0-10 OR EQUIVALENT PLANT FOOD VALUE AND SHALL BE MIXED WITH THE TOP 3 TO 4 INCHES OF SOIL. FERTILIZER SHALL BE APPLIED AT THE RATE OF 1 POUND PER 1,000 SQ. FT. NOT TO EXCEED 2-4 LBS. PER YEAR. ALL FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN AND CONTAIN NO PHOSPHORUS UNLESS THE SITE HAS BEEN TESTED AND VERIFIED AS PHOSPHORUS DEFICIENT BY THE UF-IFAS EXTENSION OFFICE. ALL FERTILIZER APPLICATION SHALL BE IN ACCORDANCE WITH MUNICIPALITY STANDARDS.

5. STAPLES FOR SOD PLACED ON SIDE SLOPES 3:1 & STEEPER SHALL BE BLACK IRON WIRE NOT SMALLER THAN 14 GAUGE, AND BENT FROM A LENGTH OF WIRE AT LEAST 25 INCHES LONG INTO A 'U' WITH A 1 INCH WIDTH AT THE CROWN. COST OF STAPLES SHALL BE INCIDENTAL TO THE SOD UNIT PRICE.

6. WATER USED FOR IRRIGATION MAY BE OBTAINED FROM ANY APPROVED SOURCE. IT SHALL BE FREE OF EXCESS AND HARMFUL CHEMICALS, ACIDS, ALKALIES, OR ANY SUBSTANCE, WHICH IS HARMFUL TO PLANT GROWTH.

8. WHERE SODDING WILL BE DONE, ALL LOOSE ROCK, WOODY MATERIAL, AND OTHER OBSTRUCTIONS THAT WILL INTERFERE WITH SODDING SHALL BE REMOVED AND THE AREA SHALL BE REASONABLY SMOOTH AND UNIFORM. LIME AND FERTILIZER WILL BE APPLIED IN THE SAME QUANTITY AND MANNER AS SPECIFIED BY THE MANUFACTURER.

9. THE SOD STRIPS SHALL BE LAID IN A STAGGERED PATTERN WITH SNUG EVEN JOINTS. ALL JOINTS SHALL BE BUTTED TIGHT TO PREVENT VOIDS. IMMEDIATELY FOLLOWING SOD PLACEMENT, IT SHALL BE ROLLED OR TAMPED TO INSURE SOLID CONTACT OF ROOT MAT TO SOIL SURFACE. THE SOD SHALL BE SECURELY ANCHORED TO THE SOIL BY PINNING WITH STAPLES OR WOODEN PEGS WHEN PLACED ON SLOPES 3:1 OR STEEPER. COST OF STAPLES AND PEGS SHALL BE INCIDENTAL TO THE SOD UNIT PRICE. PIN OR PEG EACH SEPARATE PIECE OF SOD PLACED OR EVERY 3 FEET ALONG EACH CONTINUOUS STRIP OF SOD.

SOIL EROSION PLAN

1. NO POLLUTION OR EROSION CAUSED BY THIS PROJECT WILL BE ALLOWED IN THE STORMWATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL INSTALL ANY DEVICES NECESSARY TO PREVENT POLLUTION OR EROSION. THE COST OF POLLUTION AND EROSION CONTROL SHALL BE INCIDENTAL TO THE COST OF THE CONSTRUCTION.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC SOIL EROSION CONTROL PLAN. IN GENERAL, THE SOIL EROSION CONTROL PLAN SHALL REQUIRE THAT ALL ON-SITE SOILS WILL REMAIN ON-SITE AND WILL NOT ERODE INTO THE ADJACENT ROADSIDE SWALES, ADJACENT PROPERTIES OR RETENTION DITCHES. ALL EXISTING SWALES SHALL REMAIN SODDED DURING CONSTRUCTION. THE CONTRACTOR SHALL SCARIFY ONLY AS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL SCARIFY AREAS TO PLACE VARIOUS PIPE WORK. AFTER PLACEMENT OF THE PIPE, THESE TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 98% MODIFIED PROCTOR AASHTO T-180. PRIOR TO DISCHARGE FROM THE SITE, SILTATION BARRIERS SHALL BE UTILIZED AS PER THE MOST RECENT FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL. THE DRAINAGE WHICH OUTFALLS TO THE RETENTION AREAS SHALL BE STABILIZED AND SODDED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION. ANY DEWATERING OR PUMPING OF WATER INTO THE ROADSIDE SWALES OR RETENTION SWALES SHALL BE STAKED WITH SILTATION FENCES AS PER THE MOST RECENT FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL TO AVOID FILLING THESE AREAS. UPON COMPLETION OF THE SITE WORK, ALL AREAS SHALL BE SODDED TO AVOID EROSION. CONTRACTOR IS REQUIRED TO COMPLY WITH ALL STATE WATER QUALITY CRITERIA. SPECIFICALLY, NO OFF-SITE DISCHARGES WILL BE ALLOWED WHICH EXCEED THE STATE TURBIDITY CRITERIA.

WATER QUALITY NOTES

1. THE CONTRACTOR MUST MAINTAIN A COPY OF THE LATEST LOCAL WATER MANAGEMENT DISTRICT SURFACE WATER PERMIT, COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY DISTRICT REPRESENTATIVES. THE CONTRACTOR SHALL REVIEW THE COMPLETE PERMIT PRIOR TO COMMENCEMENT OF THE ACTIVITY AUTHORIZED BY THE PERMIT.

2. ALL ACTIVITIES SHALL BE IMPLEMENTED AS SET FORTH IN THE PLANS, SPECIFICATIONS AND PERFORMANCE CRITERIA AS APPROVED BY LOCAL SURFACE WATER PERMIT. ANY DEVIATION FROM THE PERMITTED ACTIVITY AND THE CONDITIONS FOR UNDERTAKING THAT ACTIVITY SHALL BE CONSIDERED A VIOLATION OF THE PERMIT. PRIOR TO ANY WORK COVERED BY A PERMIT FROM SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), A NOTICE OF CONSTRUCTION COMMENCEMENT (FORM 0960) MUST BE SUBMITTED TO SFWMD BY THE PERMITTEE OR AUTHORIZED AGENT.

3. THE LOCAL WATER MANAGEMENT DISTRICT AUTHORIZED STAFF, UPON PROPER IDENTIFICATION, MUST BE GRANTED PERMISSION TO ENTER, INSPECT AND OBSERVE THE SYSTEM TO INSURE CONFORMITY WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE PERMIT.

4. PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. ALL PRACTICES MUST BE IN ACCORDANCE W

HALEY WARD

TECHNICAL MEMORANDUM

To: City of Ft Pierce

From: Haley Ward

Re: Sunrise Blvd - Water Main Sizing and Fire Flow Calculations

Date: 12 December 2025

The Sunrise Blvd project proposes to connect to an existing 6-inch water main located in the Sunrise Blvd right-of-way to provide water service and fire protection for the project. A 6" water main extension is also proposed from Sunrise Blvd down Dade Rd connecting to an existing main located in the 25th St right-of-way. As such, a water main sizing model and fire flow test was completed to determine the flows in the proposed system.

Fire flow tests were completed on two nearby hydrants to assist with building the water main model. The hydrant flow tests are attached to this memorandum as exhibits. An EPANET model was prepared to determine the fire flow results. Each residential unit has a base demand of 1 GPM, while the clubhouse/pool has a base demand of 5 GPM. The results of the water main sizing indicate that the pressure within the system does not drop below 65 psi factoring only the base demand.

While keeping the base demand, fire hydrant 1 (FH-1) was activated with a demand of 500 GPM. The lowest pressure in the system dropped to approximately 47 psi. Fire hydrant 2 (FH-2) was then activated, while keeping FH-1 and the base demand for all units the same. This resulted in a low pressure of approximately 22 psi within the system. Upon activating fire hydrant 3 (FH-3), the system drops to negative pressure. This indicates that a flow of 500 GPM can not be maintained.

Upon running multiple iterations of the model, fire hydrant 3 (FH-3) can only be operated alone to maintain a minimum of 20 psi in the system. Fire hydrants 1 and 2 can operate simultaneously, however fire hydrant 3 can not be operated with fire hydrant 1 or fire hydrant 2 without dropping the pressure in the system to below the minimum of 20 psi.

10250 SW VILLAGE PARKWAY, SUITE 201, PORT ST. LUCIE, FL 34987 772.462.2455 | HALEYWARD.COM



THIS MAP IS INTENDED FOR REPRESENTING APPROXIMATE LOCATION OF EXISTING HYDRANTS AND ANY ASSOCIATED FLOW TEST DATA. IT IS NOT INTENDED TO BE USED A GRAPHICAL REPRESENTATION OF EXISTING UTILITIES FOR DESIGN. FOR RECORD DRAWING INFORMATION, PLEASE CONTACT THE FORT PIERCE UTILITIES WATER, WASTEWATER & GAS ENGINEERING DEPARTMENT AT (772) 466-1600 x3401 OR THE ADDRESS LISTED BELOW FOR AS-BUILT RECORD DRAWINGS.

Test Date:	Flow Hydrant No.	Pressure Hydrant No. 1	Pressure Hydrant No. 2
12/5/2025	H-1566	H-1567	H-*
Test Time:	**Pitot Gauge**	**Static Pressure / Residual Pressure**	**Static Pressure / Residual Pressure**
10:45 AM	GPM - 1190	72 / 62	N/A / N/A
Repump No. / Repump Status	PSI - 50	**Calculated Flow at 20 PSI (Gallons per Minute)**	**Calculated Flow at 20 PSI (Gallons per Minute)**
1 na	Flow Gauge is for 2 1/2 Butt	2899	N/A
2 na			

Legend

- Flow Test Hydrants
- Completed Flow Hydrant Test
- Fire Hydrants

Watermains

- Active
- Abandoned
- Private

FPUA COMMUNITY PROUD

Fort Pierce Utilities Authority
Water/Wastewater/Gas Engineering
113 North 2nd Street (34950)
P.O. Box 3191
Fort Pierce, FLorida 34948-3191

N W E S

0 130 260

Feet

Fire Hydrant Flow Test Map

*** Calculated flow could not be determined due to lack of pressure drop**



THIS MAP IS INTENDED FOR REPRESENTING APPROXIMATE LOCATION OF EXISTING HYDRANTS AND ANY ASSOCIATED FLOW TEST DATA. IT IS NOT INTENDED TO BE USED A GRAPHICAL REPRESENTATION OF EXISTING UTILITIES FOR DESIGN. FOR RECORD DRAWING INFORMATION, PLEASE CONTACT THE FORT PIERCE UTILITIES WATER, WASTEWATER & GAS ENGINEERING DEPARTMENT AT (772) 466-1600 x3401 OR THE ADDRESS LISTED BELOW FOR AS-BUILT RECORD DRAWINGS.

Test Date:	Flow Hydrant No.	Pressure Hydrant No. 1	Pressure Hydrant No. 2
12/5/2025	H-1038	H-1389	H-*
Test Time:	**Pitot Gauge**	**Static Pressure / Residual Pressure**	**Static Pressure / Residual Pressure**
10:15 AM	GPM - 1000	66 / 56	N/A / N/A
Repump No. / Repump Status	PSI - 35	**Calculated Flow at 20 PSI (Gallons per Minute)**	**Calculated Flow at 20 PSI (Gallons per Minute)**
1 na 2 na	Flow Gauge is for 2 1/2 Butt	2280	N/A

Legend

- Flow Test Hydrants
- Completed Flow Hydrant Test
- Fire Hydrants

Watermains

- Active
- Abandoned
- Private

FPUA COMMUNITY PROUD

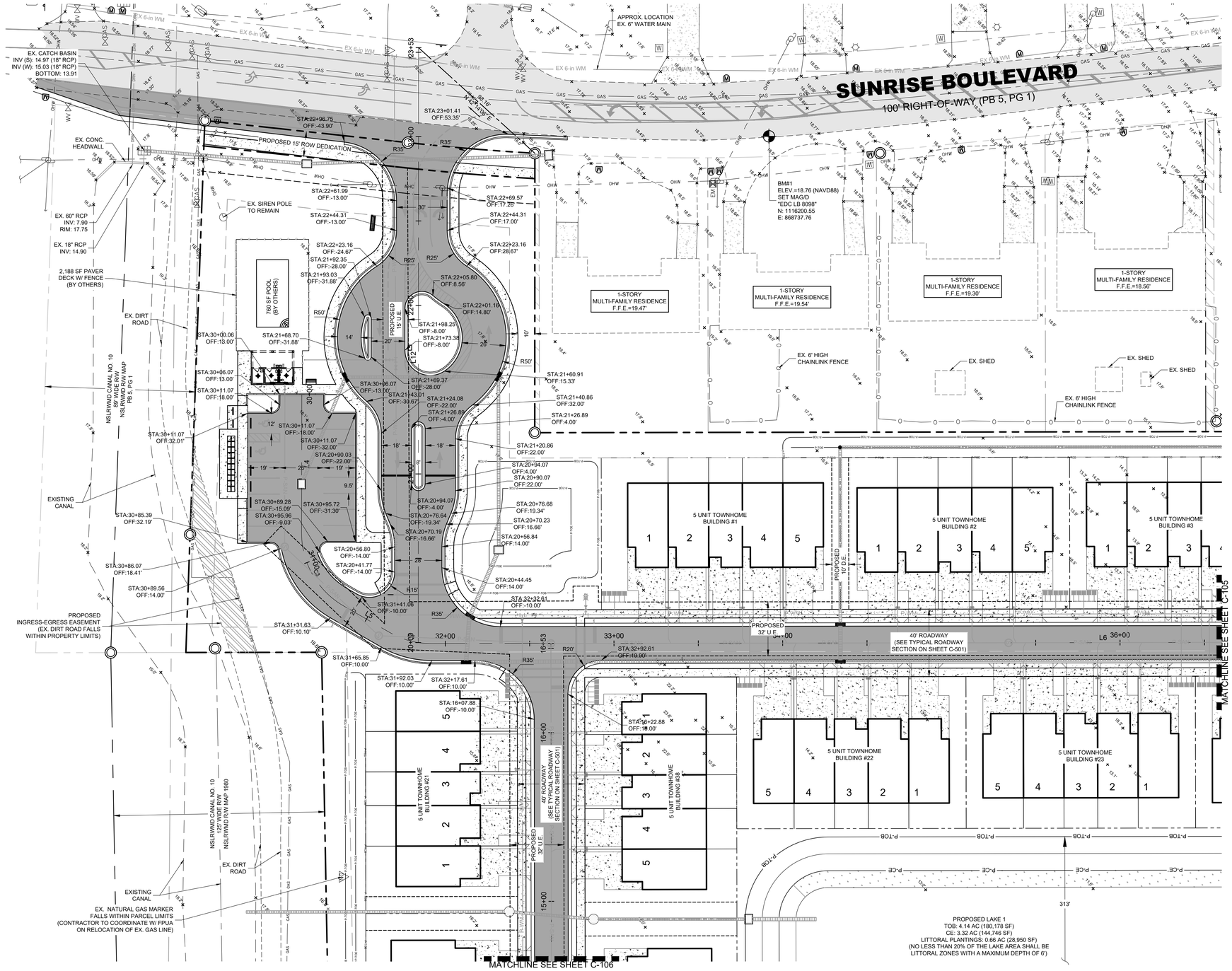
Fort Pierce Utilities Authority
Water/Wastewater/Gas Engineering
113 North 2nd Street (34950)
P.O. Box 3191
Fort Pierce, FLorida 34948-3191

N W E S

0 130 260
Feet

Fire Hydrant Flow Test Map

*** Calculated flow could not be determined due to lack of pressure drop**



ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L1	652.88'	N89° 54' 31"E
L4	82.00'	N89° 55' 02"W
L5	31.34'	S29° 54' 31"W
L6	795.99'	S0° 05' 29"E
L12	352.75'	S89° 58' 29"E

ALIGNMENT CURVE DATA						
CURVE #	RADIUS	LENGTH	PC	PT	DELTA	SUPERELEVATION
C3	50.00'	52.51'	30+82.00	31+34.51	60.17	NC
C4	50.00'	26.18'	31+65.85	31+92.03	30.00	NC

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

REV.	DATE	DESCRIPTION	BY	CHK.
1	2026.06.30	UPDATE HC PLAN PER REVISED SITE PLAN	JLW	MDL

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

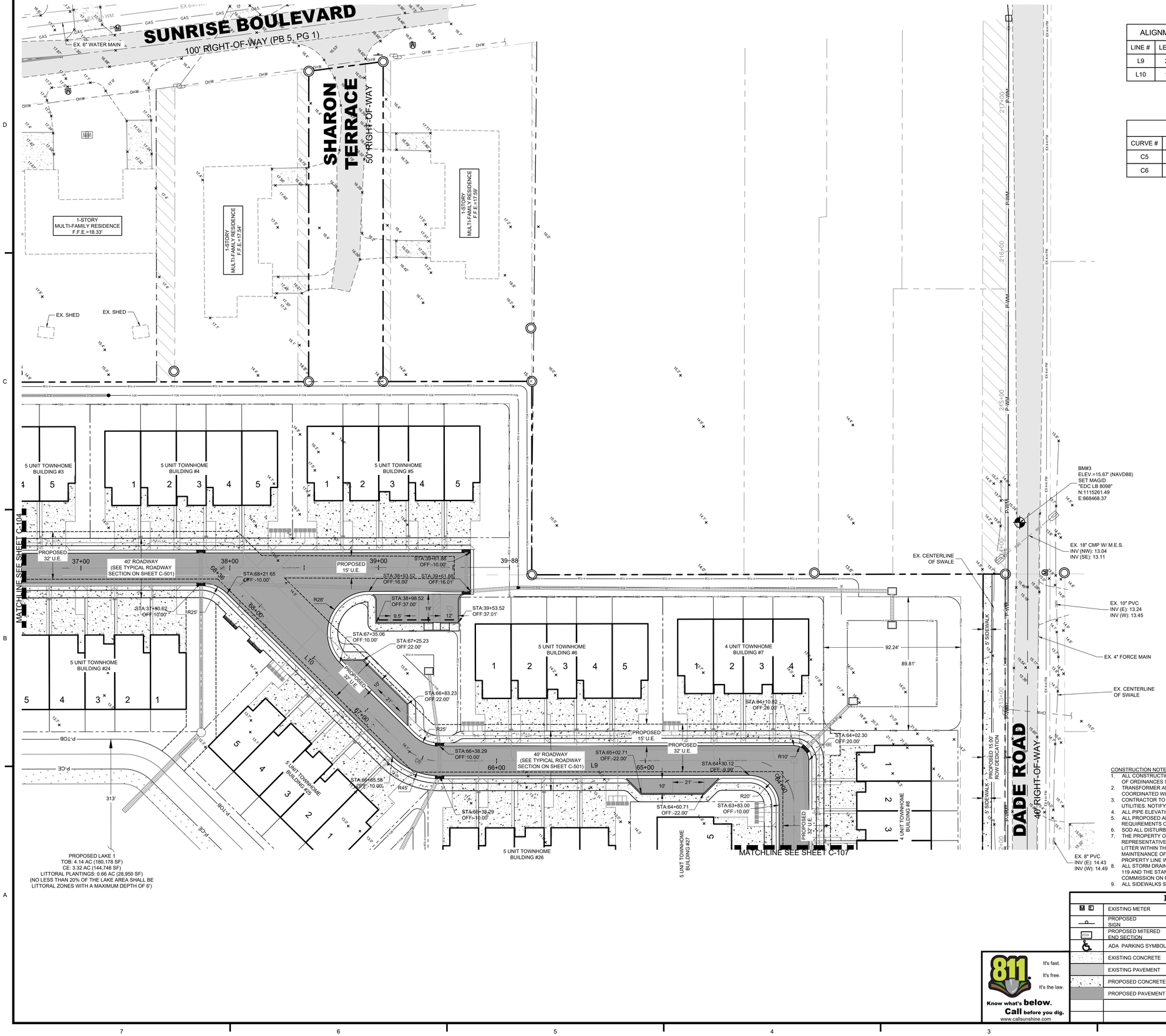
EXISTING METER		EXISTING UTILITY POLE	
PROPOSED SIGN		PROPOSED DRAINAGE INLET	
PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET	
ADA PARKING SYMBOL		EXISTING STREET LIGHT	
EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)	
EXISTING PAVEMENT		DRAINAGE FLOW ARROW	
PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)	
PROPOSED PAVEMENT	#	PARKING STALL COUNT	
		EXISTING DRAINAGE	
		PROPOSED DRAINAGE PIPE	

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

DATE	2025.05.06
SCALE	AS SHOWN
DRAWN BY	JLW
DESIGNED BY	MDL
CHECKED BY	MDL
PROJECT No.	24-237
CERTIFICATE OF AUTHORIZATION No.	C.O.A. No.
DRAWING No.	C-104
REV.	1

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

FILE LOCATION: P:\FLI0013370\PORT_RICHEY_VILLAGE_INVESTMENTS_LLC\24-237 - MOVED 2013370 (GARDFALO) - SUNRISE BLVD. (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\SH-237 ENGINEERING RS.DWG, 2026.07.08, 11:50 AM



ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L9	208.17'	N0° 05' 16"W
L10	170.45'	N44° 35' 52"E

ALIGNMENT CURVE DATA						
CURVE #	RADIUS	LENGTH	PC	PT	DELTA	SUPERELEVATION
C5	30.00'	47.12'	63+83.00	64+30.12	90.00	NC
C6	35.00'	27.30'	66+38.29	66+65.58	44.69	NC

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	ADA PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.
DRAWING ISSUE STATUS				

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-105** REV.

FILE LOCATION: P:\FLD\13370\PORT_RICHEY_VILLAGE_INVESTMENTS_LLC\24-237 - MOVED 2013370 GARDFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\ACAD\DWG\SHEETS\24-237 ENGINEERING RB.DWG, 2026.07.08, 11:00 AM

MATCHLINE SEE SHEET C-104

MATCHLINE SEE SHEET C-107

ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L1	652.88'	N89° 54' 31"E

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EXISTING CANAL

EX. DIRT ROAD

NSLRWMD CANAL NO. 10
125' WIDE R/W
NSLRWMD R/W MAP 1980

5 UNIT TOWNHOME BUILDING #20

5 UNIT TOWNHOME BUILDING #19

4 UNIT TOWNHOME BUILDING #18

PROPOSED 32' U.E.

14+00

13+00

12+00

L1

40' ROADWAY (SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

STA:11+44.88
OFF:10.00'

R25'

STA:40+35.00
OFF:-10.00'

STA:40+44.00
OFF:10.00'

40+00

41+00

42+00

43+00

40' ROADWAY (SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

PROPOSED 32' U.E.

R28'

11+00

STA:10+71.32
OFF:16.00'

STA:10+66.22
OFF:37.00'

PROPOSED 15' U.E.

9.5'

19'

12'

97'

87'

STA:10+20.82
OFF:37.00'

STA:10+16.32
OFF:-10.00'

STA:10+16.44
OFF:16.00'

4 UNIT TOWNHOME BUILDING #25

5 UNIT TOWNHOME BUILDING #37

4 UNIT TOWNHOME BUILDING #36

4 UNIT TOWNHOME BUILDING #17

5 UNIT TOWNHOME BUILDING #16

5 UNIT TOWNHOME BUILDING #15

4 UNIT TOWNHOME BUILDING #34

4 UNIT TOWNHOME BUILDING #33

5 UNIT TOWNHOME BUILDING #32

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.66 AC (28,950 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

686.36

313'

P-TOB

P-CE

BM#5
ELEV.=13.20 (NAVD88)
SET 5/8" IRC/C
"EDC LB 8098"
N: 1115945.15
E: 868017.30

EX. NATURAL GAS MARKER

EX. NATURAL GAS MARKER FALLS WITHIN PARCEL LIMITS (CONTRACTOR TO COORDINATE W/ FPUA ON RELOCATION OF EX. GAS LINE)

EX. ALUMINUM SHED FALLS ON PROPERTY CORNER (COORDINATE W/ OWNER FOR REMOVAL)

1-STORY SINGLE-FAMILY RESIDENCE F.F.E.=15.24'

CENTERLINE EX. SWALE

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	ADA PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No. 24-237 | CERTIFICATE OF AUTHORIZATION No. C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-106** REV.

FILE LOCATION: F:\FLI\2013370\PORT_ROHEY_VILLAGE_INVESTMENTS_LLC\24-237 - MOVED 2013370 GAROFALO - SUNRISE BLVD_PRIVILEGE NORTH\ENGINEERING\AUTOCAD\DWG\SG24-237 ENGINEERING RB.DWG, 2026.07.08, 11:30 AM

MATCH LINE SEE SHEET C-105

MATCH LINE SEE SHEET C-106

ALIGNMENT LINE DATA		
LINE #	LENGTH	BEARING
L7	1024.75'	S0° 05' 29"E
L8	383.00'	N89° 54' 32"E
L11	171.36'	S0° 05' 30"W

PROPOSED LAKE 1
TOB: 4.14 AC (180,178 SF)
CE: 3.32 AC (144,746 SF)
LITTORAL PLANTINGS: 0.66 AC (28,950 SF)
(NO LESS THAN 20% OF THE LAKE AREA SHALL BE
LITTORAL ZONES WITH A MAXIMUM DEPTH OF 6')

5 UNIT TOWNHOME BUILDING #26
5 UNIT TOWNHOME BUILDING #27
5 UNIT TOWNHOME BUILDING #28
4 UNIT TOWNHOME BUILDING #9
4 UNIT TOWNHOME BUILDING #10
5 UNIT TOWNHOME BUILDING #29
5 UNIT TOWNHOME BUILDING #30
5 UNIT TOWNHOME BUILDING #31
5 UNIT TOWNHOME BUILDING #32
5 UNIT TOWNHOME BUILDING #11
5 UNIT TOWNHOME BUILDING #12
5 UNIT TOWNHOME BUILDING #13
5 UNIT TOWNHOME BUILDING #14

40' ROADWAY
(SEE TYPICAL ROADWAY SECTION ON SHEET C-501)

PROPOSED 15' U.E.
PROPOSED 28.80' U.E.
PROPOSED 32' U.E.
PROPOSED 20' U.E.

5' SIDEWALK
PROPOSED 15.00' ROW DEDICATION

APPROX. LOCATION EX. 4" FORCE MAIN

BM#4
ELEV.=15.21 (NAVD88)
SET MAG/D
"EDC LB 8098"
N: 1115262.80
E: 868012.73

1-STORY
SINGLE-FAMILY RESIDENCE
F.F.E.=15.48'

DADE ROAD
40' RIGHT-OF-WAY

PLAN REFERENCE:

INFORMATION BASED ON ELEVATIONS THAT ARE SHOWN RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

GRAPHIC SCALE

30 0 15 30 60 90

(IN FEET)

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 17 & 22.
2. TRANSFORMER AND UTILITY CONDUIT PLACEMENT & ELEVATION TO BE COORDINATED WITH FPUA AND OWNER.
3. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND INVERTS OF ALL UTILITIES. NOTIFY E.O.R. OF ANY DISCREPANCIES.
4. ALL PIPE ELEVATIONS SHALL BE FIELD VERIFIED BEFORE COMMENCEMENT.
5. ALL PROPOSED AND EXISTING UTILITIES SHALL MAINTAIN MIN. COVER REQUIREMENTS OF FDEP.
6. SOD ALL DISTURBED AREAS.
7. THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY.
8. ALL STORM DRAINAGE FACILITIES SHALL CONFORM TO CHAPTERS 32 AND 119 AND THE STANDARD SPECIFICATIONS ADOPTED BY THE CITY COMMISSION ON FEBRUARY 13, 1973, AS AMENDED.
9. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF 2% OR LESS.

LEGEND

	EXISTING METER		EXISTING UTILITY POLE
	PROPOSED SIGN		PROPOSED DRAINAGE INLET
	PROPOSED MITERED END SECTION		EXIST. DRAINAGE INLET
	ADA PARKING SYMBOL		EXISTING STREET LIGHT
	EXISTING CONCRETE		PROPOSED LIGHT POLE (SINGLE)
	EXISTING PAVEMENT		DRAINAGE FLOW ARROW
	PROPOSED CONCRETE		PROPOSED LIGHT POLE (DOUBLE)
	PROPOSED PAVEMENT	#	PARKING STALL COUNT
			EXISTING DRAINAGE
			PROPOSED DRAINAGE PIPE

811 It's fast. It's free. It's the law.
Know what's **below.** **Call** before you dig.
www.callsunshine.com

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

HORIZONTAL CONTROL PLAN

DATE	SCALE
2025.05.06	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	MDL	MDL

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237	C.O.A. No.

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **C-107** REV.

FILE LOCATION: P:\FL\2015\370\PORT_RICHEY_VILLAGE_INVESTMENTS_LLC\24-237 - MOVED 2013\370 GARDFALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\SI\24-237 ENGINEERING RS.DWG, 2026.07.08, 11:30 AM

FPUA
COMMUNITY PROUD

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x

sostrander@fpua.com

August 4, 2025

Mark Landsman, P.E.
Haley Ward
10250 SW Village Pkwy, Ste 201
Port St Lucie, FL 34987

SUBJECT: Sunrise Blvd
PCN: 2428-321-0001-000-3, 2428-601-0252-000-6

Dear Mr. Landsman,

As requested, Fort Pierce Utilities Authority (FPUA) would like to confirm the availability of water and wastewater services to the above-referenced parcel. Reuse water is not available at this location. Capacity is currently available at FPUA's Water Treatment Plant and Water Reclamation Facility.

Availability would be contingent upon the completion of construction of the required infrastructure, payment of the applicable fees and charges. Please visit our website at www.fpua.com to review developer requirements, specifications, details, fees, etc.

Should you have any questions please contact Shane Ostrander at 772 466-1600 ext. 3468.

Sincerely,

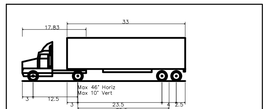
Shane Ostrander
Environmental Engineer

Ec.: file

GRAPHIC SCALE

50 0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



WB–40 – Semi-Trailer Combination, Intermediate

Overall Length	45.500ft
Overall Width	8.000ft
Overall Body Height	12.992ft
Min Body Ground Clearance	1.134ft
Track Width	8.000ft
Lock-to-lock time	4.000
Curb to Curb Turning Radius	40.000ft

VERTICAL DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

AUTOTURN - GARBAGE

DATE	SCALE
12/4/2025	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	---	---

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237 AUTOTURN R2.DWG	---

MARK LANDSMAN, P.E. (DATE)
#P6288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

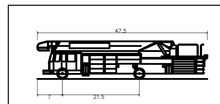
DRAWING No. **ATR01** REV.

FILE LOCATION: Z:\EDC 2024\24-237 - GARDALO - SUNRISE BLVD, (PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 AUTO TURN R2.DWG, 2025-12-04, 1:47 PM

GRAPHIC SCALE

50 0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



FIRE TRUCK	
Overall Length	47.500ft
Overall Width	10.500ft
Overall Body Height	10.519ft
Min Body Ground Clearance	0.950ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	41.500ft

VERTICAL DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D.88) AND ARE GIVEN IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
*GENERAL ACCEPTED CONVERSION: NAVD + 1.475 = NGVD

REV.	DATE	DESCRIPTION	BY	CHK.

DRAWING ISSUE STATUS

NOT FOR CONSTRUCTION

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
LAND PLANNING | INTERIOR DESIGN
10250 Village Parkway, Suite 201
Port Saint Lucie, Florida 34987
772.462.2455
WWW.HALEYWARD.COM

PROJECT

SUNRISE BLVD
FORT PIERCE

TITLE

AUTOTURN - FIRE

DATE	SCALE
12/4/2025	AS SHOWN

DRAWN BY	DESIGNED BY	CHECKED BY
JLW	---	---

PROJECT No.	CERTIFICATE OF AUTHORIZATION No.
24-237 AUTOTURN R2.DWG	---

MARK LANDSMAN, P.E. (DATE)
#96288
10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

DRAWING No. **ATR02** REV.

FILE LOCATION: Z:\EDC-2024\24-237 - GARDALO - SUNRISE BLVD_(PRIVILEGE NORTH)\ENGINEERING\AUTOCAD\DWG\24-237 AUTO TURN R2.DWG, 2025-12-04, 1:47 PM

Trish Sesta

From: FOGARTY, NICOLE L. <NICOLE.FOGARTY@stlucieschools.org>
Sent: Monday, July 13, 2026 1:30 PM
To: Mark Landsman
Cc: Trish Sesta; Brad Currie; SEARS, JENNIFER L.
Subject: Re: [EXTERNAL EMAIL] - RE: [EXTERNAL EMAIL] - PD2025-00004 - Privilege (Sunrise Blvd)
Attachments: 24-237 Auto Turn R5.pdf

Thank you for providing the turn radius. St. Lucie Public Schools approves the new entrance for bus turn around and stop.

Nicole L. Fogarty
Director of Growth Management, Land Acquisitions & Intergovernmental Relations
O: (772) 429-7547 C: (772) 789-0685 ◆ 9461 Brandywine Lane Port St. Lucie, FL 34986 ◆ nicole.fogarty@stlucieschools.org
St. Lucie PUBLIC SCHOOLS AN "A" RATED DESTINATION DISTRICT

From: Mark Landsman <mlandsman@haleyward.com>
Sent: Monday, July 13, 2026 10:11 AM
To: FOGARTY, NICOLE L. <NICOLE.FOGARTY@stlucieschools.org>
Cc: Trish Sesta <psesta@haleyward.com>; Brad Currie <bcurrie@haleyward.com>; SEARS, JENNIFER L. <JENNIFER.SEARS@stlucieschools.org>
Subject: [EXTERNAL EMAIL] - RE: [EXTERNAL EMAIL] - PD2025-00004 - Privilege (Sunrise Blvd)

Caution: This is an external email and may have suspicious content. Please take care when clicking links or opening attachments. When in doubt, contact your IT Department

See attached. It's the last sheet.

Mark Landsman, PE
Project Engineer
t: 772.462.2455 d: 772.494.0826 m: 772.773.0576

This e-mail may be confidential and is intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author ar HaleyWard, Inc. If you are not the intended recipient (or responsible for delivery of the message to such person),you may not use, copy, distribute or deliver to anyone this action in reliance on it. In such case, you should delete this message, and notify us immediately at 207 989 4824 or by email bangor@haleyward.com.

From: FOGARTY, NICOLE L. <NICOLE.FOGARTY@stlucieschools.org>
Sent: Monday, July 13, 2026 9:07 AM
To: Mark Landsman <mlandsman@haleyward.com>
Cc: Trish Sesta <psesta@haleyward.com>; Brad Currie <bcurrie@haleyward.com>; SEARS, JENNIFER L. <JENNIFER.SEARS@stlucieschools.org>
Subject: Re: [EXTERNAL EMAIL] - PD2025-00004 - Privilege (Sunrise Blvd)

Good morning,

I have been out of the office. If possible, could you please provide me with a turning radius showing the bus doing the turn around.

Thank you.

Nicole L. Fogarty
Director of Growth Management, Land Acquisitions & Intergovernmental Relations
O: (772) 429-7547 C: (772) 789-0685 ◆ 9461 Brandywine Lane Port St. Lucie, FL 34986 ◆ nicole.fogarty@stlucieschools.org
St. Lucie PUBLIC SCHOOLS
AN "A" RATED DESTINATION DISTRICT

From: Mark Landsman <mlandsman@haleyward.com>
Sent: Wednesday, July 8, 2026 3:42 PM
To: FOGARTY, NICOLE L. <NICOLE.FOGARTY@stlucieschools.org>
Cc: Trish Sesta <psesta@haleyward.com>; Brad Currie <bcurrie@haleyward.com>
Subject: [EXTERNAL EMAIL] - PD2025-00004 - Privilege (Sunrise Blvd)

> **Caution:** This is an external email and may have suspicious content. Please take care when clicking links or opening attachments. When in doubt, contact your IT Department

Afternoon Nicole,
Following up with you to advise that we have adjusted the entrance for the bus stop and the bus can make a u-turn at this northern entrance. Do you require any additional information from us regarding this project to satisfy your comment? We will resubmit this plan along with an autoturn exhibit.

Mark Landsman, PE
Project Engineer
t: 772.462.2455 d: 772.494.0826 m: 772.773.0576
This e-mail may be confidential and is intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author ar HaleyWard, Inc. If you are not the intended recipient (or responsible for delivery of the message to such person),you may not use, copy, distribute or deliver to anyone this action in reliance on it. In such case, you should delete this message, and notify us immediately at 207 989 4824 or by email bangor@haleyward.com.

From: Mark Landsman
Sent: Monday, June 22, 2026 8:50 AM
To: nicole.fogarty@stlucieschools.org
Cc: Trish Sesta <psesta@haleyward.com>; Brad Currie <bcurrie@haleyward.com>
Subject: Sunrise Blvd

Morning Nicole,
I am working on the Sunrise Blvd project in Ft Pierce. Planning staff has asked us to reach out to you to discuss the school bus stop for this new development. Attached is our autoturn exhibit showing that the school bus cannot navigate the entrance without driving over the curb. I have a couple of options, but wanted to get your opinion on which one you would prefer.

Option 1:

School bus would stop in the right-turn lane at the entrance of the site instead of driving into the site. North is to the left on this plan.

Option 2:
School bus would enter the site at the northern entrance on Sunrise Blvd and exit the site at the south entrance at Dade Rd.

HALEY WARD
AN EMPLOYEE-OWNED COMPANY
HALEYWARD.COM

Mark Landsman, PE
Project Engineer
t: 772.462.2455 d: 772.494.0826 m: 772.773.0576
a: 10250 SW Village Parkway, Suite 201, Port St. Lucie, FL 34987

Chat With Me On Teams



This e-mail may be confidential and is intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Haley Ward, Inc. If you are not the intended recipient (or responsible for delivery of the message to such person),you may not use, copy, distribute or deliver to anyone this message (or any part of its contents) or take any action in reliance on it. In such case, you should delete this message, and notify us immediately at 207 989 4824 or by email bangor@haleyward.com.

Trish Sesta

From: Tracy Telle <ttelle@cityoffortpierce.com>
Sent: Wednesday, July 8, 2026 1:47 PM
To: Mark Landsman
Cc: Mark Zrallack; Brad Currie; Trish Sesta; Vennis Gilmore
Subject: Re: Privilege PD - PD2025-00004
Attachments: PD Comments - 060326.pdf; 4 - Site Plan-2026-05-29_v1.pdf

Have the 6/5/26 engineering comments (attached) been addressed? I don't see a resubmittal. The location of the bioswales indicated on the attached site plan was previously approved by this department.

Tracy S. Telle | Engineering Manager | City of Fort Pierce
Engineering Department
Phone: 772.467.3776, Fax: 772.467.6847, 100 North U.S. 1 Fort Pierce 34950

Website | Facebook | Survey

THE SUNRISE CITY FORT PIERCE Florida

From: Mark Landsman <mlandsman@haleyward.com>
Sent: Wednesday, July 8, 2026 1:00 PM
To: Tracy Telle <ttelle@cityoffortpierce.com>
Cc: Mark Zrallack <mzrallack@cityoffortpierce.com>; Brad Currie <bcurrie@haleyward.com>; Trish Sesta <psesta@haleyward.com>; Vennis Gilmore <vgilmore@cityoffortpierce.com>
Subject: Privilege PD - PD2025-00004

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.
Afternoon Tracy,
We received this comment from Vennis on the attached review report. You did not have any additional engineering comments regarding the bioswale. Would you be able to confirm that the bioswale is approved so we can move this application to the planning board?

13. Please coordinate with the City of Fort Pierce Engineering Department concerning the proposed bioswale and provide approval prior to Planning Board.

HALEY WARD

AN EMPLOYEE-OWNED COMPANY

HALEYWARD.COM

Mark Landsman, PE
Project Engineer
t: 772.462.2455 d: 772.494.0826 m: 772.773.0576
a: 10250 SW Village Parkway, Suite 201, Port St. Lucie, FL 34987

Chat With Me On Teams



This e-mail may be confidential and is intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of Haley Ward, Inc. If you are not the intended recipient (or responsible for delivery of the message to such person),you may not use, copy, distribute or deliver to anyone this message (or any part of its contents) or take any action in reliance on it. In such case, you should delete this message, and notify us immediately at 207 989 4824 or by email bangor@haleyward.com.

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

EROSION AND SEDIMENT CONTROL AFFIDAVIT

PROJECT: Sunrise Blvd

PCN#: 2428-321-0001-000-3 & 2428-601-0252-000-6

LOCATION: 2100 Dade Rd, Fort Pierce

I now state under oath that I will perform all land disturbing activities on this project, for which I am responsible for or upon land I own, in accordance with the provisions of Ordinance K-421 of the City of Fort Pierce aka Erosion and Sediment Control Ordinance and also within the obligations set forth in my Erosion and Sediment Control Plan as approved by or modified by the City of Fort Pierce. I acknowledge that the City of Fort Pierce Erosion and Sediment Control Ordinance is based on rules and regulations promulgated by the State of Florida in accordance with NPDES.

- With my signature on this document, let it be known to all that I have received a copy of the City of Fort Pierce Erosion and Sediment Control Ordinance.
- With my signature on this document, let it be known to all that I am aware of and I will comply with the provision for establishing temporary and permanent ground covers as per the ordinance.
- With my signature on this document, let it be known to all that I will install all reasonable measures to protect all public and private properties from any sediment damage as a result of my land disturbing activities. I will keep my sediment on my site.
- With my signature on this document, let it be known to all that I am aware of the rules and regulations regarding buffer zone requirements as per the Ordinance.
- I agree to comply with the provision of my Erosion and Sediment Control Plan as approved or modified by the City of Fort Pierce, the above statements and the rules, regulations and requirements of Ordinance K-421 of the City of Fort Pierce Erosion and Sediment Control Ordinance.

Witness my signature below:
Person Responsible or Representative for Project: Ajit Singh Chhabra
Land Owner: _____

Before me, the undersigned authority, on this day personally appeared Ajit Singh Chhabra the, Person Responsible of Sunrise Blvd, who personally appeared before me, is personally known to me ( ), or has produced Florida Driver License as identification, and who did (✓) or did not ( ) take an oath.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 17 day of June 20 25.

CARMEN MARIA JIMENEZ
Notary Public - State of Florida
Commission # HH 599956
My Comm. Expires Oct 3, 2028

Notary Public _____

THE SUNRISE CITY
FORT PIERCE
BUILDING DEPARTMENT
Florida

Debris Removal and Homeowners Association Affidavit

Owner: GPS Development

Property Address: 2100 Dade Road, Ft. Pierce, FL

Permit # _____ Contractor: Capitol Building Group

As per City Ordinances 30-25, 24-19, 24-20, 24-21 and as a condition of obtaining any permit for construction, repair or renovation:

I understand and accept full responsibility for the prompt removal of all debris and construction materials from the property for which I am seeking to obtain a building permit in accordance with the Code of Ordinances of the City. Initials AC

I agree that no debris or construction materials will be placed on any public property or on any public right-of-way except as may be specifically authorized by the Code of Ordinances. Initials AC

I further understand that prior to a final inspection for the project completion or issuance of a Certificate of Occupancy (or Certificate of Completion), all debris and construction materials shall be removed from the property or the Inspector will not approve the final inspection. Additional reinspection fees shall apply. Initials AC

I understand and accept full responsibility for debris removal at my own expense in accordance with the City Code of Ordinances. Initials AC

I hereby acknowledge that I have read and understand the above statements and I further understand that any violation of the terms of this affidavit shall be reported to the City of Fort Pierce Building Department for action and possible stop work order. Initials AC

It is the owner and contractor's responsibility to verify approval for any work through the Homeowners Association and/or Condominium Association, if applicable. The City will not be held liable for disputes between the Homeowners Association, Condominium Association, owner and/or contractor. Initials AC

06-17-2025
Date

Contractor or Owner/Builder's Signature

HALEY WARD

10250 SW Village Parkway
Suite 201
Port St. Lucie, FL 34987

Project Name: **Sunrise Blvd.**

Subject: **Neighborhood Meeting**

Date: **September 2, 2026 @ 5:30 p.m.**

Name	Address	Phone	E-mail
Richard Tremblay	2011 Dade Rd	928-855-4511	Richard 386 @ comcast.net
Beverly Bustin	701 & 703 Sharon Terr	772-521-3889	Boyette@aol.com
Fred + Tina Pease	3327 Sunrise Blvd	772 940-6450	tina.kofos@yahoo.com
JIM + DIANE TAYLOR	2400 DADE ROAD	772 465-4929	CAPT55JIM@ATT.NET
Debbie McBride	3303 Sunrise	772-216-6135	MCBRIDEDEBORAH@BELLSouth.NET
Stella Colon	3356 IV Park Dr		StellaStrait@gmail.com
Jeanne Gray	3302 Sunrise Blvd		
Gene Lemire	2210 Santa Rita Blvd	772-465-2295	GLemire@gmail.com
Bonnie Starling	3322 Sunrise Blvd.	772-216-8225	BBStarling@AOL.com

Vennis Gilmore

From: Shaun Coss
Sent: Thursday, August 13, 2026 7:41 AM
To: Vennis Gilmore
Subject: Re: 5th RESUBMITTAL - PD2025-00004 - Final Planned Development - Privilege Final PD - (2) Parcels: 2428-601-0252-000-6, 2428-321-0001-000-3 - 3315 Sunrise Boulevard

Code Enforcement approves with the condition that per City Ordinance 24-19:

It shall be unlawful for any person in charge of or in control of any object or condition within the city, whether as owner, tenant, occupant, lessee or otherwise, to allow any such object or condition outlined below to remain on any private or public property within the city. This article shall not apply to any object which is kept out of sight in a fully enclosed building or where the object or condition is on the property of a business which has a specific and licensed purpose consistent with the storage, maintenance or display of such object or condition and which is being operated lawfully as provided by this Code.

(11)Any landscaping element that is not well-maintained, including, but not limited to, lawns, hedges, bushes and trees. To comply with this section, landscaping elements shall be maintained as follows:

A. Landscaping elements shall be kept trimmed and free from becoming overgrown and unsightly where the same may constitute a blighting factor to the community;

B. All trees shall be trimmed to maintain a seven-foot clear height, and hedges and bushes should be trimmed to maintain a maximum of two and one-half feet in height except when the following conditions apply:

I. Landscaping, including, but not limited to, hedges, shrubs, and bushes, used to deter graffiti, in which the hedge height is to be equal to the height of the protected fence or wall.

ii. Occupied single-family dwellings with an established landscaping plan that is routinely maintained in a neat and orderly fashion so as not to create an attractive nuisance.

iii. For parcels of three acres or more:

1. The landscape requirements of section 24-19(11)b shall be required for a 100-foot wide strip from every road, alley, public or private right-of-way and every developed parcel.

2. If a properly registered complaint pursuant to F.S. § 162.06(1)(b) of any condition that constitutes a nuisance or unsafe condition under this chapter is documented with the department, the nuisance must be abated as directed by the department.

iv. Parcels of undeveloped property that have been classified by the state as a wetland or coastal property east of the coastal construction control line, except that the owner shall maintain a minimum 15-foot-wide strip that conforms to the standards of section 24-19(11)b where the parcel abuts developed real property or a public or private right-of-way.

Best regards,

Shaun Coss | Director of Community Response
(772) 467-3148 • 100 N US Hwy 1 Fort Pierce, FL 34950
Website | Facebook

THE SUNRISE CITY
FORT PIERCE
Florida

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

To : Vennis Gilmore, Senior Planner

From : Tracy Telle, Engineering Manager TST

Thru : Mark Zrallack, P.E., City Engineer MZ

Re : 3315 Sunrise Boulevard – Sunrise Boulevard Final PD Application No. PD2025-0004

Date : August 6, 2026

This is to advise you that we have completed the review of the following documents received by this office on August 4, 2026:

- [x] Final PD
- [ ] P/D Drawings
- [ ] Test Reports & Related Documents
- [ ] Certificate of Completion
- [ ] Record Drawings
- [ ] Permits from applicable Local, State & Federal Agencies
- [ ] Clearances from all applicable Local, State and Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend
- [x] Approval of Final PD
- [ ] Building Permit
- [ ] C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

- [x] See attached for engineering advisory comments

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

ENGINEERING ADVISORY COMMENTS:

a. Prior to issuance of a Site Work permit, the applicant shall be required to file a Unity of Title combining the two parcels of land into one parcel.
b. Prior to issuance of a Site Work permit, the applicant shall provide a copy of the recorded 50' wide Ingress-Egress Easement for Sharon Terrace.
c. Ninety (90) days prior to any Land Clearing activities, a gopher tortoise survey shall be conducted. The survey shall be performed by a Florida Fish and Wildlife Conservation Commission authorized consultant.
d. The drainage plan was reviewed as a conceptual plan and will be further reviewed at time of Building Permit submittal.
e. Phasing of the property is proposed; Phase I construction shall include the master drainage system.

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

ST. LUCIE COUNTY FLORIDA

PUBLIC WORKS DEPARTMENT
TECHNICAL REVIEW COMMITTEE

April 20, 2021

PROJECT: Privilege Development - North

REF: TRC

TO: Vennis Gilmore

FROM: Grant Chambers

The following comments are offered by SLC PW/Engineering:

1. Right-of-Way dedications shall be coordinated with the County's Property Acquisitions group. Please contact Kayla Chidgey at kayla.chidgey@stlucieco.gov.
2. The emergency access driveway to Dade Road should utilize a stabilized material other than asphalt or concrete within the Right-of-Way.
3. A Site Development permit for access and drainage outfall from the County prior to initiation of site improvements is required. Please submit a site development permit application through the County's online permitting portal.
4. An offsite Roadway Improvement Agreement and bonding is required prior to issuance of a County permit.
5. For discussion regarding these comments, please contact me at 772-462-1491, haysd@stlucieco.org.

Cc: Alicia Rosenthal

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

TO: VENNIS GILMORE, SENIOR PLANNER

FROM: SARA HEDGES, CITY ATTORNEY SH

RE: PRIVILEGE TOWNHOMES - FINAL PLANNED DEVELOPMENT & DEVELOPMENT AGREEMENT

RLS: RLS 26-285

DATE: AUGUST 13, 2026

I have reviewed the above Request for Legal Services (RLS). Submitted for review were a Rezoning Ordinance and a Planned Development Agreement. Pursuant to our email conversation, this project is not in a final enough form to provide necessary information for finalization of these documents. Therefore, I have reviewed them as drafts. I have also made the changes to the Planned Development Agreement you requested:

1. Delete any Master PD language.
2. Include Unified Control language.
3. Concurrency language added, please review.
4. Traffic Contribution language, which will need to be filled in.
5. Permitted Uses, Densities, Height, which will need to be filled in.
6. Language requiring the completion of the PD by a certain time has been added, please include the number of years agreed to.

The name of the development has also been changed to the name the Developer clarified in subsequent email.

I was uncertain if your response to the cure language included in Section 23 meant you wanted all of the language deleted or the time changed to 30 days. I have changed the time to 30 days, but included a comment for you to review whether you want the entirety of the language removed.

Track Changes versions have been uploaded for your review. Once you finalize the missing information, please include it in the documents and resubmit them for final review as to legal form and correctness.

Please note, this Planned Development Agreement was not prepared using the Template this Office has provided. While the Template is not required to be followed, when it is not, that creates the issues we saw here where terms have been changed, added, deleted, etc. that Planning has to be mindful to review. It also make this Office's review more difficult because we have to go through and find the comparable terms in the Template. I strongly recommend Planning have Developers all use the same Template when preparing these Planned Development Agreements. If there are updates needed to the Template, those can be made as needed.

If you have any questions, please do not hesitate to contact this Office via phone or email.

Thank you.

Fort Pierce Utilities Authority
Gas Operations
1701 South 37th Street (PO Box 3191)
Fort Pierce, FL 34947 (34948)

Utility Load & Energy Resilience Consideration (FPUA):

Tentatively Approved. As electric demand continues to grow and infrastructure evolves, the Fort Pierce Utilities Authority (FPUA) encourages consideration of natural gas systems and appliances, where feasible, to help manage peak electric loads and support long-term system reliability.

Projects utilizing natural gas may be eligible for reduced or, in some cases, waived gas main and/or service line costs, contingent upon total connected gas load and system availability. Rebate incentives may also be available for qualifying natural gas appliances.

Natural gas services provide high reliability and results in lower month-to-month operational costs for end users when compared to all-electric designs. Early coordination with FPUA Gas Operations during the design phase is strongly recommended to evaluate availability, incentives, and long-term cost benefits.

For questions regarding natural gas availability, system capacity, or potential incentives associated with this project, early coordination with FPUA Gas Operations is encouraged. Please contact Billy Dupre at FPUA Gas Operations during the design phase to review feasibility, incentive eligibility, and long-term utility cost considerations.

Thank you kindly,

Billy Dupre
Business Development Representative
Gas Operations
Fort Pierce Utilities Authority
1701 S 37th Street
Fort Pierce FL 34947
C: 772-216-3498
O: 772-466-1600 X4705
F: 772-468-2418

FORT PIERCE UTILITIES AUTHORITY
"Community Proud"

Developer's Responsibilities for Utility Connection

The purpose of this document is to provide clear direction for connecting a project to the Fort Pierce Utilities Authority (FPUA) water and wastewater system.

Note that approval through the City of Fort Pierce or Saint Lucie County site plan approval process does not constitute approval of your detailed utility plans through FPUA. The steps required for FPUA approval are listed below. All Forms, Standards and Specifications, Standard Details, etc. can be downloaded from our website under the Doing Business with FPUA link then W/WW Engineering Downloads.

1. Visit www.FPUA.com and become familiar with our Standards and Specifications. Standard details are provided .pdf format for easy transfer onto your construction plans. These details are updated often and you are responsible for obtaining the most current specifications.

   https://fpua.com/doing-business-with-fpua/

   https://fpua.com/water-and-wastewater-engineering-downloads/

2. It is recommended at this time to contact and schedule a pre-design conference with a FPUA Project Manager.

3. Submit 3 initial sets of detailed utility drawings to 1701 S. 37th Street, Fort Pierce, FL 34947, along with the plan review and commercial applications.

   Note: Reference section 1.22 of the General Design & Construction Standards for Drawing/CAD requirements. Failure to adhere to requirements will result in utility plan denial. Allow 30-day response time. It may take several submittals to receive an approved design.

4. An Engineering Review Fee Invoice will be calculated based on your project submission. You may calculate this fee yourself, if you elect to calculate the fee yourself in an effort to expedite the submittal process, keep in mind that your calculations are subject to FPUA approval. This invoice must be paid prior to the return of your first plan submittal, permits, etc. Review fees are based on:

   $500 Flat charge per development
   plus $20 per water equivalent residential connection (WERC) at 300 gallons per day
   plus $20 per sewer equivalent residential connection (SERC) at 240 gallons per day

   Note: For multi-family developments, (more than two units per building) each unit represents 70% of one WERC and 87.5% of one SERC.

5. Submit any required permits (Draft) with your initial construction plans. Please use the Water and Wastewater FDEP Permit forms provided on the website as the pertinent information is always current.

6. Submit a Notice of Intent to Discharge Form with your initial construction plans. Should you need an Application for Wastewater Discharge Permit, you will be contacted by our Pretreatment Coordinator.

7. Upon plan approval, you will receive one set of the submitted plans stamped approved or approved as noted and any applicable permits executed.
8. Execute and submit a Water and Wastewater Supply Agreement at the time of final plan submittal. This is a three-party document outlining the requirements of the project owner and project engineer.
9. If your property is outside the City Limits, the property owner will be required to sign an Annexation Agreement. Please complete the attached annexation form and return to your FPUA project manager.
   Our office will provide this information to the attorney, who will prepare an annexation agreement and their office will call/email the property owner to have the agreement signed and will thereafter record the agreement. The service fees, which are subject to change and are payable to Fort Pierce Utilities Authority at the time the agreement is signed, range from $75 - $400.

   Note that until the approval and acceptance of the Plans and Permits, the execution of the Annexation Agreement, Supply Agreement, and Payment of Capital Improvement Charges, Accrued Guaranteed Revenue Charges, and other associated fees, the project cannot move forward to the construction phase.

10. Submit a minimum of 3 shop drawings for all sanitary structures and manufacturer's cut sheets for all materials. These submittals will be reviewed and may be returned approved or revise and resubmit if major deficiencies are found.
11. Contact your FPUA Project Manager to schedule a pre-construction meeting.
12. When your project is about 90% complete, please contact your FPUA Project Manager to schedule a post-construction meeting. At that meeting, you will need to have your turnover package complete. All items in the turnover package must be complete prior to scheduling a walk-through. Listed below are the items in the turnover package:

    a. Bill of Sale/Cost and Quantities (utilize form on website)
    b. FDEP Water/Wastewater Certification
    c. DDC Data Sheet to include device number, manufacturer, installation date, test date and results, and device size
    d. Record Drawings – Need Two Sets of Paper Copy Drawings (As-Builts are not accepted)
    e. Gravity Sewer Inspection DVD
    f. Lift Station Start Up
    g. Lift Station O & M Manuals (FPUA Owned Only)
    h. Private Lift Station/Collection System Application (if applicable)

13. If your project requires an easement, the property owner will be required to sign an easement agreement. Please complete the attached easement form and return to your FPUA Project Manager.

    Our office will prepare an invoice, payable to Fort Pierce Utilities Authority, for the service fees associated with the preparation and recording of the easement agreement. The invoice will be provided to the property owner and, once paid, our attorney will prepare an easement agreement. Our office will obtain signatures from the property owner and thereafter will record the easement agreement.

14. The following items need to be received prior to any meters being installed or chain being removed from DDC:

    a. All Fees Paid (meter, DDC, deposits, New Account Setup Fees, etc.)
    b. Final Inspection/Walk-Through

c. Punch List Complete
d. Contractor's Affidavit and Release of Lien (utilize form on website)
e. Executed Easement
f. Memorandum from Applicable Right-of-Way Agency (Agency Granting Permit) that Project is Acceptable to Them
g. Record Drawings – After Review and Approval, Need Two Sets Paper Copy, One Set of Mylars and One CD in AutoCad Format.

DDC Installation Procedures

Below are the procedures for the installation of a DDC for unmetered fire

- Fire/Mechanical Plans (offsite to device only) approved by FPUA Project Manager (PM)
- Submittals approved by PM, with an approved set provided to Water Distribution (WD)
- PM will acquire DDC installer contact information at pre-construction meeting and provide to WD
- DDC contractor must be licensed with certification in backflow device installation and testing. Proof of certification must be provided to WD prior to pressure test
- Upon notification of the need for a DDC, Engineering Coordinator (EC) e-mails Key Accounts (KA) with device size and account information
- KA sets up account and creates service order which charges $40 Initiation of Service Charge and alerts WD, via service order, of the DDC being installed
- Contractor installs standpipes, concrete pad, and DDC under direct supervision of Water/Wastewater/Natural Gas Engineering Inspector to ensure compliance with clearances and adequate work space for future testing, maintenance, and repairs. Inspector locks device with chain after installation
- Prior to scheduling the backflow certification test through the inspector, all lines to and from the device must be chlorinated and pressure tested per their respective agencies
- WD Service Foreman must be notified (via Inspector) at least 24 hours prior to the test. Service Foreman must be present for the test and re-locks the OS&Y in the closed position after test. The test sheet must be given to WD either directly after the test or arrangements should be made to receive the test results. Engineering does not need a copy of the test results; WD will notify inspector of the test results
- If at any time after the DDC installation the lock or chain has been found cut, the Revenue Protection Officer will be notified immediately. **Tampering or removal of the lock and/or chain will result in a Tampering Fee of $200 and all associated fees according to the current FPUA Resolution. (WD will do a T-Tamper-Water service order; Revenue Protection Officer will go to site, take pictures, and bill tampering fee)**
- After final walk-thru, EC will send Meter Installation Authorization (MIA) Form to WD Administrative Coordinator authorizing removal of the chain and begin billing
- WD will remove the chain and add the DDC information to the account, including the device number and billing rate
- EC will send Cost and Quantities to Finance to record the asset

WATER AND WASTEWATER ENGINEERING

REQUEST FOR PREPARATION OF EASEMENT

1. **PROPERTY OWNER BUSINESS, NAME AND ADDRESS**

2. **REGISTERED SUNBIZ AGENT CONTACT, TITLE, ADDRESS, EMAIL AND PHONE NUMBER**

3. **SITE ADDRESS AND PARCEL ID**

4. **LEGAL DESCRIPTION AND EASEMENT DESCRIPTION**

   ATTACHED

5. **FPUA PROJECT MANAGER CONTACT INFORMATION**

6. **EASEMENT TO BE PREPARED AT THE COST OF: CUSTOMER**

7. **PROJECT SCHEDULED COMMENCEMENT DATE _____**

ATTACH SKETCH OF EASEMENT

WATER AND WASTEWATER ENGINEERING

REQUEST FOR PREPARATION OF ANNEXATION

1. **PROPERTY OWNER BUSINESS, NAME AND ADDRESS**

2. **REGISTERED SUNBIZ AGENT CONTACT, TITLE, ADDRESS, EMAIL AND PHONE NUMBER**

3. **SITE ADDRESS AND PARCEL ID**

4. **FPUA PROJECT MANAGER CONTACT INFORMATION**

5. **ANNEXATION TO BE PREPARED AT THE COST OF: CUSTOMER**

SEQUENCE OF EVENTS IN PREPARATION OF EASEMENT

1. Complete Request for Preparation of Easement. When at all possible, all easements should be done on one form.

2. Forward completed Request form to FPUA Project Manager.

3. FPUA Attorney will order title search.

4. Upon receipt of title search, FPUA will email identity of owner and any mortgagees to FPUA Contact Person.

5. FPUA Contact Person will contact Customer/Owner to determine willingness to sign an easement and inform the Owner of the need for the lender, if any, to join in easement.

6. If Customer/Owner is willing to sign an easement, FPUA Contact Person will so advise FPUA Attorney and an easement will be prepared.

7. FPUA Attorney will call Customer/Owner to make arrangements to have the easement signed. In the alternative, if Contact Person wishes, the easement and other documents can be emailed to FPUA Contact Person to have signed. FPUA Contact Person will then return the signed easement/documents to FPUA Attorney.

8. FPUA Attorney will record the signed easement/documents and will return the recorded easement to Water/Wastewater Engineering Coordinator.

9. Engineering Coordinator gives the easement to the technician assigned to put on GIS.

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

SITE PLAN REVIEW

TO: Site Plan Applicant

SITE PLAN: PD2025-00004-Privilege Townhomes

REVIEW DATE: 8/18/2025

PLANNER: VENNIS GILMORE

REVIEWED BY: Captain Jesse Almand

Site Plan Approved with conditions: ___X____

Site Plan Requires Re-submittal: _____

The following Conditions/Revisions are necessary:

1. ~~**Please submit a completed application for Development/Site Plan Review (St. Lucie County Fire District Development & Site Plan Review Application). This form is available on-line at https://www.slcfd.com.**~~ **Received 10/1/2025**
2. ~~**Invoicing contact information will need to be provided in the Applicant/Agent for Owner section on the application. Please be sure to include the assigned project number, business name, address, primary contact name, phone number and email address for the responsible party. Invoices will be generated upon receipt of application and supporting documents. An abbreviated fee schedule is included on the application form. Payment can be made by credit card or check.**~~

3. ~~**Written acknowledgement of the conditions/comments provided, as well as any required revisions are due at the time of application submittal.**~~ **Received 12/16/2025**

4. ~~**Fire District review fees are due at the time of submittal. An abbreviated fee schedule is included on the application form.**~~ **Received 10/22/2025**

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

5. ~~**Fire District Development/Site Plan Review application, supporting documentation, and the associated review fee, are due prior to site plan approval.**~~

6. ~~**A separate submittal to SLCFD for review and permitting will be required for any Fire Alarm, Fire Sprinkler, Underground Fire Main, or other life safety systems where required by the currently adopted version of the *Florida Fire Prevention Code.***~~

7. ~~**Fire department access roads provided in accordance with 18.2.3 shall be provided at the start of a project and shall be maintained throughout construction. (NFPA 1 16.1.4). Surface. Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface. (NFPA 1.18.2.3.5.2)**~~

8. ~~**Electronic security gates must have an access control key switch on the control panel to allow for Fire Department entry in an emergency. Manual security gates that will be locked require a Knox lock. All security gates shall maintain a clear width of 12 feet when open and provide a means to open the gates manually upon loss of power. (SLCFD Resolution 740-23)**~~

9. ~~**The minimum acceptable cul-de-sac radius is 50 feet to the edge of pavement.**~~

10. ~~**Per the St. Lucie County Fire District Fire Prevention Code Resolution 740-23, at least 13 feet 6 inches nominal vertical clearance shall be provided and maintained over the full width of all means of access (including, but not limited to trees, canopies, etc.)**~~

11. ~~**The Fire District reserves the right for future comments at the site plan & building construction phase.**~~

12. ~~**Fire apparatus access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft from fire apparatus access roads as measured by an approved route around the exterior of the building or facility. NFPA 1 18.2.3.2.2. (*Installation of a sprinkler system will be required if this distance requirement is not met.)***~~

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

13. ~~**Where buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13R, or NFPA 13D, the distance in 18.2.3.2.2 shall be permitted to be increased to 450 ft (137 m). (NFPA 1 18.2.3.2.2.1)**~~

14. ~~**Please provide a truck circulation detail.**~~

15. ~~**Be advised: Dimensions of largest vehicle are as follows: 38 tons or 77,000 lbs, 47.5 ft. total length, 21.5 ft. wheel base, 10.5 ft. total width, 41.5 degree turning radius. (SLCFD Resolution 740-23)**~~

16. ~~**Minimum roadway pavement width (two-way traffic) shall be twenty (20) ft. (SLCFD Resolution 740-23)**~~

17. ~~**Minimum roadway pavement width (one-way traffic) shall be twelve (12) ft. (SLCFD Resolution 740-23)**~~

18. ~~**Fire apparatus access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft (0.61 m) beyond each edge of the fire apparatus access road. (NFPA 1 18.2.3.5.3.3)**~~

19. ~~**The angle of approach and departure for any means of fire apparatus access road shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m) or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the AHJ.(NFPA 1 18.2.3.5.6.2)**~~

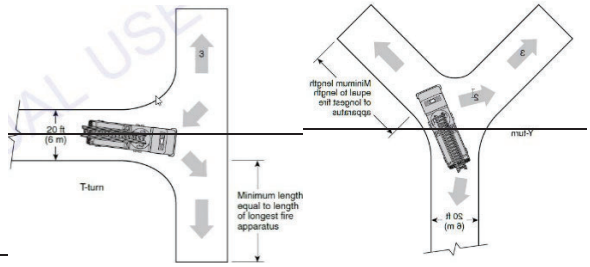
20. ~~**A fire department access road shall extend to within 50 ft (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1.18.2.3.2.1)**~~

21. ~~**Where a one- or two-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with NFPA 1 Section 13.3, NFPA 13D or NFPA 13R, the distance in 18.2.3.2.1 shall be permitted to be increased to 150 ft (46 m). (NFPA 1.18.2.3.2.1.1)**~~

22. ~~**Dead-end roadways serving commercial or residential occupancies must include a cul-de-sac when the roadway length exceeds one hundred-fifty (150) feet. "Y" or "T" type turnaround arrangements are permitted. The minimum length must be equal to the length of the longest fire apparatus. (SLCFD Resolution 740-23)**~~

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**



23. ~~**Fire hydrants (shall be) are provided for buildings other than detached one-and-two-family dwellings IAW both of the following 1) The maximum distance to a fire hydrant from the closest point in the building shall not exceed 400 feet. 2) The maximum distance between fire hydrants shall not exceed 500 feet. NFPA 1:18.5.3. Please provide fire flow calculations for hydrants.**~~

24. ~~**An approved water supply capable of supplying the required fire flow for fire protection (shall be) is identified to all premises upon which facilities, buildings, or portions of buildings which are to be constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1:18.4.**~~

25. ~~**Fire department connections shall be located on the street side of buildings and shall be located and arranged so that hose lines can be readily attached to the inlets without interference from any nearby objects, including buildings, fences, landscaping, or other fire department connections. The locations of connections shall be based upon the access requirements of the fire department.**~~

26. ~~**The distance allowed between the fire department connection and a fire hydrant shall be no more than one hundred fifty (150) feet as a vehicle travels.**~~

27. ~~**Where underground water mains and hydrants are to be provided, they shall be installed, completed, and in service prior to commencing construction work on any structure. It is not intended to prohibit the construction of non-combustible structure foundation elements such as foundations and footings prior to the completion of underground water mains and hydrants (NFPA 1 16.4.3.1.3).**~~

28. ~~**The minimum size of water mains for supplying water for firefighting purposes shall be six (6) inches. b. The minimum size of water mains supplying hydrants on a dead end main shall be eight (8) inches. c. The maximum number of hydrants**~~

~~located on a dead end main shall be one (1). d. Grid or Tee systems shall be supplied by a minimum of an eight (8) inch looped main. Exceptions may be granted based on the capacity of the water distribution system but in no case shall the main size be less than six (6) inches. e. The minimum size water main(s) shall be determined by the needed fire flow as established by the Fire Marshal and based on the current Insurance Service Office (ISO) requirements.~~

29. **~~Hydrants shall be located no more than 12ft. from the curb of roadways or from the edge of payment. Clearances of three feet (3 ft.) shall be maintained around the circumference of hydrants. A clear space of not less than five feet (5ft.) shall be provided in front of each hydrant connection having a diameter greater than 2 ½ inches. The center of hose outlet shall be not less than 18 inches above final grade. (SLCFD Fire Prevention Code Resolution 740-23).~~**

30. **~~Site Plans submitted in accordance with this Fire Prevention Code shall include the size, layout, and offsite connections for the water distribution system and the location of all existing and proposed fire hydrants within one thousand (1,000) feet of the proposed project.~~**

Patricia Sesta, Haley Ward
10250 SW Village Parkway, Suite 201
Port St. Lucie, FL 34987

Re: Final Planned Development – Privilege PD – Project #: PD2025-00004

4th Resubmittal Review 8.25.26

Dear Ms. Sesta,

The following are comments from the Planning Department's review of your application (Please provide a Written Response and any revisions (if applicable) for all responsible Departments):

1. If this is a Fee-Simple Development, Final Plat approval of the property shall be required prior to application for a building permit for a residential building.
2. The minimum Open Space shall be maintained at a minimum of 35.77% of the **Final PD** site area.
3. The development shall comply with the permitted density, intensity and residential lot and building heights as outlined within the approved Privilege Development Agreement and **Final PD** site plan.
4. A detailed stormwater and drainage plan and statement shall be submitted at the time of Building Permit.
5. The **Final PD** Plan shall be governed by all agreements, provisions and covenants which govern the use, maintenance, and continued protection of the planned development and any of its common open space or other shared areas. This shall include the binding of successors in title to any commitments concerning completion of the project and its maintenance and operation.
6. A tree mitigation calculation shall be submitted and approved prior to issuance of a site clearing or vegetation removal permit.
7. A landscape maintenance agreement shall be required prior to final certificate of occupation. (see attached)

8. All applicable state or federal permits shall be obtained before commencement of the development.
9. After completion of the Final Plat, a General Address Request Form for the newly created Parcel ID(s) and for any and each proposed building and residential unit shall be submitted to the Planning Department.
10. Consider staggered front setbacks in locations that allow for breaking up monotony in architectural design by creating visual interest.

Bearing in mind recent Planning Board and City Commission reviews/hearings relating to recent residential development/rezoning applications, we advise that the following items below be addressed and amended/included prior to the Planning Board hearing.

Per City Code Section **125-212. - Planned Development Zone (PD).** (a) *Purpose.* The Planned Development (PD) Zone District is to provide a process for the evaluation of developments which are not otherwise permitted in the zoning districts established by this chapter. The PD District is a voluntary process commenced by an applicant for such zoning designation. **The intent is to establish a resilient living and working environment through the application of enlightened and imaginative approaches to community planning, stormwater infrastructure and property design. A PD should provide a variety of natural features and scenic areas, efficient and economical land use, improved amenities, orderly and economic development, and the protection of adjacent existing and future development.** Therefore, the PD alternative may allow uses and design concepts which are not specifically allowed in standard zoning districts.

11. Wetlands are being mitigated (removed), please identify the exact preserve areas for reference. We are aware of the SFWMD Mitigation Credits.
12. It is recommended that you reach out to the neighbors and address any comments or concerns that you may receive prior to Planning Board.
13. Please coordinate with the City of Fort Pierce Public Works Department on their approval of trash pick-up.

14. Coordinate with St. Lucie Area Regional Transit and discussing a transit contribution along the corridor of South 25th Street.

Adolfo Covelli | Transit Director
Ph: 772-462-1798 |2300 Virginia Avenue, Fort Pierce, FL 34982

https://www.facebook.com/StLucieGOV/ | https://www.youtube.com/stluciegov

Adolfo Covelli - **Adolfo.Covelli@stlucieco.gov**

Cathi Petagno - **cathi.petagno@stlucieco.gov**

15. Coordinate with St. Lucie County Schools for an internal school bus stop location.

Nicole L. Fogarty
Director of Growth Management, Land Acquisitions & Intergovernmental Relations
O: (772) 429-7547 C: (772) 789-0685 ◆ 9461 Brandywine Lane Port St. Lucie, FL 34986 ◆ nicole.fogarty@stlucieschools.org

If deemed necessary, please provide a written response to each comment to expedite the review of any subsequent submittals. Please contact me should you have any questions regarding the project at (772) 467-3741 or by e-mail: vgilmore@cityoffortpierce.com.

Sincerely,
Vennis Gilmore
Historic Preservation Officer/Senior Planner

HALEY WARD

August 31, 2026

City of Fort Pierce
Attn: Vennis Gilmore
100 N US Highway 1
Fort Pierce, FL 34950

Re: Sunrise Blvd. Final PD # PD2025-00004, Response to Comments

Dear Mr. Gilmore:

On behalf of our client, please find the attached response to comments received on August 25, 2026, for a project known as **Sunrise Blvd. Final PD**. Each comment is identified below followed by a response in ***bold italics***.

Planning (Vennis Gilmore)

1) If this is a Fee-Simple Development, Final Plat approval of the property shall be required prior to application for a building permit for a residential building.

RESPONSE: Acknowledged.

2) The minimum Open Space shall be maintained at a minimum of 35.77% of the Final PD site area.

RESPONSE: Acknowledged.

3) The development shall comply with the permitted density, intensity and residential lot and building heights as outlined within the approved Privilege Development Agreement and Final PD site plan.

RESPONSE: Acknowledged.

4) A detailed stormwater and drainage plan and statement shall be submitted at the time of Building Permit.

RESPONSE: Acknowledged.

5) The Final PD Plan shall be governed by all agreements, provisions and covenants which govern the use, maintenance, and continued protection of the planned development and any of its common open space or other shared areas. This shall include the binding of successors in title to any commitments concerning completion of the project and its maintenance and operation.

RESPONSE: Acknowledged.

10250 VILLAGE PKWY, STE 201, PORT ST. LUCIE, FL 34987 772.462.2455 | HALEYWARD.COM

6) A tree mitigation calculation shall be submitted and approved prior to issuance of a site clearing or vegetation removal permit.

RESPONSE: Acknowledged.

7) A landscape maintenance agreement shall be required prior to final certificate of occupation. (see attached).

RESPONSE: Acknowledged.

8) All applicable state or federal permits shall be obtained before commencement of the development.

RESPONSE: Acknowledged.

9) After completion of the Final Plat, a General Address Request Form for the newly created Parcel ID(s) and for any and each proposed building and residential unit shall be submitted to the Planning Department.

RESPONSE: Acknowledged.

10) Consider staggered front setbacks in locations that allow for breaking up monotony in architectural design by creating visual interest.

RESPONSE: The buildings are staggered, Please see revised site plan which includes a call out for the driveway length showing the staggering of the buildings in the typical townhome section on page 2.

Bearing in mind recent Planning Board and City Commission reviews/hearings relating to recent residential development/rezoning applications, we advise that the following items below be addressed and amended/included prior to the Planning Board hearing.

Per City Code Section 125-212. - Planned Development Zone (PD). (a) Purpose. The Planned Development (PD) Zone District is to provide a process for the evaluation of developments which are not otherwise permitted in the zoning districts established by this chapter. The PD District is a voluntary process commenced by an applicant for such zoning designation. **The intent is to establish a resilient living and working environment through the application of enlightened and imaginative approaches to community planning, stormwater infrastructure and property design. A PD should provide a variety of natural features and scenic areas, efficient and economical land use, improved amenities, orderly and economic development, and the protection of adjacent existing and future development.** Therefore, the PD alternative may allow uses and design concepts which are not specifically allowed in standard zoning districts.

RESPONSE: Acknowledged.

11) Wetlands are being mitigated (removed), please identify the exact preserve areas for reference. We are aware of the SFWMD Mitigation Credits.

RESPONSE: There is no onsite preservation proposed and mitigation credits have previously been purchased through Bluefield Mitigation Bank.

12) It is recommended that you reach out to the neighbors and address any comments or concerns that you may receive prior to Planning Board.

RESPONSE: A neighborhood meeting is scheduled for September 2, 2026 @ 5:30 p.m. This meeting will be held at the White City Improvement Club.

13) Please coordinate with the City of Fort Pierce Engineering Department concerning the proposed bioswale and provide approval prior to Planning Board.

RESPONSE: Acknowledged.

14) Please coordinate with the City of Fort Pierce Public Works Department on their approval of trash pick-up.

RESPONSE: Acknowledged.

15) Coordinate with St. Lucie Area Regional Transit and discussing a transit contribution along the corridor of South 25th Street.


15. Coordinate with St. Lucie Area Regional Transit and discussing a transit contribution along the corridor of South 25th Street.

Adolfo Covelli | Transit Director
Ph: 772-462-1798 |2300 Virginia Avenue, Fort Pierce, FL 34982

https://www.facebook.com/StLucieGOV/ | https://www.youtube.com/stluciegov

ST. LUCIE COUNTY FLORIDA
Since 2016 BEST Places to work ST. LUCIE COUNTY
art area regional transit

Adolfo Covelli - Adolfo.Covelli@stlucieco.gov
Cathi Petagno - cathi.petagno@stlucieco.gov

RESPONSE: Acknowledged.

16) Coordinate with St. Lucie County Schools for an internal school bus stop location.


Nicole L. Fogarty
Director of Growth Management, Land Acquisitions & Intergovernmental Relations
O: (772) 429-7547 C: (772) 789-0685 ◆ 9461 Brandywine Lane Port St. Lucie, FL 34986 ◆ nicole.fogarty@stlucieschools.org
St. Lucie PUBLIC SCHOOLS

RESPONSE: Acknowledged.

St. Lucie County (Grant Chambers)

1) Right-of-Way dedications shall be coordinated with the County's Property Acquisitions group. Please contact Kayla Chidgey at kayla.chidgey@stlucieco.gov.

RESPONSE: Acknowledged.

2) The emergency access driveway to Dade Road should utilize a stabilized material other than asphalt or concrete within the Right-of-Way.

RESPONSE: Acknowledged.

3) A Site Development permit for access and drainage outfall from the County prior to initiation of site improvements is required. Please submit a site development permit application through the County's online permitting portal.

RESPONSE: Acknowledged.

4) An offsite Roadway Improvement Agreement and bonding is required prior to issuance of a County permit.

RESPONSE: Acknowledged.

5) For discussion regarding these comments, please contact me at 772-462-1491, haysd@stlucieco.org.

RESPONSE: Acknowledged.

We feel the attached adequately addresses staff comments and respectfully request the approval of this application. If you have any questions regarding this application, the attached documents, or the project, please contact our office.

Respectfully,
Haley Ward, Inc.



Patricia Sesta
Planner

cc: Joe Garofalo

P:\FL\2013370-Port_Richey_Village_Investments_LLC\24-237 - MOVED 2013370 Garofalo - Sunrise Blvd. (Privilege North)\ENGINEERING\Documents\Submittal Documents\Comment Response Letter\2026-08-31_V_Gilmore_Sunrise_Blvd_Final_PD_Rsp2Cmts_DRC_Ltr_24-237.docx

Planning Board - 2:00 PM **6. c.**

Meeting Date: 09/17/2026

Re: Willow Lakes Data Center - Rezoning

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

PZZAM2026-00002
Zoning Atlas Map Amendment
Willow Lakes Rezoning
10050 W. Midway Road

SUMMARY:

Request

Per Article V Sections 125-133, and 125-136 of the City Code, the applicant is requesting approval to rezone one (1) parcel from PD, Planned Development Zone to I-1, Light Industrial Zone and C-3, General Commercial Zone. The applicant proposes to rezone the property from Planned Development (PD) to General Commercial (C-3) zoning with respect to approximately 26 acres located along the property's frontage on Midway Road and to Light Industrial (I-1) with respect to the approximately 174-acre balance of the property. The property has a future land use designation of MXD, which allows for the foregoing zoning categories.

The applicant intends to develop a data center on the portion of the property to be zoned Light Industrial. The property has access to electrical power due to two FPL easements crossing the property containing large electrical transmission lines, and a major electrical substation just south of the property. The property has access to water for a data center cooling system due to a large man-made lake on the site, which was originally excavated for aggregates mining. The applicant proposes placing a restrictive covenant on the land at the time of rezoning approval, limiting the Light Industrial zoned portion of the property to use as a data center. The portion of the property to be zoned General Commercial is intended for development for commercial retail uses, and could include a hotel, gas station and/or restaurants/fast food.

After obtaining the required rezoning to allow for a data center, the applicant intends to enter into an agreement with a partner company which would develop the data center. The partner company would need to submit to the City a site plan application for the proposed data center and obtain City approval of the site plan.

<u>History</u>

The subject parcel was originally approved as the Willow Lakes Planned Development by the City Commission of Fort Pierce on October 5, 2020.

To provide some perspective, the Willow Lakes Resort Village and Community was envisioned as a

vibrant, mixed-use urban village at the crossroads of Florida's Turnpike, Interstate 95, and the City of Fort Pierce. Situated on the 200.23 acres of land lying immediately north of Midway Road and west of I-95 within the City of Fort Pierce, Willow Lakes was proposed to be an east coast destination that will bring together local residents and regional, national and international visitors in a lively, pedestrian-oriented, and healthy environment of inviting public spaces, walkable streets, and authentic neighborhoods with a destination recreational amenity for seasoned and novice surfers.

Willow Lakes was formerly designed as a community that celebrated outdoor activity and a healthy lifestyle. The envisioned community was proposed to be a place where residential, retail, and commercial uses would be combined to provide a critical mass of activity that will bring year-round life. The vision was to create a "village" that would have been one of a kind in Florida built around a state-of-the-art and largest world-class surf park in the country.

Zoning: Sec. 125-204. – (I-1) Light Industrial Zone

The purpose of this district is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

Zoning: Sec. 125-200. – (C-3) General Commercial Zone

The district is intended to provide for a broad variety of business activities including shoppers' goods stores, convenience goods and service establishments, offices and tourist/entertainment facilities. Many public and semi-public uses are also appropriate. Compared to the C-4 zone, this district is more suitable for uses requiring a high degree of accessibility to vehicular traffic, low intensity uses on large tracts of land, most repair services and small warehousing and wholesaling operations. Although this zone should be located along or near arterial or collector streets, it is not the intent of this district to encourage the extension of strip commercial areas. Instead, it should promote concentrations of commercial activities.

Future Land Use: Comprehensive Plan, 1.1.6 Policy (B) Commercial

Mixed Use Development (MXD): The MXD designation is intended to promote intensification, redevelopment, and revitalization of the areas targeted for live/work environments. This area is characterized by development that promotes the creation of well-planned centers designed to integrate a variety of complementary uses. This land use designation allows a maximum density of 15 dwelling units per acre and a maximum FAR of 1.5. All MXD designated areas shall contain a minimum of two of the following general land uses:

- Residential (single-family and/or multifamily);
- Commercial—General and/or Neighborhood;
- Commercial—Town Center;
- Hotel (minimum 100 units);
- Office Uses—Professional and/or medical;
- Industrial;
- Institutional.

Staff Analysis

The City's current zoning regulations do not expressly identify "data center" as a separate use category, so its classification would need to be based on the use that is most similar in its actual operational characteristics.

City Code Section 125-6. Authorization of Similar Use.

The City Planning Board may permit in a particular zone a use not listed in this chapter, provided the use is of the same general type as the uses permitted there by this chapter. However, this section does not authorize the inclusion, in a zone where it is not listed, of a use specifically listed in another zone, or one which is of the same general type and is similar to a use specifically listed in another zone.

I-1, Light Industrial, the purpose of the I-1 District is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

I-2, Marine Industrial – Not appropriate.

I-3, Heavy Industrial, the purpose of the I-3 District is to provide for heavy industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged.

Within the City's zoning framework, a data center is most appropriately treated as comparable to an I-1, Light Industrial sue, rather than an office, general commercial, utility, or heavy industrial use.

RECOMMENDATION:

A conventional data center has the following characteristics:

1. A large, secure, warehouse-like building;
2. Computer servers and data-processing equipment rather than manufacturing machinery;
3. Limited employees and customer traffic;
4. No public access;
5. Loading, equipment replacement, maintenance and service activity;
6. Continuous HVAC and cooling operations;
7. Significant electrical service and telecommunications infrastructure;
8. Emergency generators, fuel storage, transformers and switchgear; and
9. Potential noise from chillers and mechanical equipment.

Although the principal activity is electronic data storage and processing, the physical form and infrastructure intensity will be closer to a light-industrial facility, warehouse, laboratory or technology plant than to conventional office use.

The two (2) proposed zoning districts of I-1, Light Industrial Zone and C-3, General Commercial Zone; meet the Comprehensive Plans minimum requirement of two (2) general land uses for the MXD, Mixed Use Development designation. This aligns reasonably with the City's description of light-industrial activities as facilities involving processing, storage, distribution, laboratories, warehouses and plants.

ALTERNATIVES:

Recommend **APPROVAL** – with Amended/Additional Conditions
OR
Recommend **DISAPPROVAL/DENIAL**

RESPONSIBLE STAFF:

Vennis Gilmore, Historic Preservation Officer/Senior Planner

COORDINATED WITH:

Kevin Freeman, Planning Director
Chris Suneson, Assistant Planning Director
Technical Review Committee

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Staff Report
Narrative and Justification Statement
Declaration of Restrictive Covenants
Property Record Card
Deed
Survey
Capacity Analysis
Traffic Impact Analysis
Environmental Assessment
Historical Report
Conceptual Zoning Plan
TRC Comments Combined
Public Concern
Public Support

Form Review

Form Started By: Vennis Gilmore Started On: 09/10/2026 01:07 PM
Final Approval Date: 09/11/2026

CITY OF FORT PIERCE

PLANNING DEPARTMENT

PROJECT: **WILLOW LAKES – ZONING ATLAS MAP AMENDMENT – PROJECT #: PZZAM2026-00002**

REVIEWER: **VENNIS GILMORE, HISTORIC PRESERVATION OFFICER/SENIOR PLANNER**

BOARD DATE: 9/17/2026

STAFF REPORT

Owner: Chad LaBonte, Willow Lakes, LLC

Applicant: Lee W. Dobbins and Logan Wellmeier, Dead Mead Minton & Moore

Requested Action: A review of an application to rezone one (1) parcel from PD, Planned Development Zone to I-1, Light Industrial Zone and C-3, General Commercial Zone.

Location: Generally located at or near 10050 W Midway Road in Fort Pierce, FL.

Parcel IDs: 3302-212-0001-000-4

Site Area: 200.23 +/- Acres

Current FP Zoning: PD, Planned Development Zone

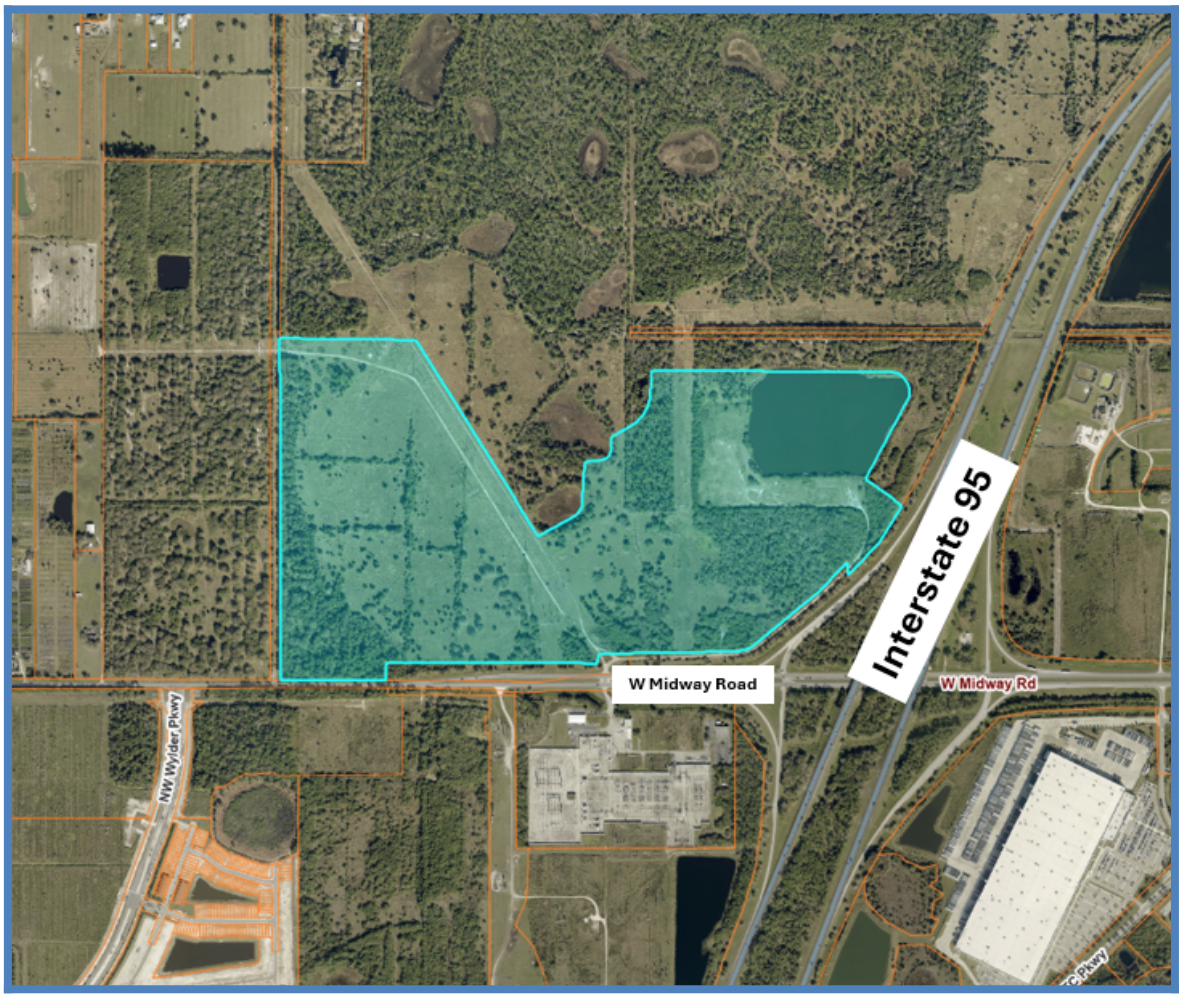
Current FP Future Land Use: MXD, Mixed Use Development

Proposed FP Zonings: I-1, Light Industrial Zone and C-3, General Commercial Zone

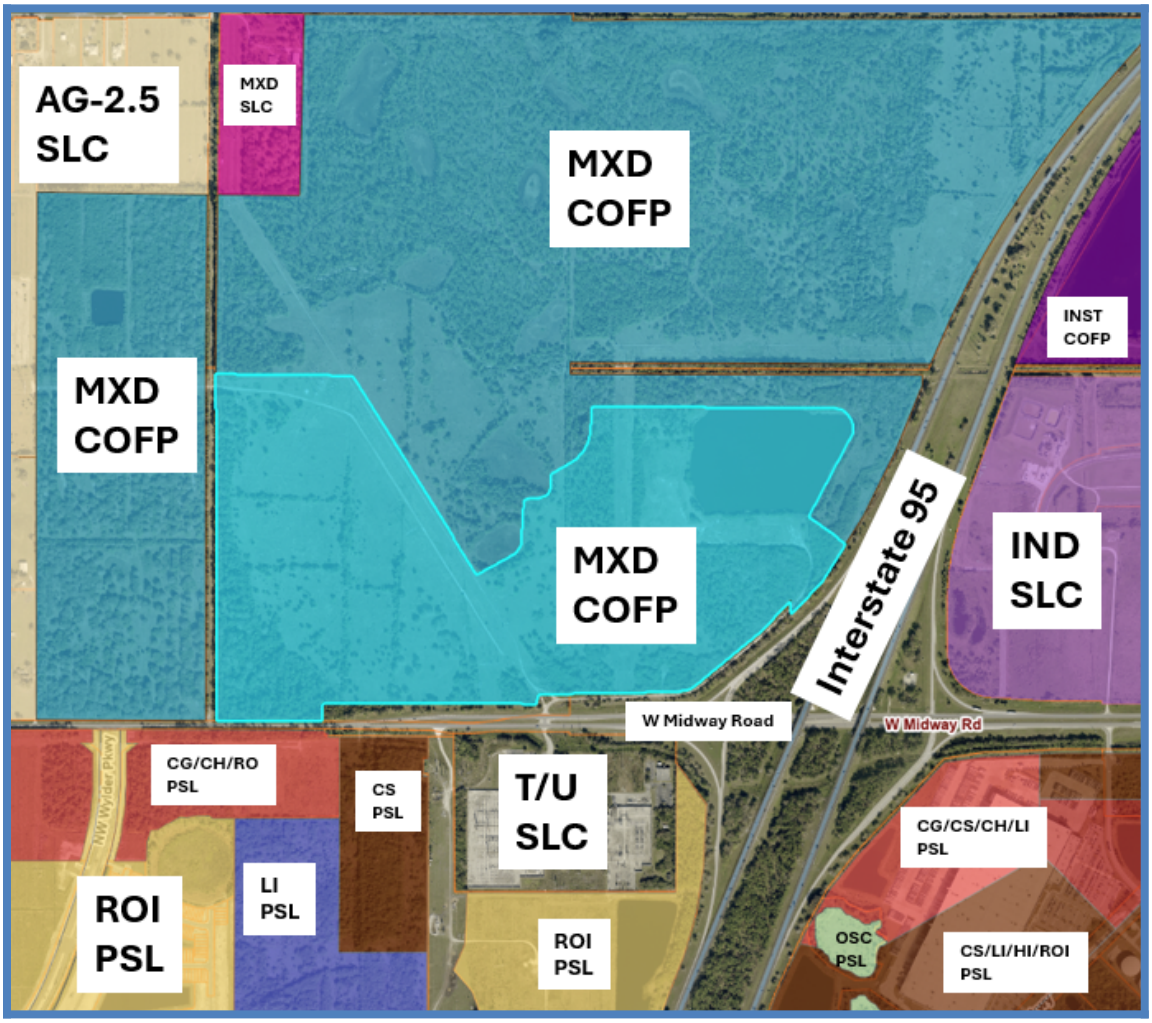
Utilities: Located within FPUA Service Area

	North	East	South	West
Surrounding FLU:	Mixed Use Development (MXD) -COFP Mixed Use (MXD) – SLC Agricultural, 1 du/2.5 ac (AG-2.5) - SLC	Institutional (INST) - COFP Industrial (Ind) – SLC	Highway Commercial/ Commercial General/ Medium Density Residential Office Institutional (CG/CH/RO) - PSL Service Commercial (CS) – PSL Residential, Office, Institutional (ROI) – PSL Light Industrial (LI) – PSL Commercial General/ Highway Commercial/ Service Commercial/Light Industrial (CG/CS/CH/LI) -PSL Service Commercial/ Light Industrial/ Heavy Industrial/ Medium Density Residential Office Institutional (CS/LI/HI/ROI) – PSL Open Space-Conservation (OSC) - PSL Transportation/Utilities (T/U) - SLC	Mixed Use Development (MXD) – COFP Agricultural, 1 du/2.5 ac (AG-2.5) - SLC
Surrounding Zoning:	Planned Development (PD) – COFP (Agricultural, 1 du/2.5 ac (AG-2.5) - SLC	Light Industrial (I-1) – COFP Utilities (U) – SLC Industrial Light (IL) - SLC	Planned Unit Development (PUD) – PSL To Be Determined (TBD) - PSL	Planned Development (PD) – COFP Agricultural, 1 du/2.5 ac (AG-2.5) - SLC

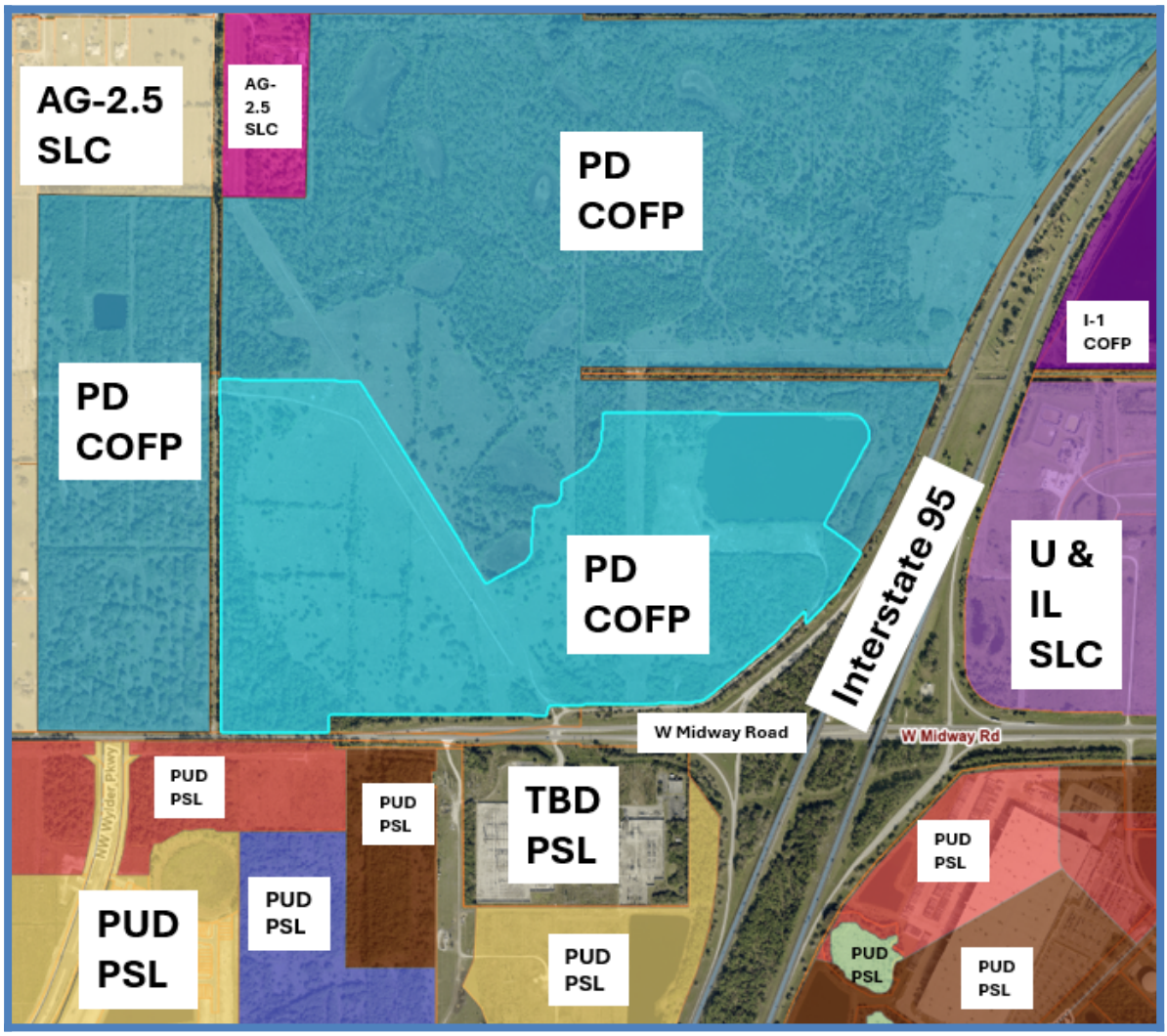
Location Map:



FP Future Land Use Map:



FP Zoning Map:



Request

Per Article V Sections 125-133, and 125-136 of the City Code, the applicant is requesting approval to rezone one (1) parcel from PD, Planned Development Zone to I-1, Light Industrial Zone and C-3, General Commercial Zone. The applicant proposes to rezone the property from Planned Development (PD) to General Commercial (C-3) zoning with respect to approximately 26 acres located along the property's frontage on Midway Road and to Light Industrial (I-1) with respect to the approximately 174-acre balance of the property. The property has a future land use designation of MXD, which allows for the foregoing zoning categories.

The applicant intends to develop a data center on the portion of the property to be zoned Light Industrial. The property has access to electrical power due to two FPL easements crossing the property containing large electrical transmission lines, and a major electrical substation just south of the property. The property has access to water for a data center cooling system due to a large man-made lake on the site, which was originally excavated for aggregates mining. The applicant proposes placing a restrictive covenant on the land at the time of rezoning approval, limiting the Light Industrial zoned portion of the property to use as a data center. The portion of the property to be zoned General Commercial is intended for development for commercial retail uses, and could include a hotel, gas station and/or restaurants/fast food.

After obtaining the required rezoning to allow for a data center, the applicant intends to enter into an agreement with a partner company which would develop the data center. The partner company would need to submit to the City a site plan application for the proposed data center and obtain City approval of the site plan.

History

The subject parcel was originally approved as the Willow Lakes Planned Development by the City Commission of Fort Pierce on October 5, 2020.

To provide some perspective, the Willow Lakes Resort Village and Community was envisioned as a vibrant, mixed-use urban village at the crossroads of Florida's Turnpike, Interstate 95, and

the City of Fort Pierce. Situated on the 200.23 acres of land lying immediately north of Midway Road and west of I-95 within the City of Fort Pierce, Willow Lakes was proposed to be an east coast destination that will bring together local residents and regional, national and international visitors in a lively, pedestrian-oriented, and healthy environment of inviting public spaces, walkable streets, and authentic neighborhoods with a destination recreational amenity for seasoned and novice surfers.

Willow Lakes was formerly designed as a community that celebrated outdoor activity and a healthy lifestyle. The envisioned community was proposed to be a place where residential, retail, and commercial uses would be combined to provide a critical mass of activity that will bring year-round life. The vision was to create a "village" that would have been one of a kind in Florida built around a state-of-the-art and largest world-class surf park in the country.

Zoning: Sec. 125-204. – (I-1) Light Industrial Zone

The purpose of this district is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

Zoning: Sec. 125-200. – (C-3) General Commercial Zone

The district is intended to provide for a broad variety of business activities including shoppers' goods stores, convenience goods and service establishments, offices and tourist/entertainment facilities. Many public and semi-public uses are also appropriate. Compared to the C-4 zone, this district is more suitable for uses requiring a high degree of accessibility to vehicular traffic, low intensity uses on large tracts of land, most repair services and small warehousing and wholesaling operations. Although this zone should be located along or near arterial or collector streets, it is not the intent of this district to encourage the extension of strip commercial areas. Instead, it should promote concentrations of commercial activities.

Future Land Use: Comprehensive Plan, 1.1.6 Policy (B) Commercial

Mixed Use Development (MXD): The MXD designation is intended to promote intensification, redevelopment, and revitalization of the areas targeted for live/work environments. This area

is characterized by development that promotes the creation of well-planned centers designed to integrate a variety of complementary uses. This land use designation allows a maximum density of 15 dwelling units per acre and a maximum FAR of 1.5. All MXD designated areas shall contain a minimum of two of the following general land uses:

- Residential (single-family and/or multifamily);
- Commercial—General and/or Neighborhood;
- Commercial—Town Center;
- Hotel (minimum 100 units);
- Office Uses—Professional and/or medical;
- Industrial;
- Institutional.

Staff Analysis

The City's current zoning regulations do not expressly identify "data center" as a separate use category, so its classification would need to be based on the use that is most similar in its actual operational characteristics.

City Code Section 125-6. Authorization of Similar Use.

The City Planning Board may permit in a particular zone a use not listed in this chapter, provided the use is of the same general type as the uses permitted there by this chapter. However, this section does not authorize the inclusion, in a zone where it is not listed, of a use specifically listed in another zone, or one which is of the same general type and is similar to a use specifically listed in another zone.

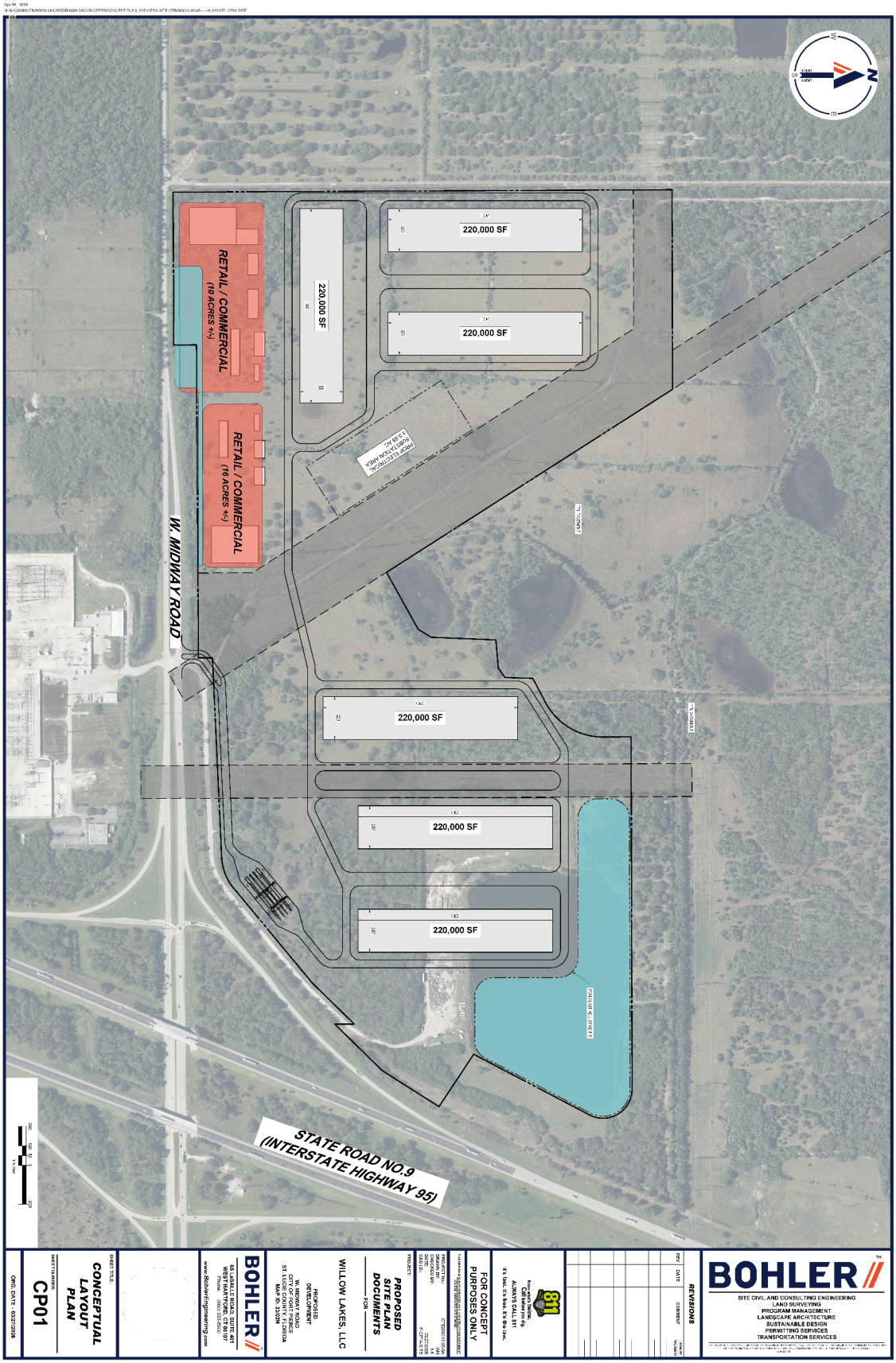
I-1, Light Industrial, the purpose of the I-1 District is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

I-2, Marine Industrial – Not appropriate.

I-3, Heavy Industrial, the purpose of the I-3 District is to provide for heavy industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged.

Within the City's zoning framework, a data center is most appropriately treated as comparable to an I-1, Light Industrial sue, rather than an office, general commercial, utility, or heavy industrial use.

Conceptual Zoning Plan



City Code Section 125-133. – Zoning Atlas Amendment:

The following procedure shall apply to amendment of the text of the zoning atlas:

(1)

The department of planning and development shall refer the application to the city planning board together with a staff report which notes any inconsistency between the proposed amendment and the comprehensive plan or this chapter.

(2)

The city planning board will review the proposed amendment within 45 days of the filing except that it may provide for a reasonable extension of time within which to consider the amendment upon a showing of good cause.

(3)

The city planning board will recommend approval, modified approval or disapproval of the proposed amendment, and its recommendations with the proposed amendment shall then be submitted to the city commission. Prior to acting on the proposed amendment, the city commission will hold a public hearing in accordance with the provisions of section 125-37.

(4)

In the event the city planning board recommends disapproval, such amendment shall not become effective except by a four-fifths vote by the city commission.

Standards for Review

City Code Section 125-136. – Basic Amendment Standards:

Before an amendment is approved, findings will be made that the following standards are satisfied:

(1)

The amendment is consistent with the comprehensive plan;

(2)

The amendment will not have an adverse effect on the ability of the city to:

a.

Satisfy land and water use needs;

b.

Meet transportation demands and provide community facilities and services.

(3)

The amendment will promote and protect the public health, safety and general welfare.

Technical Review Committee

Affected departments have reviewed the proposed Zoning Atlas Map Amendment application with regard to the requirements of the City Code. Findings from the review by corresponding departments and the associated responses by the applicant are provided with the staff's supporting documents.

Staff Recommendation:

A conventional data center has the following characteristics:

1. A large, secure, warehouse-like building;
2. Computer servers and data-processing equipment rather than manufacturing machinery;
3. Limited employees and customer traffic;
4. No public access;
5. Loading, equipment replacement, maintenance and service activity;
6. Continuous HVAC and cooling operations;
7. Significant electrical service and telecommunications infrastructure;
8. Emergency generators, fuel storage, transformers and switchgear; and
9. Potential noise from chillers and mechanical equipment.

Although the principal activity is electronic data storage and processing, the physical form and infrastructure intensity will be closer to a light-industrial facility, warehouse, laboratory or technology plant than to conventional office use.

The two (2) proposed zoning districts of I-1, Light Industrial Zone and C-3, General Commercial Zone; meet the Comprehensive Plans minimum requirement of two (2) general land uses for the MXD, Mixed Use Development designation. This aligns reasonably with the City's description of light-industrial activities as facilities involving processing, storage, distribution, laboratories, warehouses and plants.

Alternative Recommendations:

Recommend **APPROVAL** – with Amended/Additional Conditions

OR

Recommend **DISAPPROVAL/DENIAL**

NARRATIVE FOR ZONING CHANGE

WILLOW LAKES, LLC

Willow Lakes, LLC owns approximately 200 acres of land located at 10050 W. Midway Road, at the northwest corner of the intersection of I-95 and Midway Road (Tax Parcel ID #: 3302-212-0001-000-4). The property is currently entitled for a mixed-use development known as the Willow Lakes Planned Development.

The applicant proposes to rezone the property from Planned Development (PD) to General Commercial (C-3) zoning with respect to approximately 26 acres located along the property's frontage on Midway Road and to Light Industrial (I-1) with respect to the approximately 174 acre balance of the property. The property has a future land use designation of MXD, which allows for the foregoing zoning categories.

The applicant intends to develop a data center on the portion of the property to be zoned Light Industrial. The property has access to electrical power due to two FPL easements crossing the property containing large electrical transmission lines, and a major electrical substation just south of the property. The property has access to water for a data center cooling system due to a large man-made lake on the site, which was originally excavated for aggregates mining. The applicant proposes placing a restrictive covenant on the land at the time of rezoning approval, limiting the Light Industrial zoned portion of the property to use as a data center. The portion of the property to be zoned General Commercial is intended for development for commercial retail uses, and could include a hotel, gas station and/or restaurants/fast food.

After obtaining the required rezoning to allow for a data center, the applicant intends to enter into an agreement with a partner company which would develop the data center. The partner company would need to submit to the City a site plan application for the proposed data center and obtain City approval of the site plan.

This Instrument Prepared By:
W. LEE DOBBINS, ESQ.
Dean, Mead, Minton & Moore
1903 South 25th Street, Suite 200
Fort Pierce, Florida 34947
(772) 464-7700

DECLARATION OF RESTRICTIVE COVENANTS

WILLOW LAKES, LLC, a Florida limited liability company ("**Willow Lakes**") is the owner of the real property described in **Exhibit "A"** attached hereto and made a part hereof (the "**Property**") and does hereby create restrictive covenants as set forth herein (the "**Covenants**") that shall operate as covenants running with the land.

1. Willow Lakes intends to rezone approximately 174 acres of the Property to Light Industrial (I-1). Willow Lakes hereby covenants and agrees that the portion of the Property zoned Light Industrial (I-1) shall only be developed as a data center and supporting ancillary uses.

2. The Covenants set forth herein shall run with the land and shall be binding upon Willow Lakes and all successors-in-title to the Property until fifty (50) years from the date of recording of this Declaration of Restrictive Covenants (the "**Declaration**") has elapsed, at which time this Declaration and the Covenants set forth herein shall automatically terminate.

3. In the event of a violation or breach of the Covenants by Willow Lakes, its successors, assigns or successors-in-title, or any person or entity claiming an interest in the Property by or through them, the City of Fort Pierce (the "**City**") shall have the right to proceed at law or in equity to compel compliance with the terms hereof or to prevent the violation or breach of such Covenants. The failure to enforce the Covenants contained in this Declaration, however long continued, shall not be deemed a waiver of the right to do so thereafter, as to the same breach, or as to a breach occurring prior or subsequent thereto and shall not bar or affect its enforcement.

4. This Declaration may only be amended or terminated by an instrument approved by the City Commission of the City of Ft. Pierce at a public hearing, duly executed by the City and Willow Lakes or its successors-in-title, and recorded in the Public Records of St. Lucie County.

IN WITNESS WHEREOF, Willow Lakes, LLC, a Florida limited liability company, has caused the execution of this Declaration of Restrictive Covenants by their duly authorized officer as of the date set forth below.

Witnesses:

WILLOW LAKES, LLC, a Florida limited liability company

_____
Print Name: _____
Address: _____
_____

By: _____
Print Name: _____
Its: _____

_____
Print Name: _____
Address: _____
_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this ____ day of _____, 20___, by _____, as _____ of Willow Lakes, LLC, a Florida limited liability company, who is: [ ] personally known to me, or [ ] who has produced _____ as identification.

_____
Notary Public, State of Florida
Print Name: _____
My Commission Expires: _____

EXHIBIT "A"

Legal Description

Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: 10050 W MIDWAY RD	Parcel ID: 3302-212-0001-000-4	Account #: 156019	Sec/Town/Range: 02/36S/39E
Map ID: 33/03N	Zoning:	Land Use Code: 6000	Jurisdiction: Fort Pierce

Ownership

Willow Lakes LLC
11501 Green Bayberry DR
Palm Beach Gardens, FL 33418-1514

Legal Description

2/3 36 39 FROM NW COR OF SEC 3-36-39 RUN N 89 46 35 W ALG N LI OF SEC 3 2622 FT TO E R/W LI OF NSLRWCD CANAL NO. 93, TH S 00 02 49 W ALG E R/W LI 52.50 FT TO N R/W LI OF 200 FT FP&L ESMT AND POB,TH S 89 46 35 ALG N R/W LI 1026.62 FT TO E R/W LI OF 60 FT FP&L ESMT,TH S 32 18 17 E ALG E R/W LI 1746.02 FT,TH N 61 15 41 E 335.12 FT,TH N 31 56 28 E 78.35 FT,TH N 02 37 14 E 332.85 FT,TH N 85 17 03 E 146.97 FT,TH N 53 57 44 E 58.71 FT,TH N 01 56 01 E 142.19 FT,TH N 62 33 43 E 139.15 FT TO CURVE CONC NW,R OF 335 FT,TH NELY ALG ARC 365.79 FT,TH N 00 00 00 W 142.46 FT,TH S 89 50 50 E 1811.20 FT TO CURVE CONC SW,R OF 150 FT,TH SELY ALG ARC 308.52 FT,TH S 27 59 51 W 671.72 FT,TH S 56 07 55 E 323.59 FT TO W R/W LI OF I-95,TH S 32 49 14 W ALG W R/W LI 346.97 FT,TH S 44 46 35 W 339.92 FT,TH N 00 04 30 E 99.51 FT,TH S 44 46 35 W 303.05 FT, TH S 50 43 56 W 631.70 FT TO CURVE CONC N,R OF 266 FT,TH WLY ALG ARC 171.53 FT,TH S 87 40 44 W 1027.79 FT,TH S 00 01 50 E 72 FT,TH S 89 58 10 W 1610.26 FT,TH S 00 01 50 E 117.14 FT TO N R/W LI OF MIDWAY RD,TH N 89 52 26 W ALG N R/W LI 786.26 FT TO E R/W LI OF NSLRWCD CANAL NO. 93,TH N 00 02 49 E ALG E R/W LI 2564.70 FT TO N R/W LI OF FP&L ESMT AND POB- (200.30 AC - 8,725,068 SF) (OR 2658-2617: 2035-1421)

Current Values

Just/Market:	$3,396,587	Assessed:	$55,083
Exemptions:	$0	Taxable:	$55,083

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2024	$3,076,908	$55,083	$0	$55,083
2023	$2,871,781	$55,083	$0	$55,083
2022	$1,846,145	$55,083	$0	$55,083

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
07-30-2004	2035/1421	XX02	SPWD	Hendler Hyman B	$4,333,400
08-01-1981	0365/1624	XX01	CV		$0

Primary Building Information

Finished Area of this building: 0 SF
Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:	Building Type:
Year Built:	Quality:	Effective Year:	Primary Wall:
Story Height:	Number of Units: 0	Secondary Wall:	

Interior Data

Bedrooms: 0	A/C %: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heated %:	Heat Type:	Half Baths: 0
Heat Fuel:	Primary Floors:		



Image or Sketch unavailable for display

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	200.3
Land Size (SF):	8,725,068
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2026 Saint Lucie County Property Appraiser. All rights reserved.

JOANNE HOLMAN, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
File Number: 2454543 OR BOOK 2035 PAGE 1421
Recorded:08/04/04 14:05

This instrument prepared by:
DOUGLAS E. GONANO, ESQUIRE
Gonano & Harrell, Chartered
1600 S. Federal Highway, Suite 200
Fort Pierce, FL 34950-5178
(772) 464-1032

Parcel I.D. No: _____

Grantee(s) S.S. #(s): _____

* Doc Assump: $ 0.00
* Doc Tax : $ 30,333.80
* Int Tax : $ 0.00

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED made this 30th day of July, 2004, by **HYMAN B. HENDLER and ALVIN D. SCHWARTZ, ,: (a) individually and as Co-Trustees under the provisions of an unrecorded Trust Agreement known as The Restated and Amended Revocable Land Trust Agreement for HHHP Associates, dated January 2, 1995, and (b) individually and as Co-Trustees under the provisions of an unrecorded Trust Agreement known as The Restated and Amended Revocable Land Trust Agreement for HHHP Properties, dated January 2, 1995, as their respective interests may appear** whose post office address is 900 N.E. Spanish River Boulevard, Unit 4-W, Boca Raton, Florida 33431, hereinafter called the Grantor, to **WILLOW LAKES, LLC, a Florida limited liability company,** whose post office address is 222 South US Highway One, #209, Tequesta, Florida 33469, hereinafter called the Grantee:

[Wherever used herein, the terms "Grantor" and "Grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations.]

WITNESSETH: That the Grantor, for and in consideration of the sum of $10.00, and other valuable consideration, receipt of which is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the Grantee, all that certain land situate in St. Lucie County, Florida, which is more particularly described on Exhibit "A" as attached hereto and incorporated herein by reference.

THE ABOVE DESCRIBED PROPERTY IS NOT THE HOMESTEAD OF THE GRANTOR. GRANTOR FURTHER WARRANTS THAT THE ABOVE DESCRIBED PROPERTY DOES NOT NOW AND NEVER HAS CONSTITUTED GRANTOR'S HOMESTEAD; IS NOT NOW AND NEVER HAS BEEN CONTIGUOUS TO GRANTOR'S HOMESTEAD.

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining and subject to: (a) all rights of way for public roads and drainage canals, if any, (b) utility easements of record, (c all other covenants, restrictions, easements, limitations and reservations provided this reference shall not operate to reimpose the same, (d) and taxes accruing subsequent to December 31, 2003, and (e) zoning and governmental regulations.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the Grantor hereby covenants that the premises are free from all encumbrances made by Grantor and Grantor does hereby bind Grantor and Grantor's heirs, successors, and assigns to warrant and forever defend the title to the property to the Grantee above named and Grantee's heirs, successors, and assigns, against every person lawfully claiming the property, or any part thereof, by, through, or under the Grantor, but not otherwise.

Mail - Hale Shaw & Pfaffenberger

Hall

IN WITNESS WHEREOF, the said Grantor has signed and sealed these presents the day and year first above-written.

Signed, sealed, and delivered
in our presence:

Print Name: Douglas E Conard

Print Name:

Print Name: Douglas E Conard

Print Name: Lawrence C. Griffin

x HB Hendler TTEE

HYMAN B. HENDLER, individually and as Co-Trustee under the provisions of the unrecorded Trusts referenced above

x Alvin D. Schwartz

ALVIN D. SCHWARTZ, individually and as Co-Trustee under the provisions of the unrecorded Trusts referenced above

STATE OF Florida
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 30th day of July, 2004, by **HYMAN B. HENDLER, individually and as Co-Trustee under the unrecorded Trusts referenced above,** who is:
___ personally known to me, or
__X__ who has produced a drivers license as identification
and who __did/__X__ did not take an oath.

[Notary Seal]

JULIE N. KRAUSS
Commission # DD0028324
Expires 6/3/2005
Bonded through
(800-432-4254) Florida Notary Assn., Inc.

Julie N Krauss
Notary Public, State of
Printed Name:
My Commission Expires:

STATE OF Florida
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 30th day of July, 2004, by **ALVIN D. SCHWARTZ, individually and as Co-Trustee under the unrecorded Trusts referenced above,** who is:
___ personally known to me, or
__X__ who has produced a drivers license as identification
and who __did/__X__ did not take an oath.

[Notary Seal]

JULIE N. KRAUSS
Commission # DD0028324
Expires 6/3/2005
Bonded through
(800-432-4254) Florida Notary Assn., Inc.

Julie N Krauss
Notary Public, State of
Printed Name:
My Commission Expires:

WILLOW LAKES PARCEL

EXHIBIT "A"

Parcel 1

A PARCEL OF LAND LYING IN SECTIONS 2 AND 3, TOWNSHIP 36 SOUTH, RANGE 39 EAST IN ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3, THENCE N89°46'35"W ALONG THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 2622.04 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF N.S.L.R.W.C.D. CANAL NO. 93 (A 78 FEET WIDE RIGHT-OF-WAY); THENCE S00°02'49"W ALONG THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 52.50 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF A 200 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 377, PG. 2069-2076 AND BEING THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE S89°46'35"E ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING PARALLEL TO THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 1,026.62 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF A 60 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 119, PG. 404; THENCE S32°18'17"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID 60 FEET WIDE FP&L EASEMENT A DISTANCE OF 1,746.02 FEET; THENCE N61°15'41"E A DISTANCE OF 335.12 FEET; THENCE N31°56'28"E A DISTANCE OF 78.35 FEET; THENCE N02°37'14"E A DISTANCE OF 332.85 FEET; THENCE N85°17'03"E A DISTANCE OF 146.97 FEET; THENCE N53°57'44"E A DISTANCE OF 58.71 FEET; THENCE N01°56'01"E A DISTANCE OF 142.19 FEET; THENCE N62°33'43"E A DISTANCE OF 139.15 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 335.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 365.79 FEET THROUGH A CENTRAL ANGLE OF 62°33'43"; THENCE N00°00'00"W A DISTANCE OF 142.46 FEET; THENCE S89°50'50"E A DISTANCE OF 1,811.20 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 150.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 308.52 FEET THROUGH A CENTRAL ANGLE OF 117°50'41"; THENCE S27°59'51"W A DISTANCE OF 671.72 FEET; THENCE S56°07'55"E A DISTANCE OF 323.59 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROAD NO. 9 (INTERSTATE HIGHWAY NO. 95) (WIDTH VARIES); THENCE S32°49'14"W ALONG THE WEST RIGHT-OF-WAY OF SAID STATE ROAD NO. 9 A DISTANCE OF 346.97 FEET; THENCE S44°46'35"W ALONG THE WEST RIGHT-OF-WAY LINE OF SAID STATE ROAD NO. 9 A DISTANCE OF 339.92 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF A ACCESS ROAD NO. 1 AS RECORDED IN PB 24, PG. 4J&K; THENCE N00°04'30"E A DISTANCE OF 99.51 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S44°46'35"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 236.51 FEET; THENCE DEPARTING SAID ACCESS ROAD NO. 1 N00°04'43"E A DISTANCE OF 535.11 FEET; THENCE S89°59'23"W A DISTANCE OF 166.33 FEET; THENCE S00°04'55"W A DISTANCE OF 680.33 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S50°43'56"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 478.34 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH HAVING A RADIUS OF 266.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 171.53 FEET THROUGH A CENTRAL ANGLE OF 36°56'48"; THENCE S87°40'44"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 1,027.79 FEET; THENCE S00°01'50"E A DISTANCE OF 72.00 FEET; THENCE S89°58'10"W A DISTANCE OF 1,610.26 FEET; THENCE S00°01'50"E A DISTANCE OF 117.14 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY

OR BOOK 2035 PAGE 1423

LINE OF WHITE CITY ROAD (COUNTY ROAD 712) (A 70 FEET WIDE RIGHT-OF-WAY); THENCE N89°52'26"W ALONG THE NORTH RIGHT-OF-WAY OF SAID WHITE CITY ROAD (COUNTY ROAD 712) A DISTANCE OF 786.28 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93; THENCE N00°02'49"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 2,564.70 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING THE POINT OF BEGINNING.

CONTAINING 197.90 ACRES, MORE OR LESS

Parcel 2

A PARCEL OF LAND 60.00 FEET IN WIDTH LYING IN THE NE ¼ OF SECTION 35, TOWNSHIP 35 SOUTH, RANGE 39 EAST AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF THE NE ¼ OF SAID SECTION 35 LYING 60.00 FEET WEST OF (AS MEASURED AT RIGHT ANGLES) THE WEST RIGHT-OF-WAY LINE OF THE NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT CANAL NO. 96 AS RECORDED IN OFFICIAL RECORDS BOOK 396, PAGE 2511, LYING WEST OF THE WEST RIGHT-OF-WAY LINE OF INTERSTATE 95 (STATE ROAD 9)

Parcel 3

A PARCEL OF LAND 60.00 FEET IN WIDTH LYING IN THE NW ¼ OF SECTION 36 TOWNSHIP 35 SOUTH, RANGE 39 EAST AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 36, TOWNSHIP 35 SOUTH, RANGE 39 EAST, THENCE N89°45'07"E, ALONG THE NORTH LINE OF SAID SECTION 36, A DISTANCE OF 824.95 FEET; THENCE S00°12'26"W A DISTANCE OF 662.15 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL:

THENCE S47°45'46'E A DISTANCE OF 60.00 FEET THE NORTHWESTERLY RIGHT-OF-WAY LINE OF STATE ROAD 9 (INTERSTATE ROAD 95); THENCE ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE COURSES AND DISTANCES; S42°14'14"W A DISTANCE OF 83.45 FEET; THENCE S37°39'48"W A DISTANCE OF 200.64 FEET; THENCE S42°14'14"W A DISTANCE OF 955.24 FEET TO THE EAST RIGHT-OF-WAY LINE OF CANAL NO. 96; THENCE N00°08'06"E ALONG SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 89.49 FEET; TO A POINT 60.00 FEET NORTHWESTERLY OF (AS MEASURED AT RIGHT ANGLES) THE NORTHWESTERLY RIGHT-OF-WAY LINE OF INTERSTATE-95; THENCE N42°14'14"E PARALLEL WITH SAID NW RIGHT-OF-WAY LINE A DISTANCE OF 886.45 FEET; THENCE N37°39'48"E A DISTANCE OF 200.54 FEET; THENCE N42°14'14"E A DISTANCE OF 85.85 FEET TO THE POINT OF BEGINNING.

Parcel 4

A PARCEL OF LAND 80.00 FEET IN WIDTH LYING IN SW ¼ OF SECTION 25, TOWNSHIP 35 SOUTH, RANGE 39 EAST AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SECTION 25, TOWNSHIP 35 SOUTH, RANGE 39 EAST, THENCE NORTH 89°45'07"EAST, ALONG THE SOUTH LINE OF SAID

UNOFFICIAL

SECTION 25, A DISTANCE OF 824.95 FEET; THENCE N00°12'26"E A DISTANCE OF 871.61 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL:

THENCE CONTINUE N00°12'26"E A DISTANCE OF 197.52 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF THE SUNSHINE STATE PARKWAY; THENCE N23°41'09"W ALONG SAID WESTERLY RIGHT-OF-WAY LINE A DISTANCE OF 320.73 FEET TO THE NORTH LINE OF THE SW ¼ OF THE SW ¼ OF SAID SECTION 25; THENCE N89°51'53"W ALONG SAID NORTH LINE A DISTANCE OF 650.74 FEET TO THE EAST RIGHT-OF-WAY LINE OF NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT CANAL NO. 96; THENCE S00°11'53"W ALONG SAID EAST RIGHT-OF-WAY LINE A DISTANCE OF 80.00 FEET; THENCE S89°51'53"E PARALLEL WITH SAID NORTH LINE A DISTANCE OF 598.70 FEET TO A POINT 80.00 FEET (AS MEASURED AT RIGHT ANGLES) SOUTHWEST OF THE WESTERLY RIGHT-OF-WAY OF THE SUNSHINE STATE PARKWAY; THENCE S23°41'09"E PARALLEL WITH SAID WESTERLY RIGHT-OF-WAY LINE A DISTANCE OF 449.19 FEET TO THE POINT OF BEGINNING.

F:\DMS client files\Bellinger\Willow Lakes\WillowLakesParcel-Legal.doc

Official Copy

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR

CAPTEC Engineering, Inc.

SITUATED IN

SECTIONS 2 AND 3
TOWNSHIP 36 SOUTH, RANGE 39 EAST
ST. LUCIE COUNTY, FLORIDA

LEGAL DESCRIPTION:

A PARCEL OF LAND LYING IN SECTIONS 2 AND 3, TOWNSHIP 36 SOUTH, RANGE 39 EAST IN ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3, THENCE N89°46'35"W ALONG THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 2622.04 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF N.S.L.R.W.C.D. CANAL NO. 93 (A 78 FEET WIDE RIGHT-OF-WAY); THENCE S00°02'49"W ALONG THE EAST RIGHT-OF -WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 52.50 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF A 200 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 377, PG. 2069-2076 AND BEING THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE S89°46'35"E ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING PARALLEL TO THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 1,026.62 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF A 60 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 119, PG. 404; THENCE S32°18'17"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID 60 FEET WIDE FP&L EASEMENT A DISTANCE OF 1,746.02 FEET; THENCE N61°15'41"E A DISTANCE OF 335.12 FEET; THENCE N31°56'28"E A DISTANCE OF 78.35 FEET; THENCE N02°37'14"E A DISTANCE OF 332.85 FEET; THENCE N85°17'03"E A DISTANCE OF 146.97 FEET; THENCE N53°57'44"E A DISTANCE OF 58.71 FEET; THENCE N01°56'01"E A DISTANCE OF 142.19 FEET; THENCE N62°33'43"E A DISTANCE OF 139.15 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 335.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 365.79 FEET THROUGH A CENTRAL ANGLE OF 62°33'43". THENCE N00°00'00"W A DISTANCE OF 142.46 FEET; THENCE S89°50'50"E A DISTANCE OF 1,811.20 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 150.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 308.52 FEET THROUGH A CENTRAL ANGLE OF 117°50'41"; THENCE S27°59'51"W A DISTANCE OF 671.72 FEET; THENCE S56°07'55"E A DISTANCE OF 323.59 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROAD NO. 9 (INTERSTATE HIGHWAY NO. 95) (WIDTH VARIES); THENCE S32°49'14"W ALONG THE WEST RIGHT-OF-WAY OF SAID STATE ROAD NO. 9 A DISTANCE OF 1,346.97 FEET; THENCE S44°46'35"W ALONG THE WEST RIGHT-OF WAY LINE OF SAID STATE ROAD NO. 9 A DISTANCE OF 339.92 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF A ACCESS ROAD NO. 1 AS RECORDED IN PB 24, PG. 4 J&K; THENCE N00°04'30"E A DISTANCE OF 99.51 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S44°46'35"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 236.51 FEET; THENCE DEPARTING SAID ACCESS ROAD NO. 1 N00°04'43"E A DISTANCE OF 535.11 FEET; THENCE S89°59'23"W A DISTANCE OF 166.33 FEET; THENCE S00°04'55"W A DISTANCE OF 680.33 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S50°43'56"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 478.34 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH HAVING A RADIUS OF 266.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 171.53 FEET THROUGH A CENTRAL ANGLE OF 36°56'48"; THENCE S87°40'44"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO I A DISTANCE OF 1,027.79 FEET; THENCE S00°01'50"E A DISTANCE OF 72.00 FEET; THENCE S89°58'10"W A DISTANCE OF 1,610.26 FEET; THENCE S00°01'50"E A DISTANCE OF 117.14 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF WHITE CITY ROAD (COUNTY ROAD 712) (A 70 FEET WIDE RIGHT-OF-WAY) ; THENCE N89°52'26"W ALONG THE NORTH RIGHT -OF-WAY OF SAID WHITE CITY ROAD (COUNTY ROAD 712) A DISTANCE OF 786.28 FEET TO A POINT ON THE EAST RIGHT-OF WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93; THENCE N00°02'49"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 2,564.70 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING THE POINT OF BEGINNING.

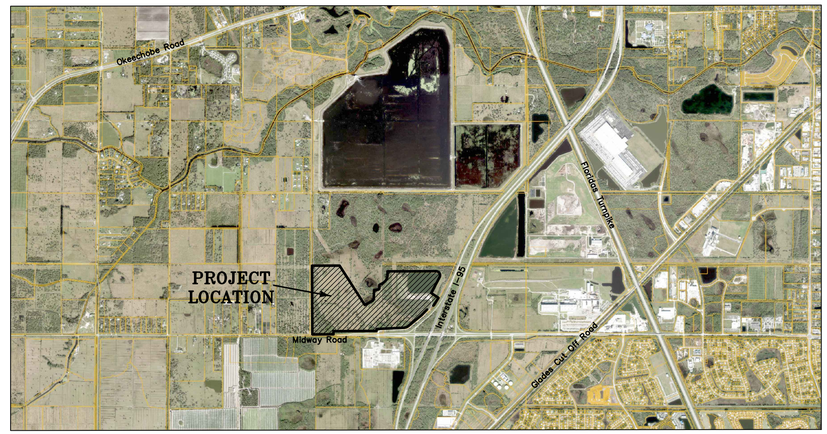
CONTAINING 197.90 ACRES, MORE OR LESS

TOGETHER WITH;

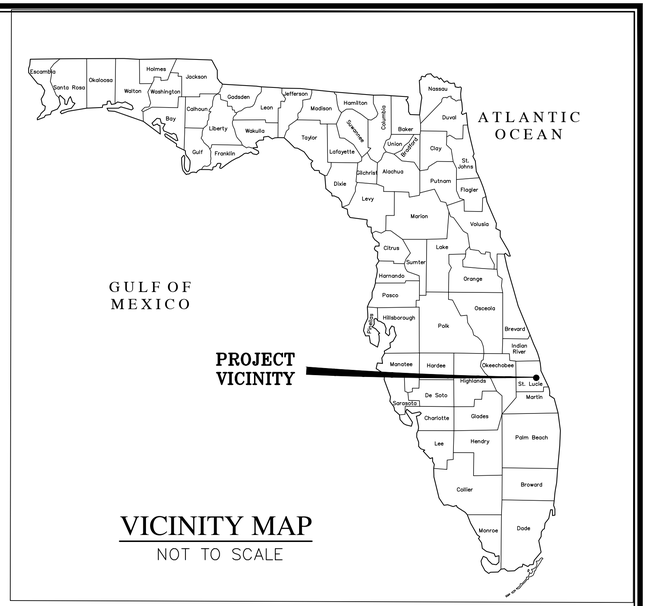
THE WEST 1/2 OF THE WEST 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 36 SOUTH, RANGE 39 EAST, LESS AND EXCEPT THAT PORTION OF THE PROPERTY WHICH WAS TAKEN FOR I-95, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

CONTAINING 2.33 ACRES, MORE OR LESS.

SURVEYED PARCEL CONTAINS A NET AREA OF 200.23 ACRES, MORE OR LESS.



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

GENERAL NOTES:

1) Not valid without the original signature and the raised seal of a Florida Licensed Surveyor and Mapper.
2) Description shown hereon provided by the client and/or their agent.
3) The last date of field work was 11/13/2019.
4) Overall parcel contains 200.23 Acres, more or less.
5) Bearings shown hereon are relative to the North line of Section 3, Township 36 South, Range 39 East, which bears S89°53'59"W and all other bearings are relative thereto.
6) Underground utilities, utility services, foundations and improvements were not located as a part of this survey.
7) The property shown hereon is located within areas having Flood Zone Designations of "X" as shown on Flood Rate Maps No. 12111C0170 J and 12111C0260 J effective dates February 12, 2012, St. Lucie County County, State of Florida, which is the current Flood Insurance Rate Maps for the community in which said premises is situated.
8) Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.
9) All interior improvements were located and are shown hereon.
10) No Jurisdictional or Wetlands were determined or located as part of this survey.
11) Bearings and distances shown hereon are the same as deed unless otherwise stated.
12) Additions Or Deletions To Survey Maps Or Reports By Other Than The Signing Party Or Parties Is Prohibited Without Written Consent Of The Signing Party Or Parties.
13) The horizontal datum for this survey is referenced to Florida State Plane, East Zone, NAD 83(2011) adjustment, as established by Florida Department Of Transportation FPRN.
14) The features shown hereon were acquired using RTK GPS and Trigonometric methods and were verified through a redundancy of measurements for an expected horizontal accuracy of 0.10'.
15) Elevations shown hereon are based on the National Geodetic Vertical Datum of 1929 (NGVD 29). The project benchmark used to establish said elevations is an aluminum disk stamped SLC Vertical Control "Gulfstream" having a published elevation of 21.248' relative to the NAVD 88 datum. A factor of +1.467 was used to convert this to elevation 22.72 relative to NGVD 29 datum.

THOMAS P. KIERNAN DATE
Professional Surveyor & Mapper
Florida Certificate No. 6199

VICINITY MAP, LOCATION MAP, GENERAL NOTES, LEGAL DESCRIPTIONS & CERTIFICATION

COMPUTER FILE REF.	FIELD BK./PG.
19-253 Boundary & Topo	1706/54

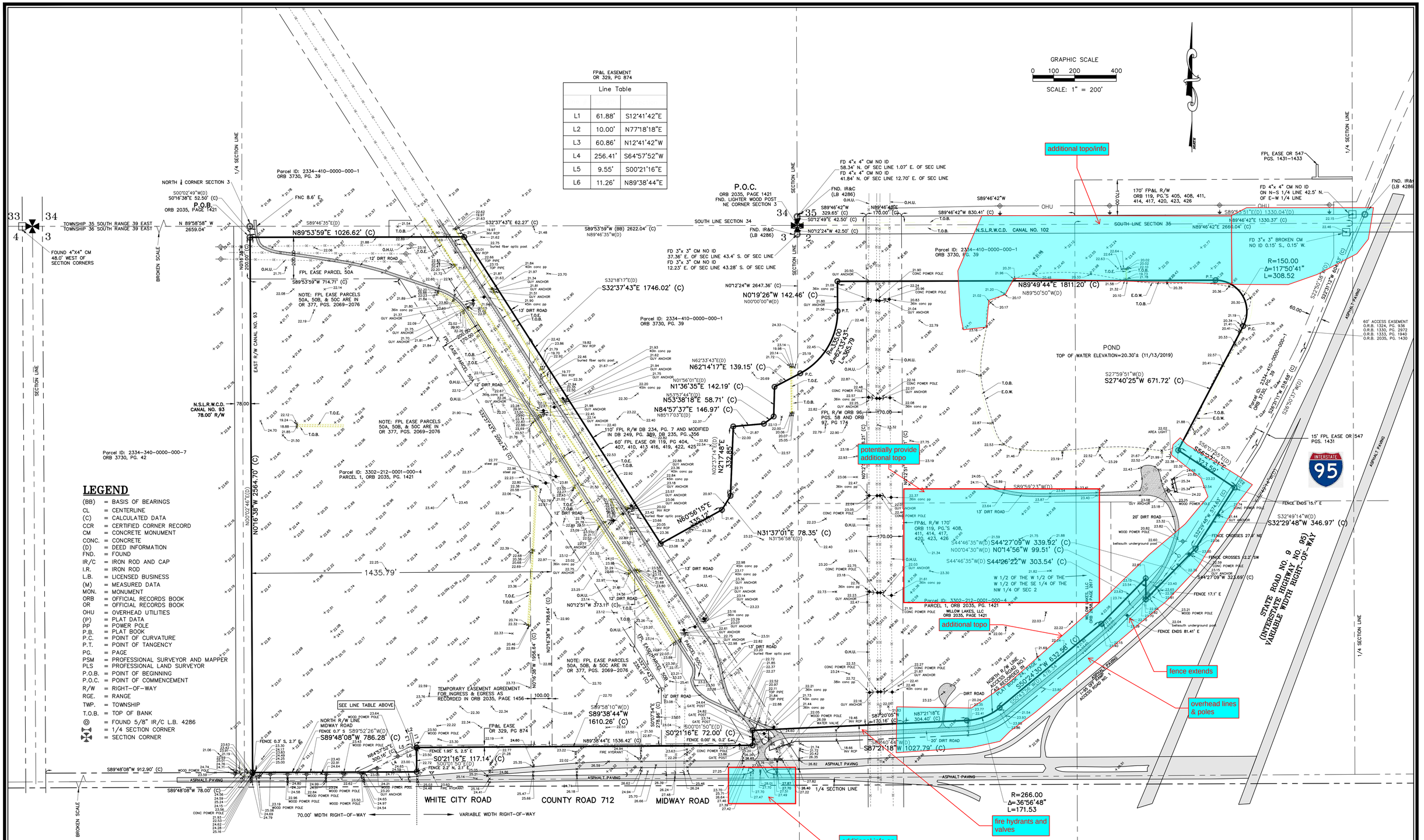
CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

– REVISIONS –	BY	DATE

	BY	DATE
FIELD	SG	11/13/19
CALCS.		
DRAWN	BKH	12/03/19
DETAILED		
CHECKED		
APPROVED		

Boundary & Topographic Survey
PREPARED FOR
CAPTEC Engineering, Inc.

DATE: 12/03/2019
HORIZ. SCALE: 1"=200'
VERT. SCALE: N/A
JOB No. 19-253
SHEET 1 of 2



GRAPHICS

COMPUTER FILE REF.	FIELD BK./PG.
19-253 Boundary & Topo	1706/54

CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

– REVISIONS –	BY	DATE

	BY	DATE
FIELD	SG	11/13/19
CALCS.		
DRAWN	BKH	12/03/19
DETAILED		
CHECKED		
APPROVED		

Boundary & Topographic Survey

PREPARED FOR

CAPTEC Engineering, Inc.

DATE: 12/03/2019
HORIZ. SCALE: 1"=200'
VERT. SCALE: N/A
JOB No. 19-253
SHEET 2 of 2

BOHLER

2150 Post Road, Suite 100
Fairfield, CT 06824
203.604.2900

Memorandum

June 15, 2026
Via Electronic Mail

Devcon Enterprises
298 South Benson Road
Fairfield, CT 06824

Attention: Chad LaBonte

RE: Estimated Water & Sewer Calculations
Proposed Data Center
W. Midway Road
City of Fort Pierce
St. Lucie County, Florida
Bohler Project #CTB260013.00

Dear Mr. LaBonte:

In support of the zoning amendment application for the property located on W. Midway Road in the City of Fort Pierce, Florida, our office has completed a preliminary evaluation of the anticipated potable water demand and sanitary sewer flows associated with the proposed mixed-use development. The estimates presented herein are based on our experience with comparable developments and should be considered preliminary pending tenant selection, final facility design, and detailed engineering.

Our analysis is based on the conceptual site plan prepared by Bohler, entitled *Conceptual Layout Plan, Sheet CP01*, dated March 27, 2026 (attached). The plan depicts a six-building data center campus consisting of six (6) single-story buildings, each containing approximately 220,000 square feet of gross floor area, together with an additional 250,000 square feet of commercial development. The commercial component is currently anticipated to include approximately 80,000 square feet of grocery and food-retail uses, approximately 110,000 square feet of large-format retail uses, and approximately 60,000 square feet of additional retail, restaurant, and complementary commercial uses.

For purposes of this evaluation, it has been assumed that any process or equipment cooling water required for data center operations will be provided through a closed-loop cooling system utilizing water sourced from the proposed on-site pond. Accordingly, the potable water demand estimates associated with the data center component are limited to domestic water consumption by facility personnel.

While the Florida Department of Health sewage flow criteria do not specifically address data centers, the proposed use is most appropriately categorized as a low-water-use commercial/industrial facility. For reference, the Department's criteria assign a design flow rate of 15 gallons per employee per 8-hour shift for factory uses without locker room showers. Recognizing the preliminary nature of the project and providing a conservative planning-level estimate, a substantially higher domestic water usage rate of 50 gallons per employee per day has been assumed.

For planning purposes, each data center building is assumed to accommodate up to 75 employees, consisting of 25 personnel per shift operating over three 8-hour shifts. Based on these assumptions, the estimated domestic potable water demand for each building is approximately 3,750 gallons per day (gpd). For the six-building campus shown on the conceptual plan, the total estimated domestic water demand associated with the data center component is approximately 22,500 gpd.

The commercial component has been evaluated using Florida Department of Health Design Flow criteria applicable to retail, food service, and commercial uses. For planning purposes, the approximately 80,000 square feet of grocery and food-retail uses have been assigned a planning-level flow rate of 0.10 gpd per

square foot, resulting in an estimated demand of 8,000 gpd. The approximately 110,000 square feet of large-format retail uses have also been evaluated at 0.10 gpd per square foot, resulting in an estimated demand of 11,000 gpd. The remaining approximately 60,000 square feet of retail, restaurant, and complementary commercial uses have been conservatively evaluated at an average flow rate of 0.40 gpd per square foot to account for the potential inclusion of higher water-use restaurant tenants and food service establishments, resulting in an estimated demand of 24,000 gpd. Collectively, the commercial component is therefore projected to generate approximately 43,000 gpd of potable water demand.

Based on these assumptions, the total average potable water demand associated with the proposed development is estimated at approximately 65,500 gpd, consisting of approximately 22,500 gpd from the data center campus and approximately 43,000 gpd from the commercial component.

Sanitary sewer flows are anticipated to closely mirror domestic water consumption, as the majority of water use will be associated with restrooms, handwashing facilities, food service operations, break areas, and other occupant-related domestic uses. Accordingly, the estimated average sanitary sewer flow for the proposed development is also projected to be approximately 65,500 gpd.

Based on the assumptions and analysis presented herein, the proposed development is expected to generate an average domestic potable water demand of approximately 65,500 gallons per day and an average sanitary sewer flow of approximately 65,500 gallons per day. These estimates are intended for zoning and utility planning purposes only and may be refined as additional project-specific information becomes available during subsequent phases of design and permitting.

Should you have any questions or need anything additional related to these estimates please don't hesitate to contact me at either nkirschner@bohlereng.com or 203.362.8620.

Sincerely,

BOHLER, LLC

Nate Kirschner, Branch Manager

Enclosure: *Conceptual Layout Plan, Sheet CP01*, dated March 27, 2026

MEMORANDUM

June 15, 2026

Re: Willow Lakes
Transportation Facilities Analysis
Fort Pierce, Florida
Project № 260191.02.03

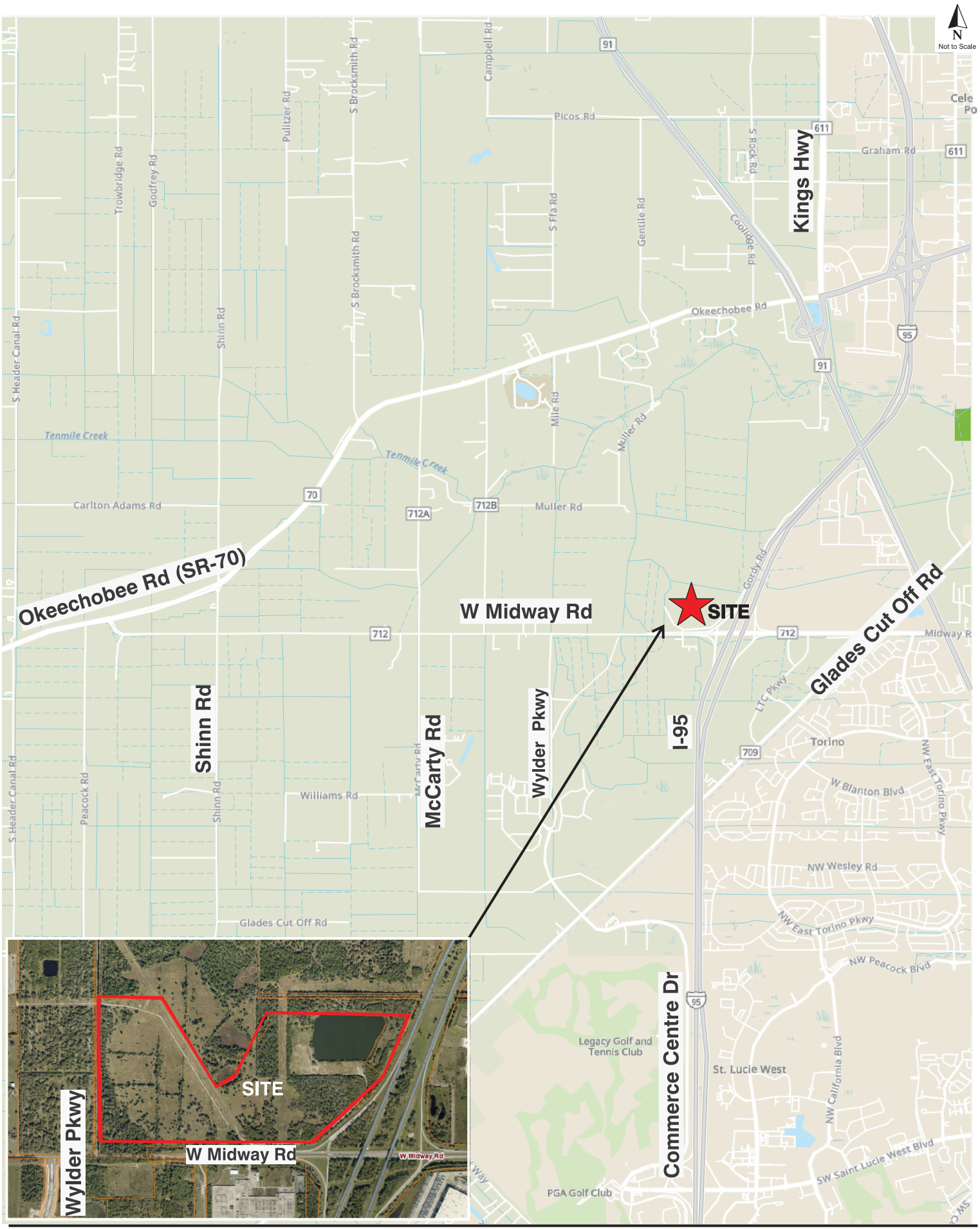
Introduction

This memorandum was prepared at the request of Willow Lakes, LLC for the proposed zoning application of the subject property from Planned Development to General Commercial (C-3) zoning with respect to approximately 26 acres located along the property's frontage on Midway Road and to Light Industrial (I-1) with restrictive covenant on the land at the time of rezoning approval, limiting the Light Industrial zoned portion of the property to use as a data center. The proposed development is located along Midway Road, east of Wylder Parkway and west of Interstate 95, in Fort Pierce, Florida, as illustrated in **Figure 1**. The property is currently entitled for a mixed-use development known as the Willow Lakes Planned Development by *Ordinance No. 22-001*; the document is included in the **Attachments** for reference. A summary of the zoning change is provide in **Table 1**.

Table 1
Zoning Summary

Future Land Use	Jurisdiction	Acres	Max Density	Land Use	Size
Existing					
PUD	Fort Pierce	200.23	--	PUD	200.23 ac
Proposed					
C-3	Fort Pierce	26.00	60% Coverage	Shopping Center	679,536 SF
I-1	Fort Pierce	174.23	60% Coverage	Light Industrial	3,825,788 SF*

*I-1 size calculation less 727,887 square feet of existing utility easement.


N
Not to Scale
Okeechobee Rd (SR-70)
W Midway Rd
SITE
Kings Hwy
Glades Cut Off Rd
Shinn Rd
McCarty Rd
Wylder Pkwy
I-95
Commerce Centre Dr
Okeechobee Rd
Picos Rd
Graham Rd
Carlton Adams Rd
Muller Rd
Williams Rd
Glades Cut Off Rd
Torino
NW Wesley Rd
NW East Torino Pkwy
NW Peacock Blvd
St. Lucie West
SW Saint Lucie West Blvd
Legacy Golf and Tennis Club
PGA Golf Club
Tenmile Creek
SITE
W Midway Rd
Wylder Pkwy

Trip Generation

The development's existing entitlement from *Ordinance No. 22-001* is 37,297 daily trips, 2,381 AM peak hour trips, and 2,486 PM peak hour trips. Potential trip generation was calculated using information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 12th Edition* and were based on the most intense allowable use under the existing and proposed zoning categories. For the proposed Commercial zoning use, Shopping Center (>150k) (LUC 820) was used, and for the proposed Light Industrial zoning use, Data Center (LUC 160) was used. The ITE information sheets are included in the **Attachments**. **Table 2** summarizes the resulting trip generation analysis.

Table 2
Trip Generation Comparison

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
Existing FLU												
-	PUD	200.23 ac	-	37,297	-	2,381	1,328	1,053	-	2,486	1,450	1,036
Proposed FLU												
820	Shopping Center (>150k)	679.54 KSF	36.39 (R)	24,728	0.88 (R)	598	371	227	3.26 (R)	2,215	1085	1,130
160	Data Center	3,825.79 KSF	0.73 (R)	2,793	0.07 (R)	268	206	62	0.05 (R)	191	53	138
		Gross Trip Generation		**27,521**		**866**	**577**	**289**		**2,406**	**1,138**	**1,268**
		Pass-by Retail/Commercial		*4,601*		*203*	*126*	*77*		*414*	*207*	*207*
		Total External Trips		**22,920**		**663**	**451**	**212**		**1,992**	**931**	**1,061**
		Net Change in Trips		**-14,377**		**-1,718**	**-877**	**-841**		**-494**	**-519**	**25**

Source: ITE Trip Generation Manual, 12th Edition, and Trip Generation Handbook, 3rd Edition; Existing FLU data are from the 11th Edition.
Fitted curve equeations (E) were used in cases where R2 >=0.75 & have 20 or more studies
Pass-by capped at 10% future traffic volumes

The proposed development is projected to generate 22,920 net external daily trips, which is a reduction of 14,377 net external daily trips, a decrease of 38 percent. 663 trips are projected to occur during the AM peak hour and 1,992 trips occur during the PM peak hour. Both the AM and PM peak hour two-way trips are projected to decrease, with an increase of 25 PM exiting trips projected.

Conclusion

This review of transportation conditions demonstrates a decrease in trips compared to the Willow Lakes Planned Development and therefore further analysis of the zoning change is not required.

- The proposed zoning change would result in a net decrease of 14,377 net external daily trips, 1,718 AM peak hour trips and 494 PM peak hour trips.

- The proposed development of the site will undergo additional review through the development process, where roadway capacity, traffic operations, access, and intersection capacity will be further evaluated in accordance with the requirements of the development approval process. The proposed development will be required to address off-site impacts through the City of Fort Pierce, St. Lucie County, and the Florida Department of Transportation.

Respectfully submitted,

TRAFFIC & MOBILITY CONSULTANTS

PROFESSIONAL ENGINEERING CERTIFICATION

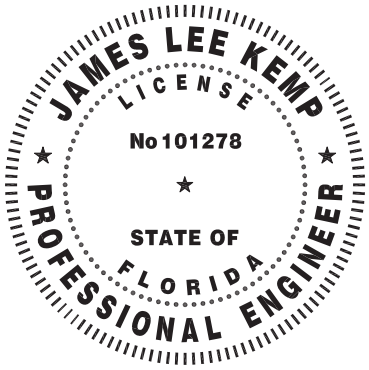
I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants LLC, a corporation authorized to operate as an engineering business, CA-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Willow Lakes

LOCATION: Fort Pierce, Florida

CLIENT: Willow Lakes, LLC

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

James L Kemp

Digitally signed by James L Kemp
DN: CN=James L Kemp, dnQualifier=A01410C0000019DE40E9E940002FE34, O=Unaffiliated, C=US
Reason: I agree to the terms defined by the placement of my signature on this document
Date: 2026.06.16 10:40:29-04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

TRAFFIC & MOBILITY CONSULTANTS LLC
3725 SE OCEAN BOULEVARD, SUITE 201
SEWALL'S POINT, FLORIDA 34996
CERTIFICATE OF AUTHORIZATION CA-30024
JAMES LEE KEMP, P.E. NO. 101278

ATTACHMENTS

ORDINANCE NO. 22-001

AN ORDINANCE BY THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA; **AMENDING AND RESTATING ORDINANCE NO. 20-025** TO INCLUDE PHASE 1A SITE PLAN AND ADOPT PLANNED DEVELOPMENT GUIDELINES FOR PROPERTY GENERALLY LOCATED AT OR NEAR **10050 WEST MIDWAY ROAD**; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR REPEAL OF ORDINANCES OR PARTS THEREOF IN CONFLICT HEREWITH; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the subject property is generally located at or near 10050 West Midway Road within the City of Fort Pierce, Florida, representing approximately 200.3 acres of land; and

WHEREAS, on October 5, 2020, Ordinance No. 20-025 was approved for rezoning of the subject property generally located at or near 10050 West Midway Road from AG-2.5, Agricultural, 1 du/2.5 ac (Saint Lucie County Zoning) to Planned Development, PD; and

WHEREAS, Ordinance No. 20-025 provided for the development of the subject property in phases; and

WHEREAS, this proposed amended and restated Ordinance is consistent with the comprehensive plan, will not have an adverse effect on the ability of the city to satisfy land and water use needs and to meet transportation demands and provide community facilities and services, and will promote and protect the public health, safety and general welfare as required by City Code 125-136; and

WHEREAS, the City of Fort Pierce Planning Board, at their November 8, 2021, meeting, voted to recommend approval of the request to amend Ordinance No. 20-025; and

NOW, THEREFORE BE IT ORDAINED by the City Commission of the City of Fort Pierce, Florida as follows:

SECTION 1. From and after the effective date hereof, this proposed amended and restated Ordinance is approved with respect to the following described property:

A PARCEL OF LAND LYING IN SECTIONS 2 AND 3, TOWNSHIP 36 SOUTH, RANGE 39 EAST IN ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3, THENCE N89°46'35"W ALONG THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 2622.04 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF N.S.L.R.W.C.D. CANAL NO. 93 (A 78 FEET WIDE RIGHT-OF-WAY); THENCE S00°02'49"W ALONG THE EAST RIGHT-OF -WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 52.50 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF A 200 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 377, PG. 2069-2076 AND BEING THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE S89°46'35"E ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING PARALLEL TO THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 1,026.62 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF A 60 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 119, PG. 404; THENCE S32°18'17"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID 60 FEET WIDE FP&L EASEMENT A DISTANCE OF 1,746.02 FEET; THENCE N61°15'41"E A DISTANCE OF 335.12 FEET; THENCE N31°56'28"E A

DISTANCE OF 78.35 FEET; THENCE N02°37'14"E A DISTANCE OF 332.85 FEET; THENCE N85°17'03"E A DISTANCE OF 146.97 FEET; THENCE N53°57'44"E A DISTANCE OF 58.71 FEET; THENCE N01°56'01"E A DISTANCE OF 142.19 FEET; THENCE N62°33'43"E A DISTANCE OF 139.15 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 335.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 365.79 FEET THROUGH A CENTRAL ANGLE OF 62°33'43"; THENCE N00°00'00"W A DISTANCE OF 142.46 FEET; THENCE S89°50'50"E A DISTANCE OF 1,811.20 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 150.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 308.52 FEET THROUGH A CENTRAL ANGLE OF 117°50'41"; THENCE S27°59'51"W A DISTANCE OF 671.72 FEET; THENCE S56°07'55"E A DISTANCE OF 323.59 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROAD NO. 9 (INTERSTATE HIGHWAY NO. 95) (WIDTH VARIES); THENCE S32°49'14"W ALONG THE WEST RIGHT-OF-WAY OF SAID STATE ROAD NO. 9 A DISTANCE OF 346.97 FEET; THENCE S44°46'35"W ALONG THE WEST RIGHT-OF- WAY LINE OF SAID STATE ROAD NO. 9 A DISTANCE OF 339.92 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF AN ACCESS ROAD NO. 1 AS RECORDED IN PB 24, PG. 4 J&K; THENCE N00°04'30"E A DISTANCE OF 99.51 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S44°46'35"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 236.51 FEET; THENCE DEPARTING SAID ACCESS ROAD NO. 1 N00°04'43"E A DISTANCE OF 535.11 FEET; THENCE S89°59'23"W A DISTANCE OF 166.33 FEET; THENCE S00°04'55"W A DISTANCE OF 680.33 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S50°43'56"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 478.34 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH HAVING A RADIUS OF 266.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 171.53 FEET THROUGH A CENTRAL ANGLE OF 36°56'48"; THENCE S87°40'44"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO I A DISTANCE OF 1,027.79 FEET; THENCE S00°01'50"E A DISTANCE OF 72.00 FEET; THENCE S89°58'10"W A DISTANCE OF 1,610.26 FEET; THENCE S00°01'50"E A DISTANCE OF 117.14 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF WHITE CITY ROAD (COUNTY ROAD 712) (A 70 FEET WIDE RIGHT-OF-WAY) ; THENCE N89°52'26"W ALONG THE NORTH RIGHT -OF-WAY OF SAID WHITE CITY ROAD (COUNTY ROAD 712) A DISTANCE OF 786.28 FEET TO A POINT ON THE EAST RIGHT-OF- WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93; THENCE N00°02'49"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 2,564.70 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING THE POINT OF BEGINNING.

CONTAINING 197.90 ACRES, MORE OR LESS

TOGETHER WITH;

THE WEST 1/2 OF THE WEST 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 36 SOUTH, RANGE 39 EAST, LESS AND EXCEPT THAT PORTION OF THE PROPERTY WHICH WAS TAKEN FOR 1-95, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

CONTAINING 2.33 ACRES, MORE OR LESS.

SURVEYED PARCEL CONTAINS A NET AREA OF 200.23 ACRES, MORE OR LESS.

SECTION 2. Ordinance No. 20-025 shall remain in full force and effect, except as amended in Sections 3 and 5 of this Ordinance.

SECTION 3.

(a) With respect to the subject property, the Planned Development Guidelines contained in the attached and incorporated Exhibit "A" are hereby approved with this Ordinance.

(b) The Phase 1A Site Plan depicted on the attached and incorporated Exhibit "B" is hereby approved with this Ordinance.

SECTION 4. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause, or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

SECTION 5. All ordinances or parts thereof that may be determined to be in conflict herewith are hereby repealed.

SECTION 6. This Ordinance shall be and become effective immediately upon final passage.

APPROVED AS TO FORM & CORRECTNESS:

Tanya M. Earley
City Attorney

STATE OF FLORIDA

COUNTY OF ST. LUCIE

WE, THE UNDERSIGNED, Mayor Commissioner and the City Clerk of the City of Fort Pierce, Florida, do hereby certify that the foregoing and above Ordinance No. 22-001 was duly advertised by title only in the St. Lucie News Tribune on Sunday, January 2, 2022; copy of said Ordinance was made available at the office of the City Clerk to the public upon request; said Ordinance was duly introduced, read by title only, and passed on first reading by the City Commission of the City of Fort Pierce, Florida, on January 18, 2022; and was duly introduced, read by title only, and passed on second and final reading February 7, 2022, by the City Commission of the City of Fort Pierce, Florida.

IN WITNESS HEREWITH, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this 7th day of February, 2022.

Linda Hudson
Mayor Commissioner

ATTEST:

Linda W. Cox
City Clerk

(CITY SEAL)

EXHIBIT A
Planned Development Guidelines

EXHIBIT "A"

Planned Development Guidelines

For

Willow Lakes

A PROPOSED

Resort Village and Community

W. Midway Road
Fort Pierce, Florida
St. Lucie County

Master Developer:
WILLOW LAKES, LLC

Prepared by:

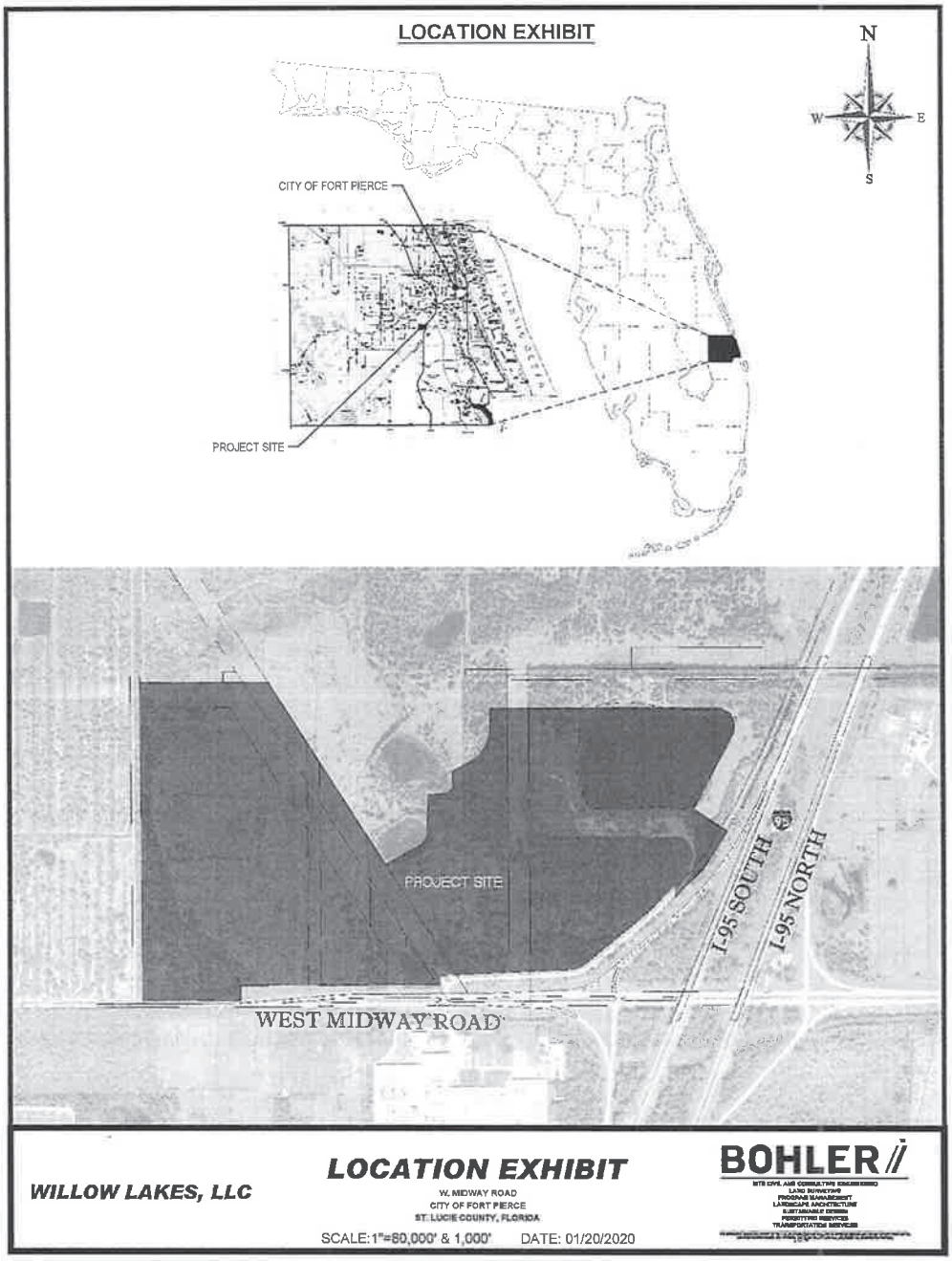
BOHLER
16 Old Forge Road, Suite A
Rocky Hill, CT 06067
(860) 333-8900 TEL.

2255 Glades Road Suite 305E
Boca Raton, FL 33431
561-571-0280

BOHLER //

July 14, 2020
#CT191015

O2806583.v1


LOCATION EXHIBIT
N
W
E
S
CITY OF FORT PIERCE
PROJECT SITE
PROJECT SITE
I-95 SOUTH
I-95 NORTH
WEST MIDWAY ROAD
WILLOW LAKES, LLC
LOCATION EXHIBIT
W. MIDWAY ROAD
CITY OF FORT PIERCE
ST. LUCIE COUNTY, FLORIDA
SCALE: 1"=80,000' & 1,000'
DATE: 01/20/2020
BOHLER

BOHLER //

II. LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN SECTIONS 2 AND 3, TOWNSHIP 36 SOUTH, RANGE 39 EAST IN ST. LUCIE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3, THENCE N89°46'35"W ALONG THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 2622.04 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF N.S.L.R.W.C.D. CANAL NO. 93 (A 78 FEET WIDE RIGHT-OF-WAY); THENCE S00°02'49"W ALONG THE EAST RIGHT-OF -WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 52.50 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF A 200 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 377, PG. 2069-2076 AND BEING THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE S89°46'35"E ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING PARALLEL TO THE NORTH LINE OF SAID SECTION 3 A DISTANCE OF 1,026.62 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF A 60 FEET WIDE FP&L EASEMENT AS RECORDED IN OR 119, PG. 404; THENCE S32°18'17"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID 60 FEET WIDE FP&L EASEMENT A DISTANCE OF 1,746.02 FEET; THENCE N61°15'41"E A DISTANCE OF 335.12 FEET; THENCE N31°56'28"E A DISTANCE OF 78.35 FEET; THENCE N02°37'14"E A DISTANCE OF 332.85 FEET; THENCE N85°17'03"E A DISTANCE OF 146.97 FEET; THENCE N53°57'44"E A DISTANCE OF 58.71 FEET; THENCE N01°56'01"E A DISTANCE OF 142.19 FEET; THENCE N62°33'43"E A DISTANCE OF 139.15 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 335.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 365.79 FEET THROUGH A CENTRAL ANGLE OF 62°33'43"; THENCE N00°00'00"W A DISTANCE OF 142.46 FEET; THENCE S89°50'50"E A DISTANCE OF 1,811.20 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 150.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 308.52 FEET THROUGH A CENTRAL ANGLE OF 117°50'41"; THENCE S27°59'51"W A DISTANCE OF 671.72 FEET; THENCE S56°07'55"E A DISTANCE OF 323.59 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROAD NO. 9 (INTERSTATE HIGHWAY NO. 95) (WIDTH VARIES); THENCE S32°49'14"W ALONG THE WEST RIGHT-OF-WAY OF SAID STATE ROAD NO. 9 A DISTANCE OF 346.97 FEET; THENCE S44°46'35"W ALONG THE WEST RIGHT-OF- WAY LINE OF SAID STATE ROAD NO. 9 A DISTANCE OF 339.92 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF A ACCESS ROAD NO. 1 AS RECORDED IN PB 24, PG. 4 J&K; THENCE N00°04'30"E A DISTANCE OF 99.51 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S44°46'35"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 236.51 FEET; THENCE DEPARTING SAID ACCESS ROAD NO. 1 N00°04'43"E A

BOHLER

DISTANCE OF 535.11 FEET; THENCE S89°59'23"W A DISTANCE OF 166.33 FEET; THENCE S00°04'55"W A DISTANCE OF 680.33 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1; THENCE S50°43'56"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO. 1 A DISTANCE OF 478.34 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH HAVING A RADIUS OF 266.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 171.53 FEET THROUGH A CENTRAL ANGLE OF 36°56'48"; THENCE S87°40'44"W ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID ACCESS ROAD NO I A DISTANCE OF 1,027.79 FEET; THENCE S00°01'50"E A DISTANCE OF 72.00 FEET; THENCE S89°58'10"W A DISTANCE OF 1,610.26 FEET; THENCE S00°01'50"E A DISTANCE OF 117.14 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF WHITE CITY ROAD (COUNTY ROAD 712) (A 70 FEET WIDE RIGHT-OF-WAY) ; THENCE N89°52'26"W ALONG THE NORTH RIGHT -OF-WAY OF SAID WHITE CITY ROAD (COUNTY ROAD 712) A DISTANCE OF 786.28 FEET TO A POINT ON THE EAST RIGHT-OF- WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93; THENCE N00°02'49"E ALONG THE EAST RIGHT-OF-WAY LINE OF SAID N.S.L.R.W.C.D. CANAL NO. 93 A DISTANCE OF 2,564.70 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID 200 FEET WIDE FP&L EASEMENT AND BEING THE POINT OF BEGINNING.

CONTAINING 197.90 ACRES, MORE OR LESS

TOGETHER WITH;

THE WEST 1/2 OF THE WEST 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 2, TOWNSHIP 36 SOUTH, RANGE 39 EAST, LESS AND EXCEPT THAT PORTION OF THE PROPERTY WHICH WAS TAKEN FOR 1-95, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

CONTAINING 2.33 ACRES, MORE OR LESS.

SURVEYED PARCEL CONTAINS A NET AREA OF 200.23 ACRES, MORE OR LESS.

BOHLER //

III. GENERAL SITE DATA

Parcel ID Numbers: 3302-212-0001-000-4

General Location: Northwesterly of the interchange of W. Midway Rd. and I-95 lying in Section 02 and 03, Town 36S, Range 39E.

Overall Site Area: 200.3 acres

Existing Zoning Planned Development (PD)

Future Land Use: Mixed Use (MXD)

Maximum Allowable Residential Density: 15 Dwelling Units per Acre Gross PD Area

Maximum Allowable Floor Area Ratio: 1.5 FAR

Surrounding Zoning, Future Land Use and Existing Use:

	Zoning	Future Land Use	Existing Use
North	PD	MXD	Vacant/Walton
South	TBD(City of PSL approved DRI) & PUD	CG/CH/ROI/CS (City of PSL) MXD & T/U (SL County)	Vacant/LTC Ranch/FPL
East	IL	INST/IND	Tropicana Mfg.
West	PD	MXD	Vacant/Walton

Table 1.0 – Surrounding Zoning, Future Land Use and Existing Use

BOHLER //

IV. QUANTITATIVE DEVELOPMENT DATA

Development Data:

See attached Planned Development Conceptual Master Plan for development data relating to site area calculations.

Proposed Uses and Intensity Allocations:

Please refer to *Table 1.1 – Use and Intensity Allocation* for a list of general uses along with applicable intensities.

Table 1.1 – Use and Intensity Allocation

General Use	Applicable Lot Type(s)	Intensity Allocation
Shopping Center	Commercial	250,000 SF
Entertainment (Indoor)	Commercial	100,000 SF
Neighborhood Bistro/Café/Restaurant/Bar	Commercial	100,000 SF
Fast Food/Coffee Shop	Commercial	25,000 SF
Convenience Store/Pharmacy	Commercial	25,000 SF
Office	Commercial	150,000 SF
Residential - Detached House	Single-Family Residential	150 Units
Residential - Townhouse	High-Density Residential	150 Units
Residential – Multifamily	High-Density Residential	700 Units
Hotel	Commercial	600 Rooms
Surf Park	Commercial	N/A (by total trips/use)
Entertainment (Outdoor)	Commercial	N/A (by total trips/use)

Uses and Intensities listed above in Table 1-1 are derived from the ITE Trip Generation Manual, which provide a baseline intensity by which traffic impacts are analyzed and mitigated for, if applicable. The uses listed in the General Uses column above are general in nature and account for similar uses contained within each general use category. Please refer to Table 1-2 for Lot Types accommodated by the Planned Development along with associated Lot and Dimensional Requirements and Permitted Uses allowed within each Lot Type.

The Traffic Impact Study for the project assumes that the Surf Park will include a 9.5-acre wave pool with ancillary facilities. The Surf Park and its ancillary facilities shall be allocated a Commercial Intensity Allocation of vehicle trips, as set forth in Table 1-1 above and as approved in the Master Traffic Impact Study. If the applicant applies for site plan approval for a Surf Park with a larger pool and facilities than that described in the Master Traffic Impact Report, then the City Planning Director may require an updated Traffic Impact Report and revised conditions of approval, if needed.

To provide flexibility in the build-out of the proposed development, Intensity Allocations provided above in Table 1.1 may be increased or decreased based on the Land Use Conversion Matrix on the following page.

BOHLER //

Table 1.1a: Willow Lakes Land Use Conversion Matrix

Land Use to Increase	Land Use	Peak Hr Rates	Land Use to Decrease: Single Family (1 Unit)	Apartment Low-Rise (1 unit)	Apartment Mid-Rise (1 unit)	Shopping Center (1,000 SF)	Pharmacy/ Drugstore (1,000 SF)	Convience Store (1,000 SF)	Fast Food Restaurant (1,000 SF)	High Turnover Restaurant (1,000 SF)	Hotel (1 room)	General Office (1,000 SF)
		Per Unit	0.427	0.28	0.187	0.956	1.8	13.2	9.32	3.21	0.278	0.79
	Single Family (1 Unit)	0.427	1.000	1.525	2.283	0.447	0.237	0.032	0.046	0.133	1.536	0.541
	Apartment Low-Rise (1 unit)	0.28	0.656	1.000	1.497	0.293	0.156	0.021	0.030	0.087	1.007	0.354
	Apartment Mid-Rise (1 unit)	0.187	0.438	0.668	1.000	0.196	0.104	0.014	0.020	0.058	0.673	0.237
	Shopping Center (1,000 SF)	0.956	2.239	3.414	5.112	1.000	0.531	0.072	0.103	0.298	3.439	1.210
	Pharmacy/Drugstore (1,000 SF)	1.8	4.215	6.429	9.626	1.883	1.000	0.136	0.193	0.561	6.475	2.278
	Convience Store (1,000 SF)	13.2	30.913	47.143	70.588	13.808	7.333	1.000	1.416	4.112	47.482	16.709
	Fast Food Restaurant (1,000 SF)	9.32	21.827	33.286	49.840	9.749	5.178	0.706	1.000	2.903	33.525	11.797
	High Turnover Restaurant (1,000 SF)	3.21	7.518	11.464	17.166	3.358	1.783	0.243	0.344	1.000	11.547	4.063
	Hotel (1 room)	0.278	0.651	0.993	1.487	0.291	0.154	0.021	0.030	0.087	1.000	0.352
	General Office (1,000 SF)	0.79	1.850	2.821	4.225	0.826	0.439	0.060	0.085	0.246	2.842	1.000
	Medical Office (1,000 SF)	1.8	4.215	6.429	9.626	1.883	1.000	0.136	0.193	0.561	6.475	2.278
	Golf Simulator(1 Tee/Hole)	1.553	3.637	5.546	8.305	1.624	0.863	0.118	0.167	0.484	5.586	1.966
	Water Slide Park (1 Acre)	13.263	31.061	47.368	70.925	13.873	7.368	1.005	1.423	4.132	47.709	16.789
	Recreational Facility (1,000 SF)	1.531	3.585	5.468	8.187	1.601	0.851	0.116	0.164	0.477	5.507	1.938

*Rate is based on the highest resultant trip rates of either the AM or PM directional rate calculated as the highest directional trip divided by the units.

Example:

1. If you want to build an 3,000 SF Fast Food Restaurant by decreasing the number of Low-Rise Apartments, how many apartments would need to be cut?

Instruction= Multiply 3 by the number that connects the Fast Food Restaurant row with the Apartment Low-Rise column (33.286).

Result; 3*33.286

You will need to cut 100 Low-Rise Apartments

2. If you want to remove 100 MFDU and figure out how many square feet of shopping center to add you go to Shopping Center along the top of the columns and MFDU on the rows to the left and get the cell with .293.

Multiply 100 x .293 = 29.3. Now can do 29,300 square feet of shopping center.

BOHLER //

V. DESIGN AND DEVELOPMENT GUIDELINES

The following section will govern overall design and development guidelines for development occurring within the Planned Development. *Table 1.2 – Dimensional Requirements* provides dimensional requirements by lot type followed by applicable development standards relating to permitted and restricted uses.

Table 1.2 – Dimensional Requirements

Lot Type	Maximum Gross Density (DU/Ac.)	Min. Lot Size	Min. Lot Width	Min. Road Frontage	Minimum Yard				Max. Bldg. Height	Max. Lot Coverage by Bldg.
					Front	Rear	Side	Side Corner		
Commercial - General	N/A	10,000 sf	50	50'	0'	0'	0'	0'	65' (1)	none
Single-Family Attached Medium Density Residential	N/A (2)	2,500 sf	30'	30'	10'	5'	5'	10'	35'	none
Single-Family Detached Medium Density Residential	N/A (2)	2,500 sf	30'	30'	10'	5'	5'	10'	35'	none
Residential – High-Density/ Mixed Use	N/A (2)	1,500 sf	50	50	0'	10'	0'	0'	65' (1)	none

1. *Maximum height for hotel/lodging buildings shall be a maximum of one hundred (100) feet if adjacent to I-95. If not adjacent to I-95, the sixty-five (65) foot maximum height limit shall apply.*
2. *Maximum Residential Density shall be determined by the Future Land Use in accordance with the City Comprehensive Plan, 15 units/acre gross Planned Development Area, not restricted. Development may be clustered, so that individual parcels may exceed 15 units/acre, provided that the Planned Development Area in total shall not exceed 15 units /acre and shall not exceed the maximum number of units set forth in Table 1.1.*

Where more than one lot, or parts of more than one lot, are owned by a single owner and subjected to a unity of title, the setbacks between such lots and any platted easements along the lot lines dividing such lots, shall be disregarded, and such lots or parts of lots may be developed pursuant to single unified site plan. In such event, the setbacks and platted lot line easements shall only apply to the outside boundaries of the property subjected to the unity of title, as if it were a single platted lot.

Commercial – General: The purpose of the Commercial General Lot Type is to provide and protect an environment suitable for a wide variety of commercial uses intended to serve a population over a large market area. The following uses shall be permitted within the Commercial – General Lot Type:

Permitted Uses:

a. Commercial – General and/or Neighborhood
b. Commercial – Town Center
c. Hotel (minimum 100 units)
d. Office Uses – Professional and/or Medical
e. Institutional

Residential – Medium Density Residential (10): The purpose of this lot type is to provide and protect an environment suitable for single-family, two-family, three-family, and multiple-family dwellings at a maximum density of ten (10) dwelling units per acre, together with such other uses as may be necessary for and compatible with moderate density residential surroundings. The following uses shall be permitted within the Residential – Medium Density Residential Lot Type:

Permitted Uses:

a. Community residential homes
b. Family day care homes
c. Multiple-family dwellings (Four (4) or more units)
d. Single-family detached dwellings
e. Two-family (duplex) dwellings
f. Three-family (triplex) dwellings
g. Townhome attached dwellings
h. Vacation Rentals

Residential – High-Density/Mixed Use: The purpose of this lot type is to provide and protect an environment suitable for a mix of compatible uses, including single-family, two-family, three-family, and multiple-family dwellings along with complementary commercial uses in a walkable, high-density residential and mixed-use village context, with specific building and neighborhood density limited only by building height and form, and by the maximum gross density permitted under the underlying land use in the Fort Pierce comprehensive plan of fifteen (15) dwelling units per acre of the gross Planned Development Area, together with such other uses as may be necessary for and compatible with high-density residential surroundings. The following uses shall be permitted within the Residential – High-Density/Mixed Use Lot Type:

Permitted Uses:

a. Multiple-family dwellings (four (4) or more units)
b. Single-family detached dwellings
c. Two-family (duplex) dwellings
d. Three-family (triplex) dwellings
e. Townhome attached dwellings
f. Multi-Family Apartments/Flats, with or without Commercial first-floor components.
g. Commercial – General and/or Neighborhood
h. Commercial – Town Center
i. Hotel
j. Vacation Rentals

BOHLER //

Agricultural Use: For the purpose of this document, agricultural uses shall be limited to cultivated cropland and/or livestock. Agricultural uses of the property shall be allowed within any phase or phases of this planned development project at any time prior to the commencement of construction of such project phase. Upon commencement of construction of any project phase, agricultural use of such phase shall no longer be permitted.

Open Space: Pursuant of Section 22-40(b)(3) of the City of Fort Pierce Code of Ordinances, a minimum of 20% of the site area of this development is required to be set aside as Open Space (200.3 ac. x 0.2 = 40.06 ac.). Open Space shall be land devoid of any above-ground structures or buildings, except pergolas, gazebos, pavilions or other open-air structures; or landscape structures such as terraces, planters, walls or retaining walls. Open space may include natural areas, buffer areas, upland habitats, including those areas of on-site preservation required by the other provisions of the City of Fort Pierce Code of Ordinances; recreation areas, but not including swimming pools, tennis courts or other impervious activity areas; but may include parks, golf courses, sports fields; bicycle, pedestrian or equestrian paths and facilities; common open space, common landscaping or planting areas; stormwater detention and retention facilities providing that no more than thirty (30) per cent of the overall open space requirement shall be satisfied in this manner; water features, conservation areas or other areas intended for public purposes other than street or road rights-of-way, but shall exclude aquatic areas for conservation and development. This equates to 12.02 acres of the Open Space requirement to be satisfied by stormwater detention and retention facilities. As part of the development for Willow Lakes Resort Village and Community the Open Space requirement will be satisfied by a combination of open green space, streetscape/hardscape tree-lined pedestrian sidewalks, channelized waterways, and stormwater detention and retention. The calculations below delineate the areas associated with each category:

Open Space Provided:

Total SWM: 1,276,750 sf ~ 29.31 ac

Open Green Space:		1,215,032 sf ~ 27.89 ac	
Channelized Waterways:		+150,139 sf ~ 3.45 ac	
Pedestrian-oriented Open Space/Facilities:			
Pier Avenue Pedestrian Walks:	119,189 sf ~ 2.73 ac		
Main Street Pedestrian Walks:	31,966 sf ~ 0.73 ac		
Strand Boulevard Pedestrian Walks:	53,934 sf ~ 1.24 ac		
Walton Pedestrian Walks:	78,666 sf ~ 1.80 ac		
Total Pedestrian-oriented Open Space/Facilities:		+283,755 sf	6.51 ac
30% SWM Facilities:			+12.02 ac
Open Space Provided:			**=49.87 ac**
> 40.06 ac Required			

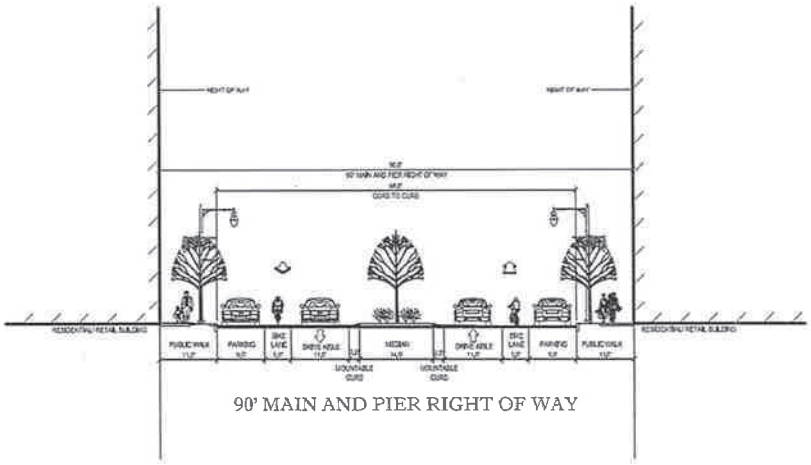
BOHLER //

Site Plan Review: Development proposed on any one (1) or more lots within the Planned Development shall be reviewed in accordance with Section 125-313 – Major and minor site plan application.

Additional Documentation: Prior to the development of each phase, the applicant shall submit for review and approval all documentation then required by City Code to obtain City site plan approval for such phase, including the site plan, landscaping plan, tree mitigation plan, lighting plan, and master sign plan for such phase.

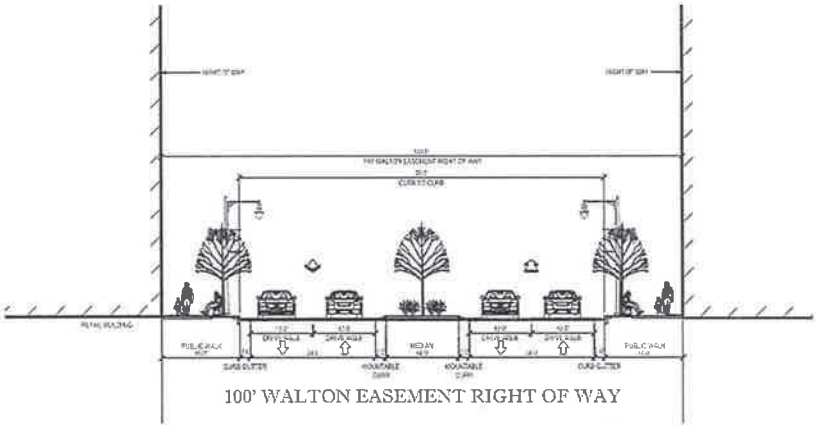
Design Review: The applicant may submit with a future phase of this project, proposed design standards to govern development within the Willow Lakes Resort Village and Community Planned Development. Such proposed design standards shall be subject to review and approval by the City in accordance with applicable City Code provisions at the time of submittal.

Private Access Tract Street Sections:

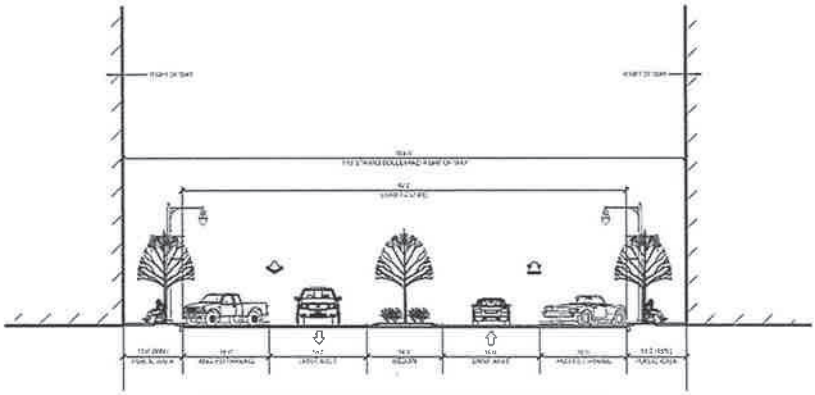


90' MAIN AND PIER RIGHT OF WAY

BOHLER //



100' WALTON EASEMENT RIGHT OF WAY



104' STRAND BOULEVARD R.O.W. WITH
45° ANGLED PARKING

VI. HEALTH AND SAFETY REGULATION FOR SURF PARK

The applicant intends to develop a Surf Pool within Phase 1 of the Project. A "Surf Pool" means a pool that is designed to generate waves dedicated to the activity of surfing on a surfboard or an analogous surfing device commonly used in the ocean and intended for sport, as opposed to the general play intent of wave pools, other large-scale public swimming pools or other public bathing places. Pursuant to Florida Statute 514.0115, until such time as the Florida Department of Health adopts rules for the supervision and regulation of Surf Pools, the Surf Pool will be exempt from supervision or regulation under Florida Statutes Chapter 514, provided that the Surf Pool is larger than 4 acres, and is permitted by the City pursuant to a special use permit process in which the City asserts regulatory authority over the construction of the Surf Pool and, in consultation with the Florida Department of Health, establishes through the City's special use permitting process the conditions for the Surf Pool's operation, water quality and necessary lifesaving equipment. Therefore, if the Florida Department of Health has not yet adopted rules for the supervision or regulation of Surf Pools, then prior to the issuance of final site plan approval for any Surf Pool larger than 4 acres within the Project, special conditions regulating the construction and operation of the Surf Pool, including its water quality and lifesaving equipment, shall be reviewed and approved by the City, asserting its regulatory authority over the Surf Pool, and such conditions shall be deemed a part of, and incorporated into, these Planned Development Guidelines. The City shall consult with the Florida Department of Health, as required by Florida Statute 514.0115, in reviewing and approving such special conditions relating to the Surf Pool's operation, water quality and necessary lifesaving equipment.

VII. ZONING ORDINANCE EXCEPTIONS

The following deviations from the current City of Fort Pierce Code of Ordinances are proposed within the Willow Lakes Resort Village and Community Planned Development.

Chapter 125 - Zoning

- Hotels shall be permitted to be constructed to a height not to exceed one hundred (100) feet if constructed generally proximate or adjacent to the frontage of I-95, or situated on the lake adjacent to I-95. This 100' height allowance exceeds the sixty-five (65) foot height limit for Hotel uses found in Chapter 125 -Zoning, of the City of Fort Pierce Code of Ordinances.
- A list of permitted and conditional uses has been included herein, which shall govern use allowances within the Planned Development; such permitted and conditional uses included herein may or may not be found within Chapter 125 -Zoning.
- Sec. 123-66. - Tree protection and mitigation: Mitigation shall be provided pursuant to future site plan submittals in the form of excellence in urban village, pedestrian-oriented tree-lined streetscapes, in lieu of the mitigation requirements set forth in the City Code.

Planned Development Guidelines
SUPPORTING DOCUMENTATION

For

Willow Lakes

A PROPOSED

Resort Village and Community

W. Midway Road
Fort Pierce, Florida
St. Lucie County

Master Developer:
WILLOW LAKES, LLC

Prepared by:

BOHLER
16 Old Forge Road, Suite A
Rocky Hill, CT 06067
(860) 333-8900 TEL.

2255 Glades Road Suite 305E
Boca Raton, FL 33431
561-571-0280

BOHLER //

July 14, 2020
#CT191015

O2806583.v1

TABLE OF CONTENTS

I. PROJECT NARRATIVE 2
II. PROJECT PHASING 4
III. TRAFFIC CONCURRENCY (O'Rourke Engineering and Planning) 7

I. PROJECT NARRATIVE

Jennifer Hofmeister, AICP, LCAM
Planning Director
City of Fort Pierce
W. Midway Road
Fort Pierce, FL 34950

Re: Proposed Resort Village and Community

Dear Mrs. Hofmeister,

Willow Lakes Resort Village and Community is envisioned as a vibrant, mixed-use urban village at the crossroads of Florida's Turnpike, Interstate 95, and the City of Fort Pierce. Situated on 200.23 acres of land lying immediately north of Midway Road and west of I-95 within the City of Fort Pierce, Willow Lakes will be an east coast destination that will bring together local residents and regional, national and international visitors in a lively, pedestrian-oriented, and healthy environment of inviting public spaces, walkable streets, and authentic neighborhoods in which to live, work, play and learn.

The vision is that of a typical beach community that celebrates outdoor activity and a healthy lifestyle. A place where residential, retail, and commercial uses will be combined to provide a critical mass of activity that will bring year-round life to the Village. Yet, this community will be one of a kind in Florida, situated not on a lone beach, but around the newest and largest world-class surf park in the country. A joy to simply relax and watch, and a thrill to experience, the Wavegarden at Willow Lakes will deliver high quality waves and authentic surfing experiences year-round for new and existing surfers of all ages, experience and ability. Beyond the Wavegarden. the Village will be comprised of several distinct neighborhoods, knit together by a network of walkable, pedestrian-oriented streets, and navigable floways designed for maximum environmental and recreational purposes. The result will be a natural, honest and inclusive environment where memorable experiences are created daily, and where visitors, residents, and professionals have fun, keep fit and feel part of a community that shares their passion and respect for surfing, the ocean, others and our planet.

Neighborhoods are the traditional building blocks of villages, towns and cities. They provide an organic, localized sense of place, identity and community within the larger fabric of a town. Willow Lakes Resort Village and Community is conceived as a series of small, local places organized in a framework of larger neighborhood types or areas. The primary neighborhoods that make up Willow Lakes will include the Wavegarden surf resort village and hotels, the mixed-use main and village streets immediately surrounding it, a town center plaza, an entertainment retail zone, and two residential areas, accompanied by adjacent undeveloped open space/conservation area. Within the larger, primary areas will be the smaller commercial and residential places that create variety, scale, local identity, and texture. The concentration of this series of neighborhoods will facilitate shared pedestrian accessibility to the many activities and residential options, the creation of vibrant commercial areas, and the simultaneous introduction of a system of recreational floways linking the natural spring-fed lake in the heart of the project to the neighborhoods and open space conservation areas throughout.

The street system proposed in this plan emphasizes connectivity and the importance of the streetscape as a place of value to the community. Where vehicle traffic is envisioned, parking is planned as an essential part of the project and will be encouraged on the streets, contributing to the availability of convenient parking spaces and to a sense of traffic-calming in pedestrian-oriented areas that have concentrated street-front commercial activity. Streets and parking facilities will be designed to support single-trip

visits to Willow Lakes for multiple activities. While the basic accommodation of cars is essential to the life of the project, and any similar project in Florida, Willow Lakes is fundamentally a place for people. The design of all streets and the associated public realm reflects a focus on pedestrians, accommodations for bicycles, and the enduring qualities of livable, active public spaces for human interaction.

The intent of this guideline is to provide flexible development options for the variety of uses proposed by utilizing the Planned Development Zoning District as outlined in Section 22-40 of the City of Fort Pierce Code of Ordinances. As proposed, approval of an overall Planned Development site plan and preliminary plat, along with Planned Development guidelines, will provide the foundation for future tenants to submit detailed development plan proposals for review and approval by the City. This affords all involved, including the City, the master developer and potential tenants a clear, approved plan to provide for the most efficient and flexible development of the overall project.

Design and development parameters by lot type, including, but not limited to: permitted and prohibited uses, applicable setbacks; allowable building area; street cross sections; landscaping, irrigation and signage standards have been provided for. A master Property Owners Association (POA) will be created to provide for continued and long-term maintenance of common areas, such as plazas, floways, open spaces and preserve areas, as well as the master stormwater system, master irrigation system, common area signage, street lighting, and other common improvements and services. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

BOHLER

Geoffrey P. Fitzgerald, PE, AICP, Branch Manager

O2806583.v1

II. PROJECT PHASING

As proposed, initial infrastructure improvements will be constructed by the developer, which include excavation of the storm water management floways and ponds within the Storm Water Management Tracts; clearing and rough grading development tracts; construction of certain roads or segments thereof, and placement of structural fill where deemed necessary or desirable. Installation of common utilities such as water and wastewater lines, fiber optics and telecom among other general infrastructure improvements is yet to be determined. To provide for as much flexibility as possible in accommodating potential end-users, the developer reserves the right to implement construction on any one (1) or more phases at any such time it is deemed appropriate; i.e. based on market demand or other metrics utilized by the developer.

The Phase Schedule below provides for a general outline of the Phases of infrastructure construction. Please note that the timelines provided are estimates only and are subject to market conditions and approval timelines. It is anticipated that a Phase 1 submittal will be made within a year.

PHASE SCHEDULE

Estimated Duration of Construction of Phase	General Description of Improvements
Phase 1A (18 months)*	• Roadwork consisting of a full access signalized intersection at Midway Road and Gordy Road, Gordy Road Improvements, including roundabout at new Main Street. • Construction of pavement and landscaped median for Strand Boulevard Tract, and Main Street Tract from Gordy Road north to the intersection of Pier Avenue Tract. • Drainage associated with roadwork. • Construction of potable water and wastewater service mains and stub-outs for future phases; • Electric and telecom services and stub outs for future phases; • Construction of Pier Avenue subgrade for use as on-site construction haul road. • Rough site grading and excavation of Storm Water Management floways and ponds. • Placement of fill and preparation of subgrade on Wavegarden Surf Park parcel 1A. • Construction of Wavegarden Surf Park and associated commercial buildings, parking, drives, facilities, walks, landscaping and amenities. • Sidewalks and Street lighting along upper Strand Boulevard.
Phase 1B (8 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for parcel 1B commercial development.

	• Construction of commercial development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities.
Phase 1C (12 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for parcel 1C commercial development. • Construction of commercial development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Sidewalks along Strand Boulevard. • Street Trees and Lighting along Strand Boulevard
Phase 2A (12 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for parcel 2A commercial development. • Construction of commercial development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Sidewalks along Frontage of Phase 2A
Phase 2B (18 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for parcel 2B commercial development. • Construction of commercial development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Sidewalks along Frontage of Phase 2B
Phase 2C (12 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for parcel 2C mixed-use development. • Construction of mixed-use development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Sidewalks along Frontage of Phase 2C

Phase 2D (12 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for Phase 2D mixed-use development. • Construction of mixed-use development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Sidewalks along Frontage of Phase 2D
Phase 3 (12 months)*	• General earthwork, including placement of fill and preparation of subgrade and associated sitework for Phase 3 commercial development. • Construction of commercial development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities. • Improvements along lakefront and shoreline, and completion of eastern floway system. • Completion of Phase 3 and Phase 4 private roads and drives.
Phase 4 (12 months)*	• Construction of Multifamily Residential development and associated buildings, parking, drives, utility and storm water infrastructure, facilities, walks, landscaping, lighting and amenities.
Future Phases TBD*	• Roadwork consisting of a full access signalized intersection at Midway Road and Walton Easement Road, and remaining Pier Avenue Improvements to western limits of Willow Lakes property. • Construction of pavement and landscaped median for Walton Easement Tract, and Pier Avenue Tract. • Completion of western side floway system. • Drainage associated with roadwork. • Construction of potable water and wastewater service mains and stub-outs for future phases; • Electric and telecom services and stub outs for future phases; • Construction of commercial tracts in Phase 5 and 6, and residential tracts in Phases 7 and 8. See PD Conceptual Site Plan.

* Subject to market conditions

III. TRAFFIC CONCURRENCY (O'Rourke Engineering and Planning)

Trip Generation – The project will generate an estimated 37,297 daily trips, 2,381 AM peak hour trips and 2,486 PM peak hour trips.

Analysis/Needs – A detailed analysis of the intersections and link generally within a 5-mile radius that were significantly impacted by the project was conducted. As a result of the analysis, a series of prop share payments were estimated. The total prop share estimate is $7,358,178. These payments, which are creditable against impact fees, as well as additional impact fees collected, would be used to make improvements in the Midway corridor. The impact fees are estimated as $8,696,883, exclusive of the golf and Wave Garden facilities.

Those improvements include widening Midway Road to six lanes from Arterial A through to the northbound on ramps at I-95. Extensive turn lanes would also be required at the driveways along Midway Road. The construction along Midway Road will be coordinated with the developers of LTC Ranch and the Village at Midway, where appropriate.

Test Mix of Land Uses

WILLOW LAKES IMPACT FEES

Land Use	ITE Code	Intensity	St. Lucie County Road Impact fees	Total Fee
Residential Single-Family	210	150 DU	5016	752,250
Multifamily (Low-Rise)	220	150 DU	3875	581,250
Multifamily (High-Rise)	221	700 DU	2874	2,011,800
General Office	710	100,000 SF	3634	363,400
Medical Office	720	50,000 SF	3634	181,700
Commercial/ Retail	820	395,000 SF	7553	2983,435
Gas Station with Convenience Market 3k+	820	16 Pumps	9852	157,632
Movie Theater	760	1,000 Seats	338	338,000
Rec. Facility	710	19,600 SF	1233	24,167
Hotel	310	600 Rooms	2172	1,303,200
TOTAL				**$8,696,834**

Note: This total does not include the Wave Garden or Top Golf facilities

ADDITIONS TO PLANNED DEVELOPMENT GUIDELINES

SURF POOL REGULATIONS:

The surf pool regulations attached hereto, were approved by the City of Fort Pierce in consultation with the Florida Department of Health. The surf pool regulations are incorporated into the Planned Development Guidelines, and thereby establish through the City's Planned Development permitting process the conditions for the surf pool's operation, water quality and necessary life-saving equipment, in accordance with Florida Statutes 514.0115(7).

PARKING STALL AND DRIVE AISLE DIMENSION REGULATIONS.:

The parking stall and drive aisle dimension deviations to the code are shown in the submitted plan set and include 9'x18' parking stalls and 24' wide drive aisles. These deviate from the land development code which state the dimensions for a parking stall and drive aisle to be 9.5'x19' and 26', respectively.

Fort Pierce, Florida Surf Pool – Special Use Permitting

1. Applicable Florida State Regulation: 514.0115 Exemptions from supervision or regulation; variances.

(7) Until such time as the department adopts rules for the supervision and regulation of surf pools, a surf pool that is larger than 4 acres is exempt from supervision under this chapter if the surf pool is permitted by a local government pursuant to a special use permit process in which the local government asserts regulatory authority over the construction of the surf pool and, in consultation with the department, establishes through the local government's special use permitting process the conditions for the surf pool's operation, water quality, and necessary lifesaving equipment.

This subsection does not affect the department's or a county health department's right of entry pursuant to s. 514.04 or its authority to seek an injunction pursuant to s. 514.06 to restrain the operation of a surf pool permitted and operated under this subsection if the surf pool presents significant risks to public health.

For the purposes of this subsection, the term "surf pool" means a pool that is designed to generate waves dedicated to the activity of surfing on a surfboard or an analogous surfing device commonly used in the ocean and intended for sport, as opposed to the general play intent of wave pools, other large-scale public swimming pools, or other public bathing places.

2. Glossary

"AQUATIC VENUE" means an artificially constructed structure or modified natural structure where the general public is exposed to water intended for recreational or therapeutic purpose and where the primary intended use is not watering livestock, irrigation, water storage, fishing, or habitat for aquatic life. Such structures do not necessarily contain standing water, so water exposure may occur via contact, ingestion, or aerosolization. Examples include swimming pools, wave pools, lazy rivers, surf pools, spas (including spa pools and hot tubs), therapy pools, waterslide landing pools, spray pads, and other interactive water venues.

"SURF POOL": means a pool that is designed to generate waves dedicated to the activity of surfing on a surfboard or an analogous surfing device commonly used in the ocean and intended for sport, as opposed to the general play intent of wave pools, other large-scale public swimming pools, or other public bathing places.

"BATHYMETRY": means the specific shaping and sloping of the SURF POOL floor in order to create the desired waves.

"SURFER": a person or occupant in a SURF POOL who is partially or fully immersed in SURF POOL water and using a surfboard or other analogous surfing or wave riding device.

3. Guidelines for Surf Pool Special Use Permitting

3.1 Design and Construction

SURF POOLS are identified as different from swimming pools, wave pools and any other AQUATIC VENUES. Therefore, while meeting the intent of any existing Design and Construction codes for public AQUATIC VENUES, SURF POOLS cannot practically be designed to meet existing design and

construction codes and keep the intended use. The following standards shall be applicable to SURF POOLS:

3.1.1 Design for Risk Management:

a. Design of the SURF POOL shall include consultation with and input by the owner, the SURF POOL wave equipment supply company or a surf or aquatic risk management consultant and address safety operational considerations.

3.1.2 Construction Material:

a. SURF POOL shall be constructed of structurally sound material(s), which provide an easily cleaned, watertight structure capable of withstanding the anticipated stresses/loads for full and empty conditions.

3.1.3. Finish:

a. All water-contact surfaces shall have a durable finish suitable for regular scrubbing and cleaning.
b. The areas of access and egress shall be constructed with slip-resistant materials.

3.1.4. Bathymetry:

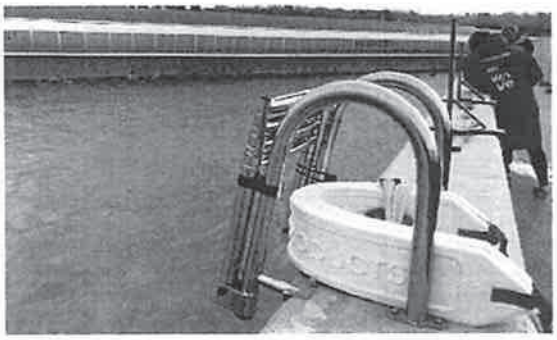
a. The design of the BATHYMETRY and associated slope changes shall be specified by the wave equipment supply company.

3.1.5. Access / Egress

a. SURF POOL shall have a minimum of two means of access and egress at the shallowest end.
b. Access/egress areas to the SURF POOL for disabled persons shall conform to ADA Standards for AQUATIC VENUES.

3.1.6 Wheelchair Accessibility/Emergency Egress

a. SURF POOL shall comply with the Florida Building Code Accessibility 7th edition, Chapter 10, to include in part:
Accessible routes, Loading/Unloading Areas, Slopes, Ride Entry, Transfer Devices, Wheelchair Storage Spaces, etc.
b. Emergency egress shall be provided from the deep end (5 feet or deeper) of the surf pool at intervals of no less than 100 feet along the lateral (outside) walls of the surf pool, but not along the central wall or the central machine building, and the ladders shall be permanently fixed. This requirement may be satisfied by providing retractable emergency ladders similar to the ladder depicted below (product information/spec sheet and locations to be provided with the building plans for the SURF POOL).



3.2 Equipment Standards

3.2.1 Accredited Standards

a. Where applicable, all wave making and water treatment equipment used in the SURF POOL shall be:

   1) Of an engineered design and construction, and
   2) Certified to a specific standard for the specified equipment use by an ANSI-accredited certification organization.

3.3 Operation and Safety

3.3.1 Basic Requirements

a. The SURF POOL design, including shape, materials of construction, appurtenances, etc., shall provide for the safety of SURFERS, the thorough and complete circulation of the water, the ability to clean and maintain the SURF POOL, and be considered when planning for effective supervision and surveillance of SURFERS.
b. The SURF POOL shall be operated in accordance with a water safety program that includes specialized water safety personnel, training, procedures, and equipment. The owner shall deliver to the City a Water Safety Plan for the SURF POOL setting out the proposed lifeguard staffing schedule, standard operating procedures and emergency procedures. All components of the water safety plan shall be in compliance with the most current life safety guidelines appropriate for surfing-related activities from the American Red Cross or other applicable certifying entity.

3.3.2. SURF POOL Lifeguards

a. Lifeguards shall have completed a lifeguard training course intended for waterfront, open water, or surf environments offered by the Red Cross or another recognized training agency.

3.3.3. Lifeguard to SURFER Ratio

a. A 1:20 Lifeguard / SURFER ratio (where SURFERS are partially or fully immersed in the SURF POOL water) is required for water that is clear enough to see the bottom of the SURF POOL while the water is static.
b. A 1:10 LIFEGUARD / SURFER ratio (where SURFERS are partially or fully immersed in the SURF POOL water)is required in the event that water is not sufficiently clear to see the bottom of the SURF POOL while the water is static.

3.3.4. Lifeguard Response Time
a. Lifeguards shall be able to demonstrate competency to reach the furthest edge of SURFER surveillance within 20 seconds.

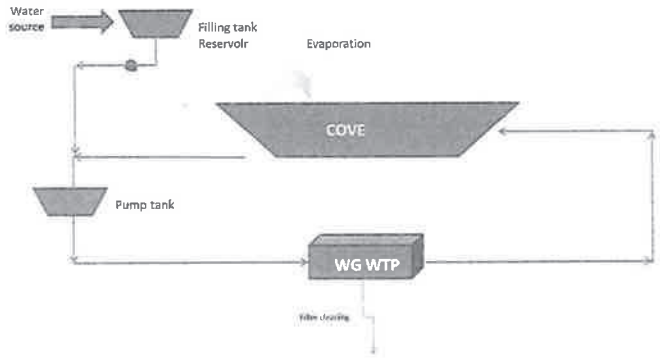
3.3.5. Theoretical Peak Occupancy
a. The specifications for the SURF POOL shall indicate design peak SURFER occupancy for safe operations of surf wave action. Occupancy will be no more than 1 SURFER partially or fully immersed in the SURF POOL water per 1,000 ft² of SURF POOL water surface area.

3.3.7. Water Clarity
a. The water in the SURF POOL shall be sufficiently clear such that resuscitation can be initiated within 2 minutes of identifying a distressed SURFER. Clarity shall be verified using contrasting color markers placed in the deepest sections of the SURF POOL accessible to SURFERS and staff.
b. Ten Feet Deep or Less: For a SURF POOL with the deepest SURFER accessible water being 10 feet deep (3.0 m) or less, a contrasting color marker with an area of 0.40 ft2 (372 cm2) or less shall be placed such that it is visible for verification of water clarity in the deepest section of the SURF POOL.
c. Over Ten Feet Deep: For a SURF POOL with the deepest SURFER accessible water depth over 10 feet deep (3.0 m) the marker size may be increased to 0.50 ft2 (464 cm2).
d. This marker shall be visible in still water from a vantage point above water surface up to 30 ft (9 m) away in a direct line of sight from the marker.
e. Regular turbidity (NTU) measurements are to be taken and logged for correlation to verification by line of sight marker visibility.
f. In the event that the water is not sufficiently clear to see the bottom while the water is static, the following conditions shall apply:
    1) Leash or Tether Requirements: All SURFERS must effectively be attached to a surfboard, bodyboard or other analogous surfing or flotation device.
    2) High Visibility and Reflective Rash Guard Requirements: All SURFERS must wear a high visibility and reflective rash guard.
    3) A Lifeguard shall be able to demonstrate competency to reach the furthest extent of the assigned zone of SURFER surveillance within 15 seconds.

3.4 Water Quality

3.4.1. Water Quality Equipment Specifications
a. The water quality system shall include the following components:
    1) A piping network for water collection, recirculation and distribution.
    2) Flow meters accurate to within +/- 5% of the actual design flow.
    3) Water treatment equipment to include screens, pumps, filters, ozone treatment, UV treatment, chemical dosing and commercial probes for monitoring and control.
    4) An underwater vacuuming system to remove solids.

b. The water recirculation and water treatment system shall follow the following schematic:



c. All equipment used shall be appropriate for use in recreational water treatment either by meeting an accredited standard such as NSF-50/61 listing, UL or international equivalent, manufacturer certification, or other technical justification based on material in contact with water, operational characteristics and benefits to the SURF POOL water quality management system.
d. All chemicals used must be NSF 60 certified.

3.4.2. Water Quality Parameters

a. The SURF POOL shall not have a specified water recirculation and turnover time requirement. The turnover time shall be determined by the water treatment equipment supplier but it must have the ability to meet the following water quality parameters:
   1) Water clarity / Turbidity: Maintain turbidity below 5 NTU with continual monitoring.
   2) Oxidation: maintain minimum ORP of 600 mV in main body of water and maximum of 900 mV in return water
   3) Residual chlorine to be monitored continuously with a minimum allowable FAC of 0.5 ppm (mg/L)
   4) pH maintained between 7.0 to 7.6 and monitored continuously
   5) Total Alkalinity (TA) maintained between 60 to 180 ppm
   6) Other standard water chemistry values as would normally be kept for swimming pools.

3.4.3 Water Quality Testing

a. The SURF POOL operator shall test the following parameters:
   1) Continual Monitoring:
      i. Water Clarity (NTU)
      ii. Residual chlorine (FAC)
      iii. pH
   2) At least once per day during business hours:
      i. Oxidation (ORP)
      ii. Alkalinity (TA)
      iii. Other standard water chemistry values as would normally be kept for swimming pools
   3) At least monthly in winter and bi-weekly for the remainder of the year:
      i. E. coli bacteria testing from three (3) locations in the SURF POOL by a state certified lab. Frequency may be reduced by approval of the City of Fort Pierce

and/or the Florida Department of Health after treatment system proves that turbidity, disinfection and pH tests are within acceptable range.

b. The SURF POOL operator may perform these tests using a properly calibrated automatic chemical monitoring and control system in accordance with the manufacturer's equipment specifications for calibration and directions for proper use.
c. The SURF POOL operator shall maintain a written daily record of all test results, equipment readings, calibrations, and corrective action taken at the SURF POOL.
d. If the SURF POOL operator adds cyanuric acid to the water, the SURF POOL operator shall measure the cyanuric acid concentration in the water a minimum of once every 2 months and shall maintain a written record of these test results and all corrective action taken at the SURF POOL site.
e. The SURF POOL operator shall maintain data and records collected pursuant to this section for at least two years for inspection by the City of Fort Pierce and/or the Florida Department of Health upon request and shall submit all data and records to the City of Fort Pierce and/or the Florida Department of Health upon request. The SURF POOL operator shall also compile data reports on the water quality of the SURF POOL quarterly (four times per year), and shall submit the same to the City Building Official.

3.5 Inspections

3.5.1 Preoperational Inspections

a. The SURF POOL may not be placed in operation until an inspection approved by the City of Fort Pierce shows compliance with the Special Use Permit requirements set forth herein or the City of Fort Pierce otherwise approves opening for operation.

3.5.2. Operational Inspections

a. Upon presenting proper identification, an authorized employee or agent of the City of Fort Pierce or the Florida Department of Health shall have the right to, and be permitted to, enter any SURF POOL area, including the recirculation equipment and piping area, at any reasonable time during the SURF POOL's business hours, for the purpose of inspecting the SURF POOL to do any of the following:
    1) Inspect, investigate, or evaluate for compliance with these Special Use Permit regulations;
    2) Verify compliance with previously written violation orders;
    3) Collect samples or specimens;
    4) Examine, review, and copy relevant water quality records;
    5) Obtain photographic or other evidence needed to enforce these regulations; or
    6) Question any supervisory employee of the operator responsible for the operation of the SURF PARK or water quality.
b. A SURF POOL´s inspection frequency may be amended based on a risk of recreational water injury and illness.
c. The operator of the SURF POOL shall obtain, at its sole cost, quarterly inspections conducted by an independent third party. The independent third party inspector shall inspect the SURF POOL and the water quality test records maintained by the operator in accordance with section 3.4.3.e above, to determine if the SURF POOL is in compliance with these regulations. The independent third party inspector shall then submit a quarterly written report of its findings to the City Building Official.

3.6 Enforcement

3.6.1 Florida Department of Health and County Health Department Enforcement Rights

a. In accordance with the requirements of F.S. 514.0115(7), these special use permit regulations shall not affect the Florida Department of Health's or the county health department's right of entry pursuant to F.S. 514.04 or its authority to seek an injunction pursuant to F.S. 514.06 to restrain

the operation of a SURF POOL permitted and operated under these regulations if the SURF POOL presents significant risks to public health.

3.6.2. City Enforcement Rights

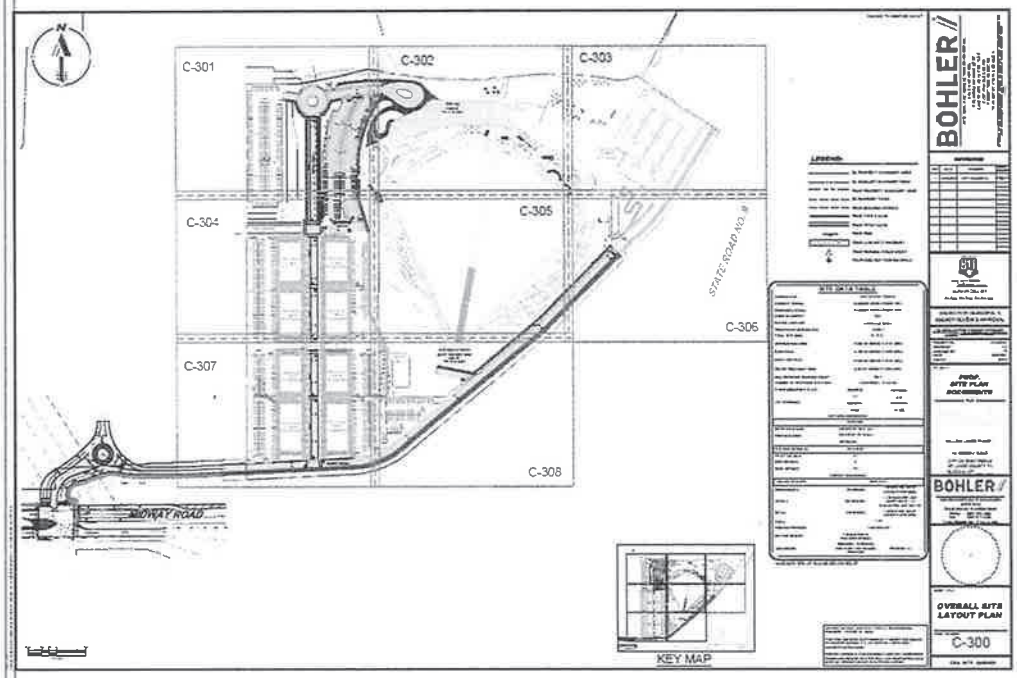
a. Enforcement.
In addition to the enforcement rights of the Florida Department of Health and the county health department, as set forth above, the City may exercise its code enforcement rights, and any other legal rights of the City, to enforce compliance with the regulations set forth herein.

b. Termination of Operation/Notice.
If the operator of the SURF POOL does not comply with all required operational procedures and safety conditions set forth in these regulations, then the City shall have the right to terminate the operation of the SURF POOL, provided however that (i) the City shall first provide the operator of the SURF POOL with written notice of such violation of these regulations, and (ii) the operator of the SURF POOL shall than have ten (10) days from receipt of the written notice to correct such violation. If such violation cannot reasonably be corrected within such ten (10) days, then the operator of the SURF POOL must commence correcting such violation within such ten (10) day period and diligently complete such correction within a reasonable time, not to exceed thirty (30) days after receipt of the written notice. The foregoing notwithstanding, the City shall have the right to seek an injunction to immediately terminate the operation of the SURF POOL in the event that any such violation causes a significant risk of death or serious physical harm to the public.

c. Emergency Measure/Imminent Danger.
When in the opinion of the Building Official, there is imminent danger of failure or that life or health is endangered by the occupation of any part of the facility or premises or when there is actual or potential danger to the occupant or those in proximity to the facility or any structure, the Building Official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. This enforcement authority, as granted by F.S. 468.604(1); F.S. 553.79 and adopted International Property Maintenance Code, shall not be delegated to any other individual or entity and shall be enforced independently of the need of court injunction. In such event, the Building Official shall cause to be posted at each entrance to such structure or facility a notice reading as follows: "This Structure is Unsafe and its Occupancy has been Prohibited by the Building Official." It shall be unlawful for any person to enter the structure or facility without the approval of the Building Official until such repairs have been made or the hazardous condition has been addressed.

d. Hearing.
Any person ordered to take emergency measures shall comply with such order forthwith. Any affected person shall thereafter, upon petition directed to the Circuit Court, be afforded a hearing for relief, in accordance with applicable law.

EXHIBIT B
PHASE 1A



Data Center
(160)

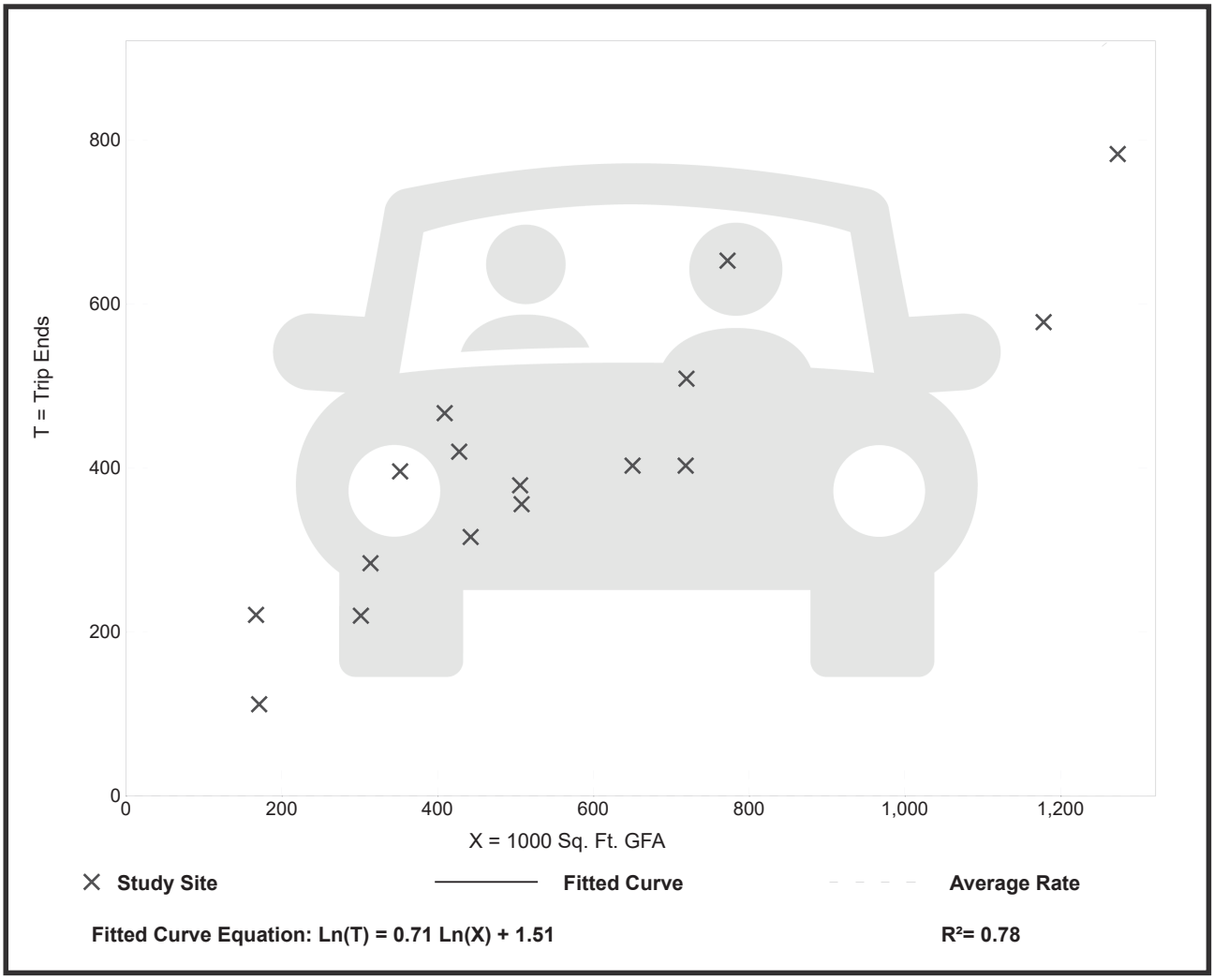
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 557
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.73	0.49 - 1.32	0.20

Data Plot and Equation



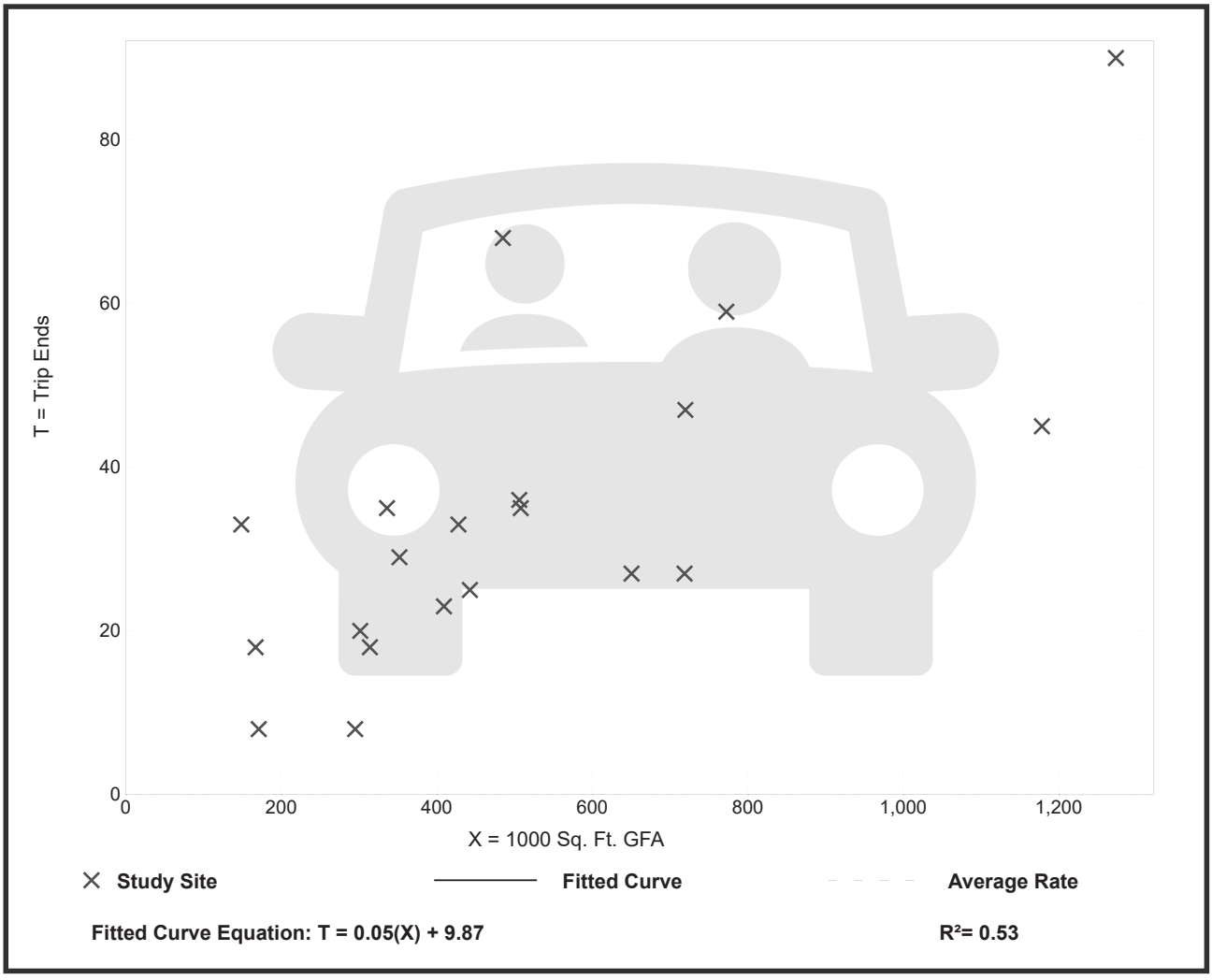
Data Center
(160)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	20
Avg. 1000 Sq. Ft. GFA:	509
Directional Distribution:	71% entering, 29% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.07	0.03 - 0.22	0.03

Data Plot and Equation



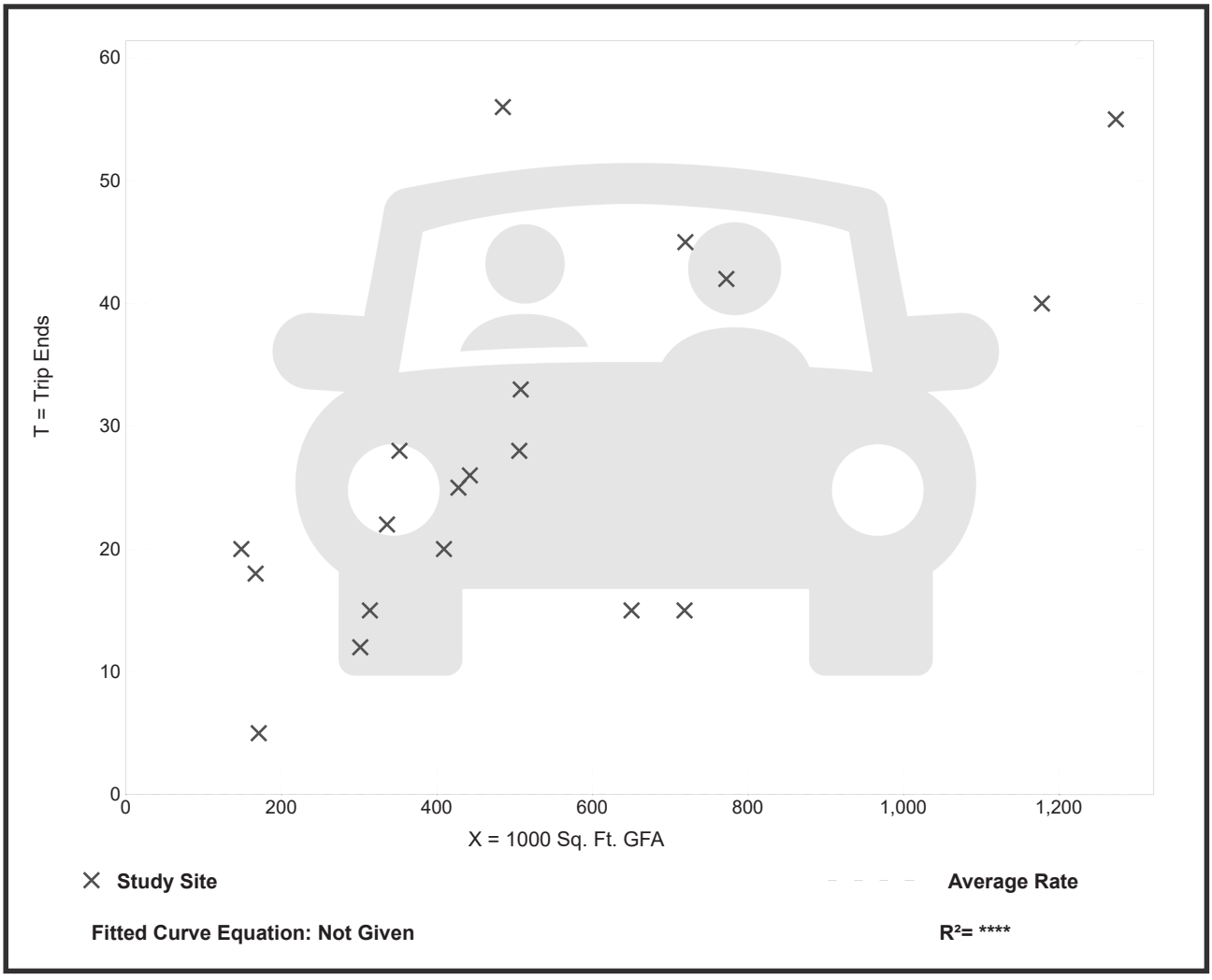
Data Center
(160)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 19
Avg. 1000 Sq. Ft. GFA: 520
Directional Distribution: 19% entering, 81% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.05	0.02 - 0.13	0.03

Data Plot and Equation



Shopping Center (>150k)
(820)

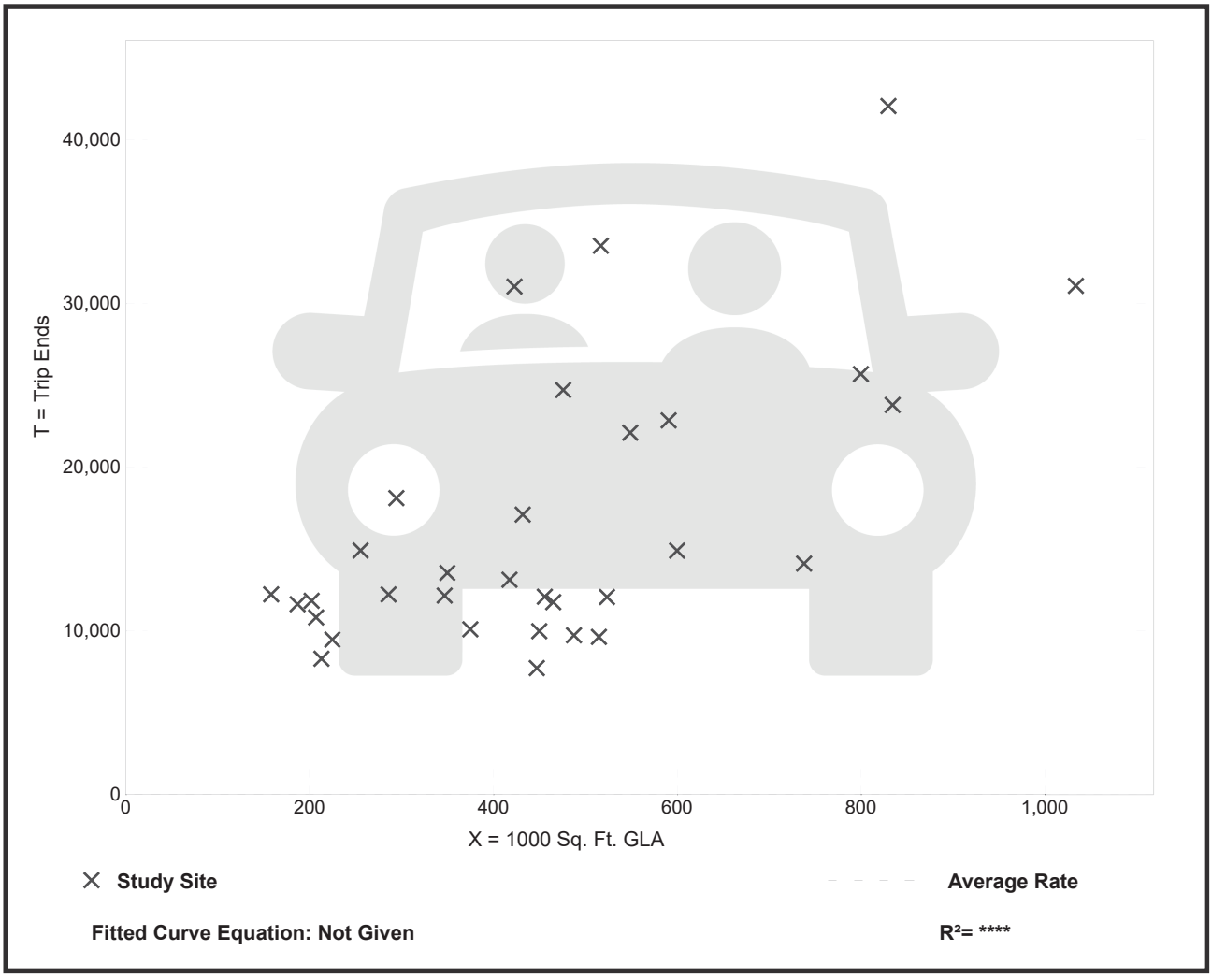
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 32
Avg. 1000 Sq. Ft. GLA: 459
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
36.39	17.27 - 77.31	15.38

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

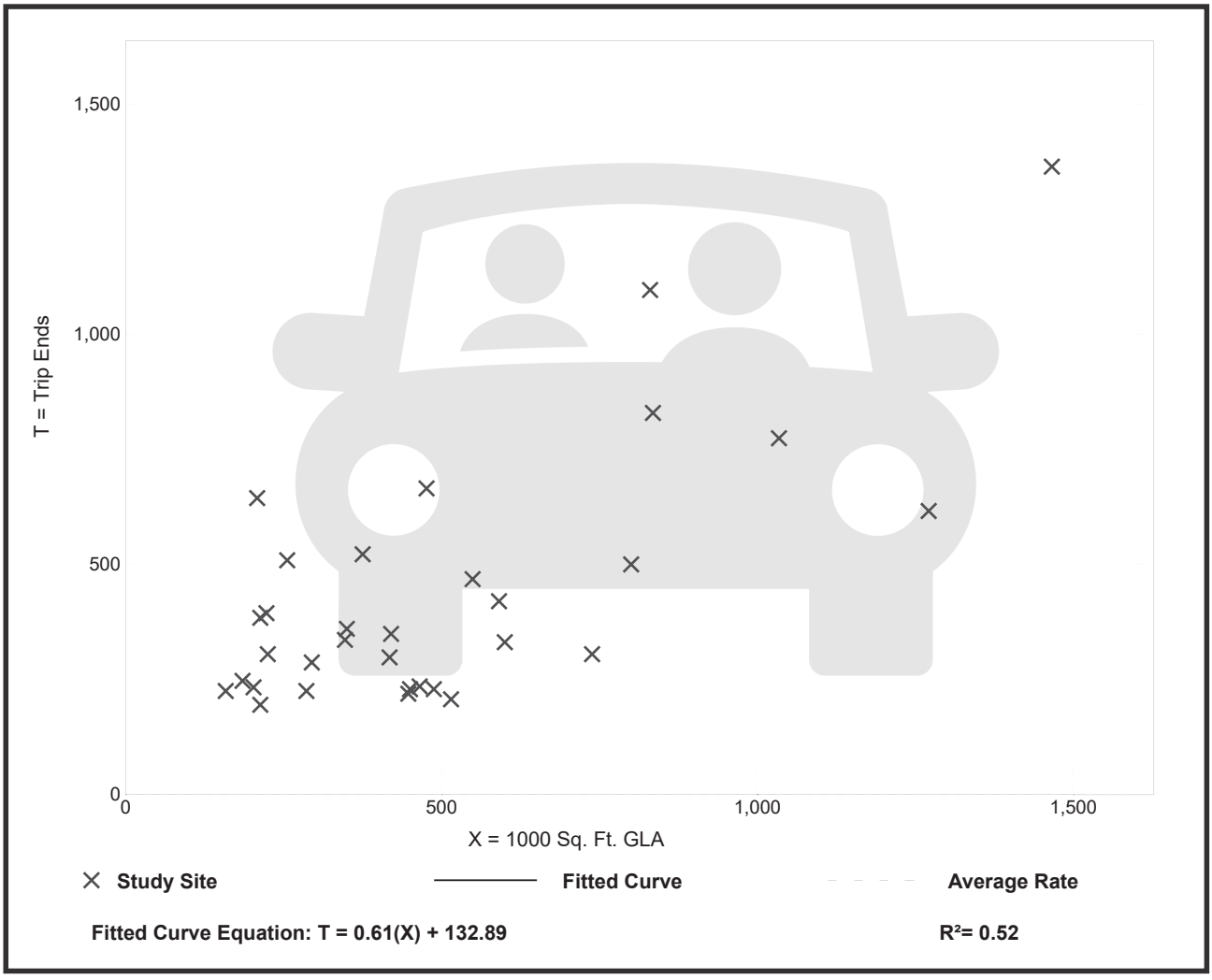
Shopping Center (>150k)
(820)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 32
Avg. 1000 Sq. Ft. GLA: 498
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.88	0.40 - 3.10	0.45

Data Plot and Equation



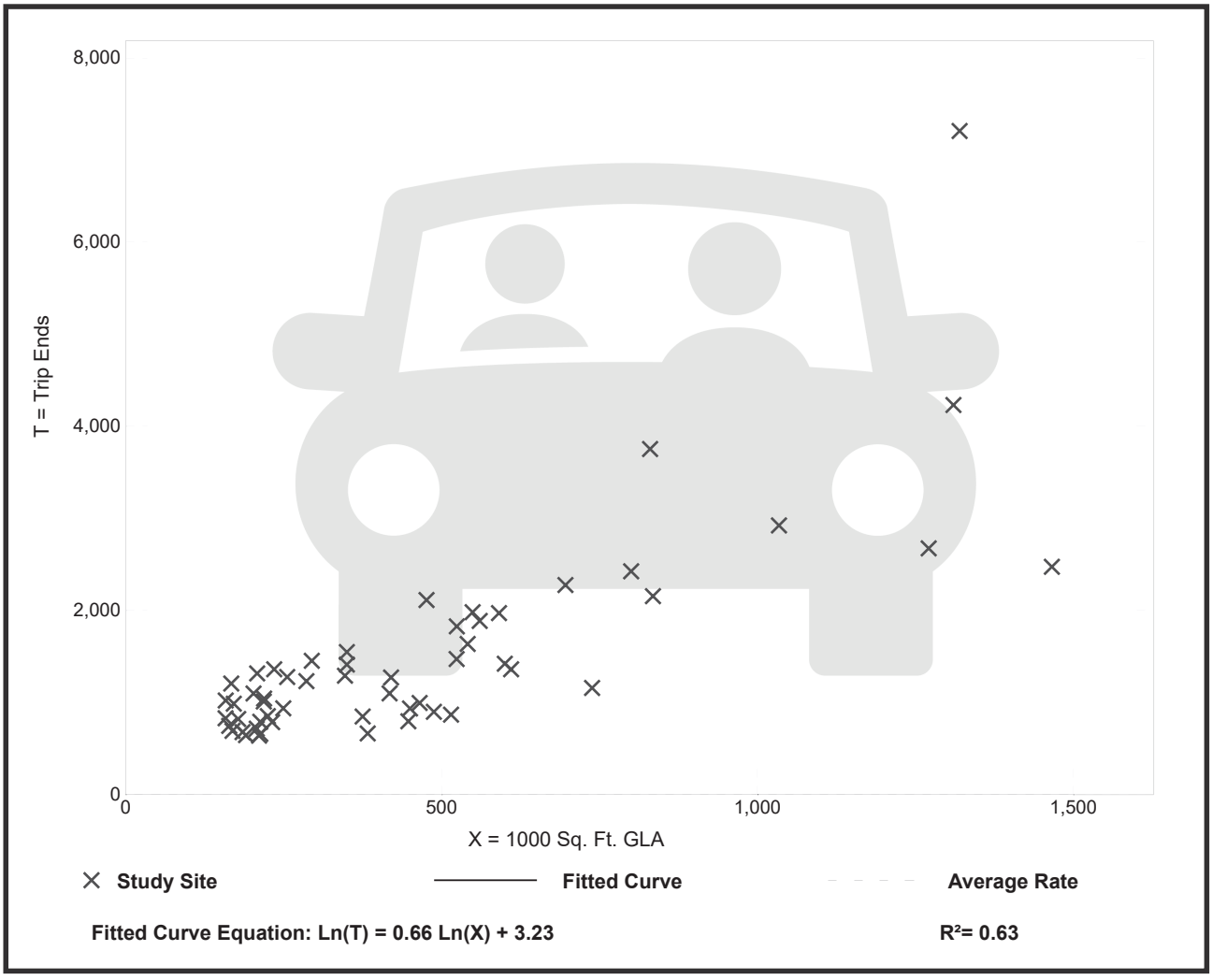
Shopping Center (>150k)
(820)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 55
Avg. 1000 Sq. Ft. GLA: 460
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.26	1.57 - 7.22	1.25

Data Plot and Equation



EW Consultants, Inc.
Natural Resource Management, Wetland, and Environmental Permitting Services

ENVIRONMENTAL ASSESSMENT

WILLOW LAKES

FORT PIERCE, FLORIDA

Prepared for:

Willow Lakes, LLC

Prepared by:

EW Consultants, Inc.

March 2020/May 2026

© 2020/2026 EW Consultants, Inc.

1000 SE Monterey Commons, Suite 208 • Stuart, FL 34996 • 772-287-8771 • Fax 772-287-2988

www.ewconsultants.com

I. INTRODUCTION –

This Environmental Assessment documents and summarizes the various natural resources and man-made alterations present on a property referred to as Willow Lakes. The project site, as shown on Figure 1, in Appendix A is ± 200.2 acres and is located at the northwest corner of I-95 and Midway Road (S.R. 709). The property lies within Sections 2 & 3, Township 36 South, Range 39 East in the City of Fort Pierce, St. Lucie County, Florida (see Figure 2, USGS Quadrangle Map in Appendix A).

II. GENERAL PROPERTY DESCRIPTION –

The property is bounded to the north and west by undeveloped lands, to the east by Gordy Road and the southbound I-95 exit ramp to Midway Road, and to the south by Midway Road (please refer to Figure 3, 2026 Aerial Photograph, in Appendix A for existing and surrounding conditions). Since the last Environmental Assessment report in 2020, the land south of Midway Road (within the City of Port St. Lucie) has seen significant development in the form of the LTC Ranch DRI (a.k.a. Wylder) mixed-use project. Wylder Parkway, a.k.a. Arterial A, is now functional at its intersection with Midway Road connecting to Glades Cut-Off Road to the south through the Wylder development. The Wylder Parkway/Midway Road intersection is approximately 800 feet west of the west boundary of Willow Lakes.

The Willow Lakes property is undeveloped and is comprised of a combination of open and wooded pastures, areas dominated by exotic vegetation, man-made surface waters (ditches and a large pond), and freshwater wetlands. Electrical transmission lines are present on the site, as well; one set in a south-to-north orientation and one in a southeast-to-northwest orientation. Detailed discussions of land cover types are described in subsequent sections of this report.

III. SOIL TYPES -

A Soils Report generated by the United States Department of Agriculture/Natural Resources Conservation Service is provided in Appendix B of this report. The soils report identifies mainly sand-based soils and open water throughout the project site.

IV. EXISTING LAND COVER TYPES –

The following is a summary of the land cover types and vegetative communities found on the subject site. Land cover and vegetation community classifications are mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCCS) developed by the Florida Department of Transportation. Field reconnaissance and aerial photograph interpretation were employed in the mapping of the vegetative communities on the subject property.

There are several different FLUCCS classifications present on the site based on fieldwork conducted by EW Consultants, Inc. in May of 2026. They include Improved Pastures (code 211); Woodland Pastures (code 213); Pine Flatwoods (code 411); Brazilian Pepper (code 422); Reservoirs larger than 10 acres but less than 100 acres (code 533); and Freshwater Marshes (code 641). The Electrical Transmission Lines on-site (code 832) contain Improved Pasture (211), Woodland Pasture (213), and Freshwater Marsh (641) within their alignments. A graphic of the observed land cover types is included as Figure 4 in Appendix A of this report. The land cover types on the property are described as follows:

211 Improved Pastures

This is a sub-category of the FLUCCS Agriculture classification and includes areas that contain a sparse tree canopy or no tree canopy at all. Dominant vegetation includes a variety of non-native grass species that have been introduced to the property as forage for livestock as well as naturally occurring ruderal grasses and weeds. These species are typical of pasture lands in the region and includes, but is not limited to smut grass, Bahia grass, torpedo grass, Caesar-weed, beggars ticks, and ragweed. Native canopy trees that are present within this land cover type include slash pine, cabbage palm, laurel oak, and live oak. Other native species were also observed in areas where native trees occur and include saw palmetto, gallberry, grape vine, smilax vine, poison ivy, and swamp fern.

213 Woodland Pastures

This agricultural classification and includes areas where woodlands are used for cattle grazing. While the vegetative understory layer has been cleared, native canopy trees remain, and native grasses have partially regenerated. For the 213 areas on the subject site, the tree canopy is dominated by slash pine (*Pinus elliottii*) and can be found generally within the far western and far eastern edges of the site (small patches occur in the south-central portion of the site, as well), typically surrounded by improved pasture. These areas have been impacted by years of cattle grazing activities. Slash pine and various broomsedge and bluestem grasses are the dominant plants species within this land cover category.

411 Pine Flatwoods

This is a sub-category of the FLUCCS Upland Forests classification and includes areas where the tree canopy is dominated by slash pine (*Pinus elliottii*). The soil is typically poorly to moderately well-drained with occasional organic layers associated with the sandy layers. The native areas of pine flatwoods are generally found in the north-central portion of the site. While most of this habitat appears to be in good ecological condition, lack of regular land management activities such as burning and roller-chopping have allowed the understory plants to dominate thus restricting native grasses from spreading. Slash pine (*Pinus elliottii*), saw palmetto (*Serenoa repens*), and gallberry (*Ilex glabra*) are the dominant plants species within this land cover category.

422 Brazilian Pepper

This area on-site are dominated by the exotic Brazilian pepper tree. This tree tends to dominate a landscape once present, shading out the forest floor and prohibiting desirable native species from establishing. Therefore, these areas provide very little wildlife habitat potential. It is located within the eastern portion of the site adjacent to Gordy Road.

533 Reservoirs Larger Than 10 Acres/Less Than 100 Acres

A man-made reservoir exists within the northeastern portion of the site just west of I-95/Gordy Road. It is generally rectangular in shape, and its banks consist of cattails, Carolina willow, primrose willow, torpedo grass, and other weedy species.

641 Freshwater Marshes

This is a sub-category of the FLUCCS Wetlands classification and includes long-hydroperiod aquatic vegetation generally associated with depressional wetlands. These wetlands may contain water throughout the year or go completely dry during prolonged drought periods. Such habitats provide a variety of wildlife with foraging and nesting opportunities. The marsh wetlands occur throughout the site within the pasture areas (both improved and woodland) and are generally in poor to fair ecological condition due to the historic agricultural use of the site as well as the routine maintenance of the powerline easements. The vegetation in these marshes predominantly includes the following species: chestnut sedge (*Fimbristylis spadicea*), seedbox (*Ludwigia alternifolia*), St. John's wort (*Hypericum brachyphyllum*), pickerelweed (*Pontederia cordata*), bladderwort (*Utricularia* spp.), maidencane (*Panicum hemitomon*), Tracy's beakrush (*Rhynchospora tracy*), spatterdock (*Nuphar* spp.), corkwood (*Stillingia aquatica*), and duck potato (*Sagittaria graminea*). The landward extents of such wetlands were delineated via an informal wetland determination from the South Florida Water Management (SFWMD) in 2020.

832 Electrical Transmission Lines

There are two sets of electrical transmission lines that are present within the project site; one aligned south-to-north within the eastern portion of the property and one aligned southeast-to-northwest located in the central and northwest portions of the project site. The land cover underneath the powerlines (and therefore within the easements of the powerlines) include Improved Pasture (211), woodland pasture (213), and Freshwater Marsh (641) as described above.

V. LISTED SPECIES DISCUSSION –

Because of the various types of land cover found on the property, the project site provides potential foraging and nesting habitat for a variety of state and federally listed wildlife species. In particular, the on-site water resources (wetlands and reservoir) could provide habitat for several listed species, including a myriad of wading birds such as wood stork, roseate spoonbill, sandhill cranes, as well as various ibis and herons. No such species were observed on-site during the May 2026 site visit.

The site is located within the federal consultation area for the threatened Audubon's crested caracara bird which prefers open pasture with scattered and isolated cabbage palms. This type of land cover does exist on the project site necessitating a survey which was conducted several years ago and yielded no caracara nesting activities. In addition, recent caracara surveys performed on nearby sites along Midway Road just west of I-95 did not reveal nesting pairs of this species.

Upland areas, in particular the pine flatwoods and woodland pastures, serve as potential burrowing and foraging habitat for the state threatened gopher tortoise. During the May 2026 site visit, this species was confirmed burrowing within the project's upland areas. A systematic gopher tortoise survey will be required within the entire development footprint's upland areas prior to new construction activities, and tortoises will have to be relocated to a state-approved receiver site per Florida Fish & Wildlife Conservation Commission (FFWCC) guidelines.

While the bald eagle has been delisted, it remains protected under the Bald and Golden Eagle Protection Act. The subject property contains mature slash pines that could provide potential nesting opportunities for bald eagles and is located within a few miles of major foraging areas, such as the St. Lucie River and Indian River Lagoon, and numerous regional and local waterways. No bald eagle nests were observed on-site during the 2020 or 2026 site visits. The closest recorded nests are located to the southwest (SL009) along Glades Cut-Off Road and northeast (SL006) along just east of I-95 at 10-Mile Creek. A map showing bald eagle nests from the Audubon Florida's Eagle Watch program is attached as Figure 5 in Appendix A.

A search of the FFWCC water bird colonies database is shown on Figure 6 in Appendix A. The data reveal that numerous colonies within 20 miles of the project site have been documented, mainly along major waterways and wetland systems in the region. Since the foraging range of a wood stork is generally recognized as 18.6 miles from its colony, the project site is located within a wood stork foraging area. Therefore, aquatic features within the boundaries of the project site may be used as foraging areas by the wood stork as well as other wading birds. It should be noted that as of February of 2026, the wood stork is no longer federally protected under the Endangered Species Act, although it is still listed by the state of Florida.

Non-listed species observed on-site during the recent site visits include red-shouldered hawk, mourning dove, great egret, blue jay, mocking bird, pileated woodpecker, wild turkey, feral hogs (tracks and scat), white-tailed deer (tracks), coyote (scat), among others.

APPENDIX A

Figure 1 – Location Map

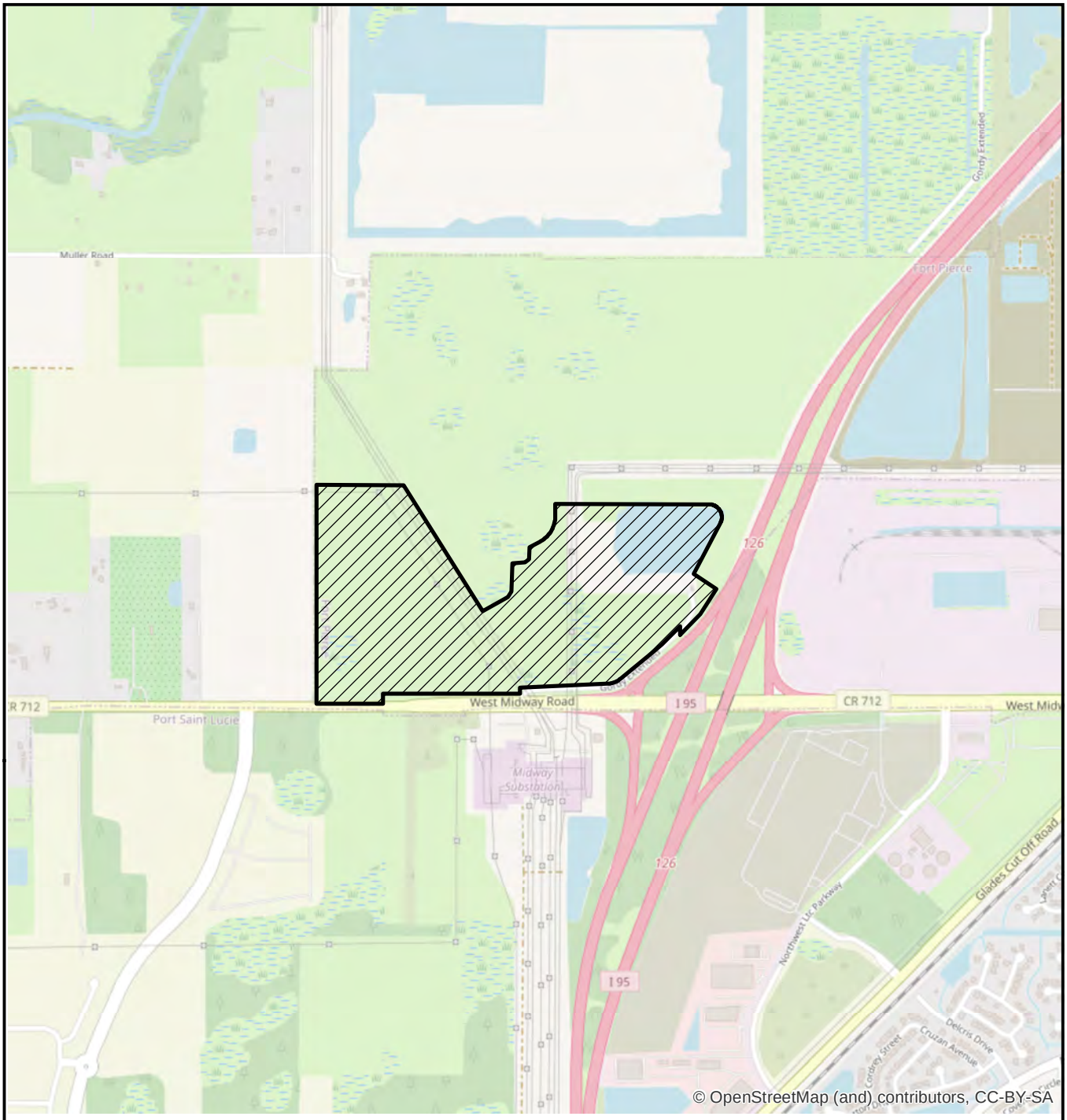
Figure 2 – USGS Quadrangle Map

Figure 3 – 2026 Aerial Photograph

Figure 4 – FLUCCS/Land Cover Map

Figure 5 – Audubon's Eagle Nest Locations

Figures 6 – FFWCC Wading Bird Colonies



LEGEND

▨ - SITE (200.2+/- AC)

0 2,000 Feet

N

WILLOW LAKES
LOCATION MAP

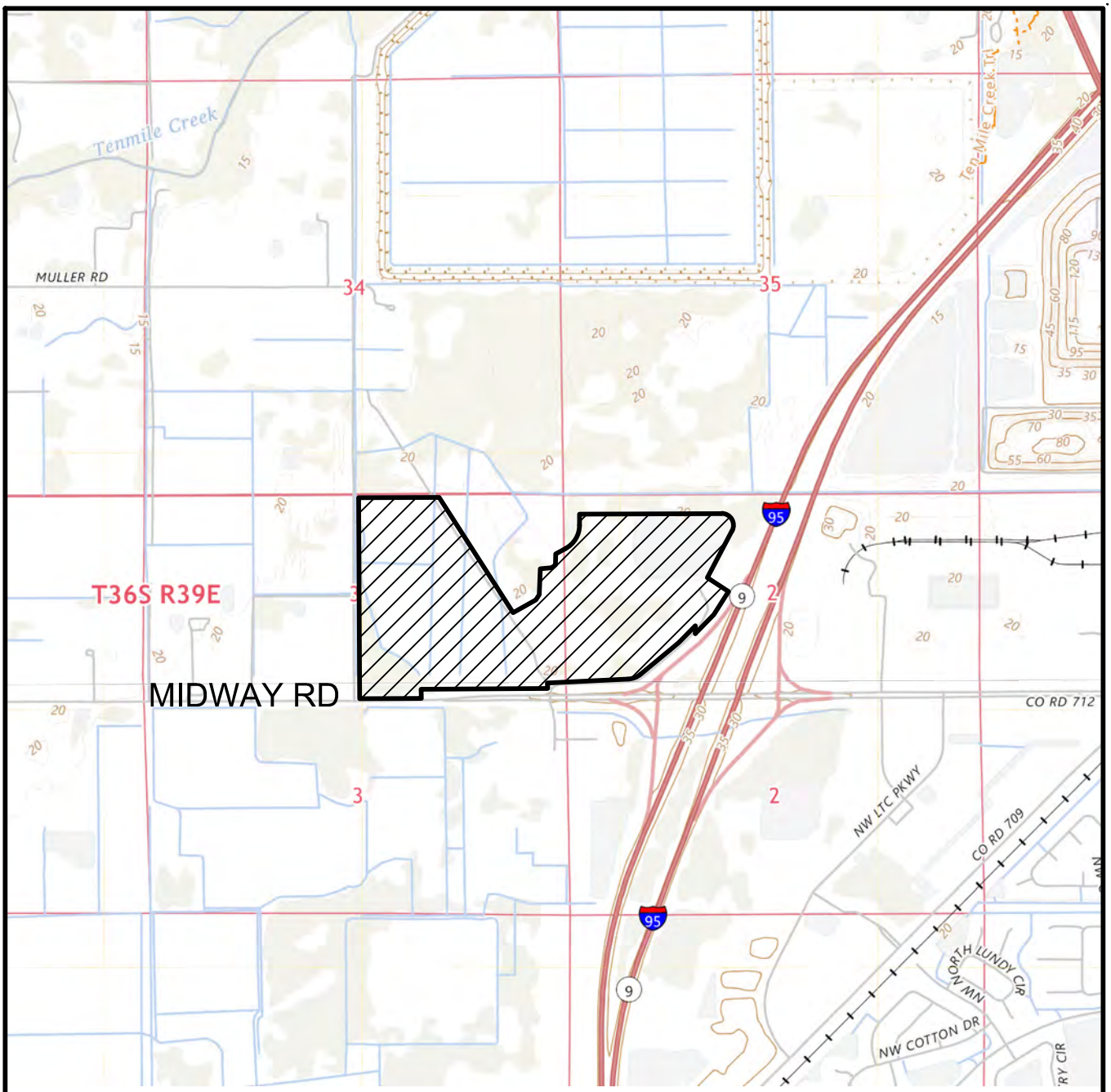
EW CONSULTANTS, INC.

1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

MAY 2026

FIGURE

1



USGS QUAD "FORT PIERCE NW", SECTIONS 2 & 3, TOWNSHIP 36 SOUTH, RANGE 39 EAST, CITY OF FORT PIERCE, ST LUCIE COUNTY, FLORIDA, LATITUDE 27°22'35" LONGITUDE -80°25'04"

LEGEND

▨ - SITE (200.2± AC)

0 2000

SCALE IN FEET

WILLOW LAKES

QUAD

EW CONSULTANTS, INC.

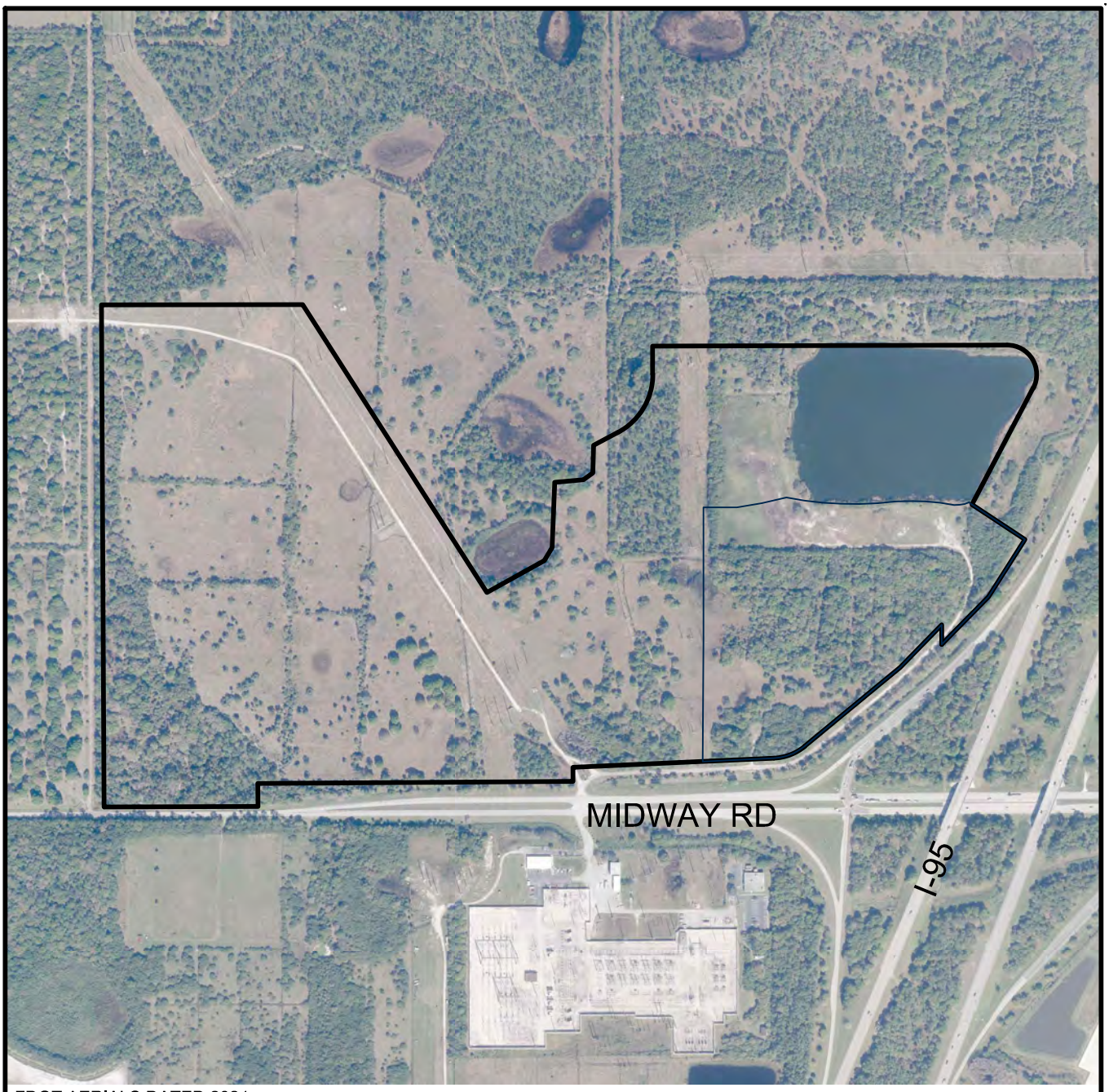
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

MAY 2026

FIGURE

2

Willow Lakes.dwg QUAD



FDOT AERIALS DATED 2024

0 800
SCALE IN FEET

WILLOW LAKES
AERIAL

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

MAY 2026

FIGURE
3

Willow Lakes.dwg AERIAL



LEGEND

211 - IMPROVED PASTURE (91.4± AC)
213 - WOODLAND PASTURES (39.6± AC)
411 - PINE FLATWOODS (7.9± AC)
422 - BRAZILIAN PEPPER (1.5± AC)
533 - RESERVOIRS MORE THAN 10ACS (19.6± AC)
641 - FRESHWATER MARSHES (3.7± AC)
832/211 - ELECTRICAL POWER TRANSMISSION LINE/IMPROVED PASTURE (33.1± AC)
832/213 - ELECTRICAL POWER TRANSMISSION LINE/WOODLAND PASTURES (0.8± AC)
832/641 - ELECTRICAL POWER TRANSMISSION LINE/FRESHWATER MARSHES (2.6± AC)
TOTAL SITE (200.2± AC)

GOOGLE EARTH IMAGERY DATED 2026

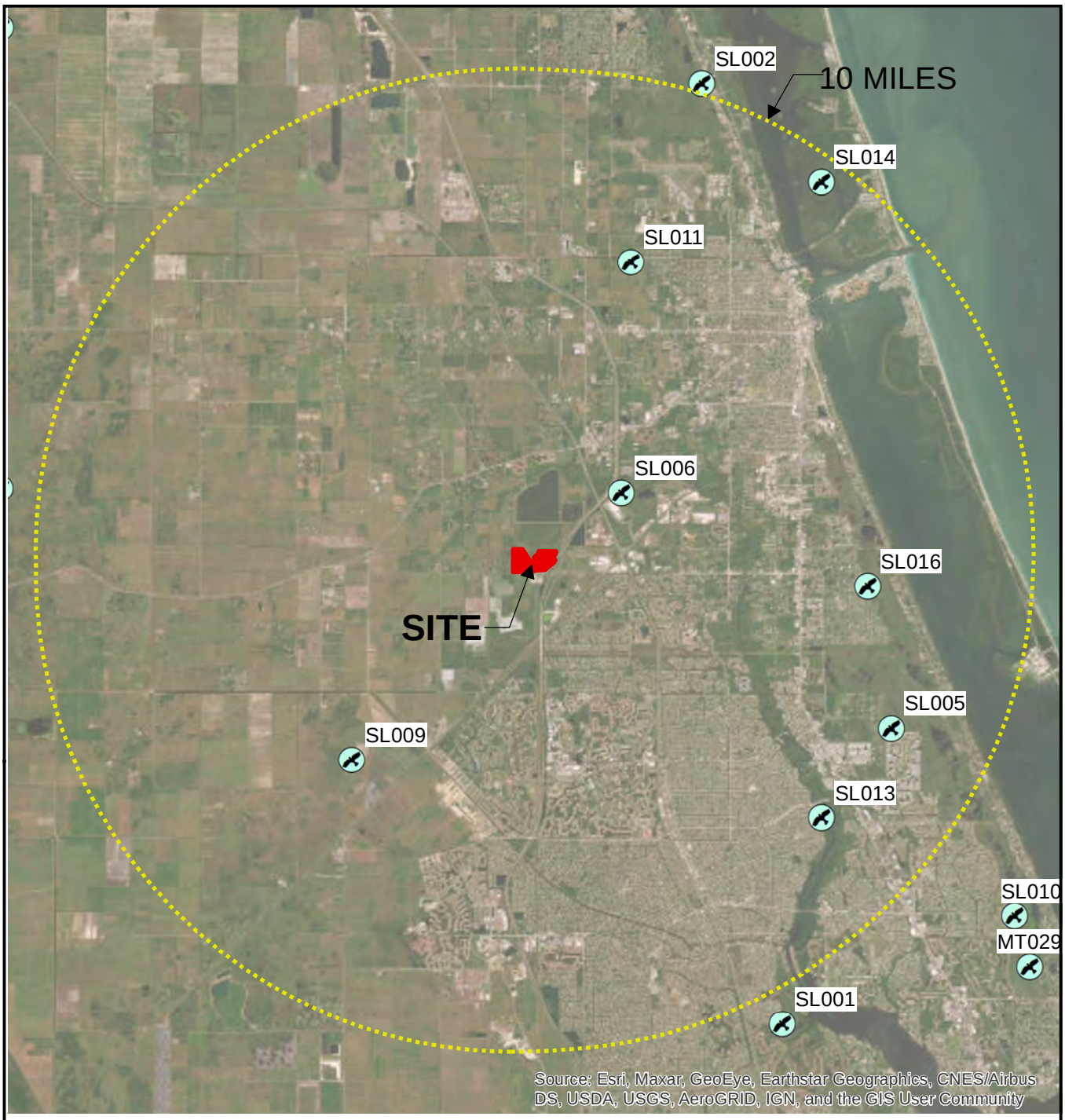
0 500
SCALE IN FEET

WILLOW LAKES FLUCCS

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 · FAX 772-287-2988
WWW.EWCONSULTANTS.COM

MAY 2026
FIGURE 4

Willow Lakes.dwg FLUCCS



LEGEND

EAGLE NESTING LOCATIONS 2017

WILLOW LAKES

FL AUDUBON EAGLEWATCH DATABASE

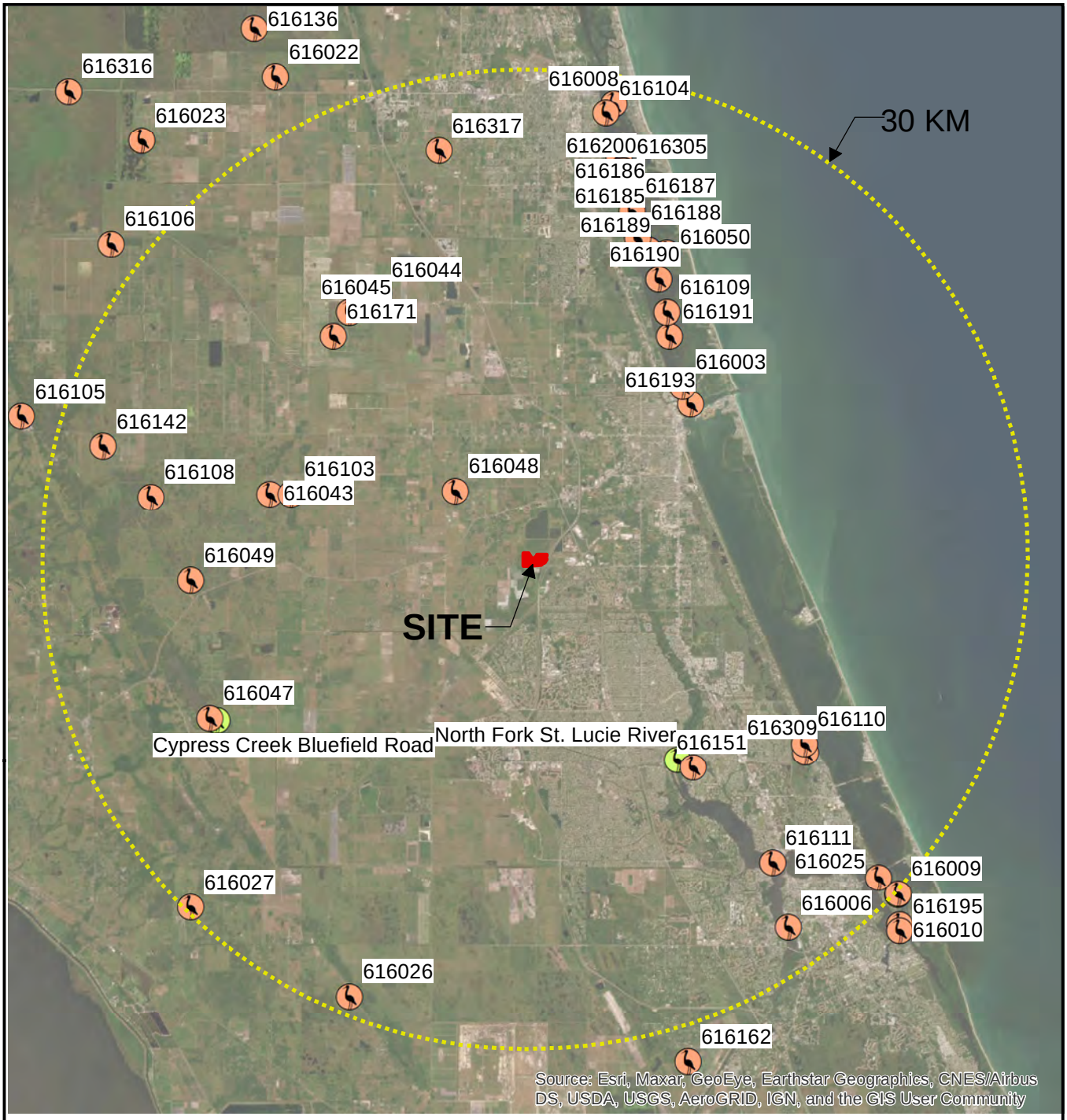
EW CONSULTANTS, INC.

1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

MAY 2026

FIGURE

5



LEGEND

- FFWCC WADING BIRD ROOKERIES 1999
- USFWS WOST COLONIES ACTIVE 2009-2018

WILLOW LAKES
WADING BIRDS

EW CONSULTANTS, INC.

EW Consultants, Inc.
1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

MAY 2026

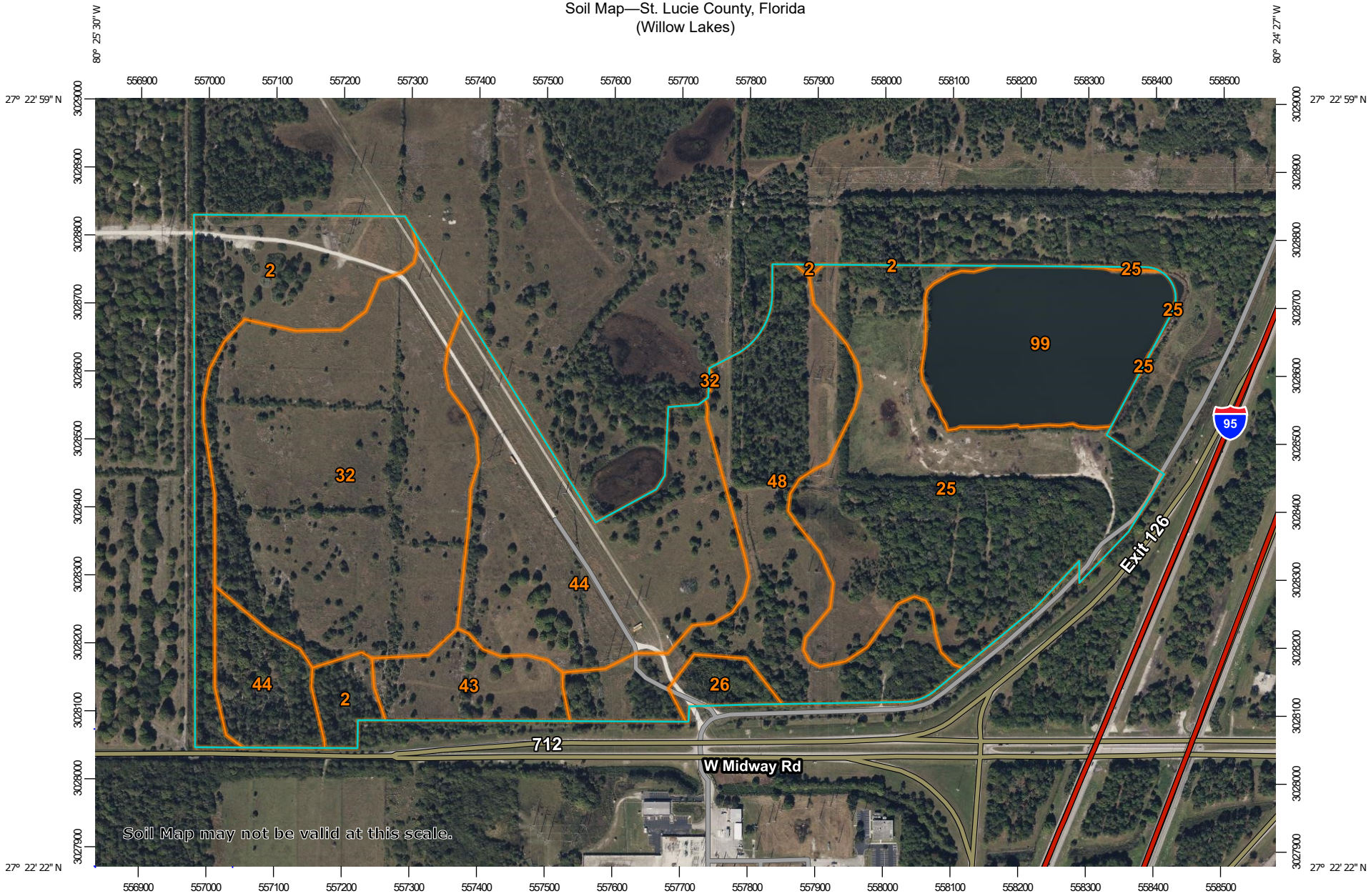
FIGURE

6

APPENDIX B

USDA/NRCS Soils Report

Soil Map—St. Lucie County, Florida
(Willow Lakes)



Map Scale: 1:7,980 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida
Survey Area Data: Version 19, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ankona and Farmton sands	19.2	9.6%
25	Nettles and Oldsmar sands	41.0	20.5%
26	Oldsmar sand, depressional	2.3	1.2%
32	Pineda sand, 0 to 2 percent slopes	45.4	22.7%
43	Susanna and Wauchula sands	7.0	3.5%
44	Tantile and Pomona sands	37.3	18.6%
48	Wabasso sand, 0 to 2 percent slopes	29.5	14.7%
99	Water	18.8	9.4%
Totals for Area of Interest		**200.5**	**100.0%**

RECEIVED
CARTER & BURGESS

FLORIDA DEPARTMENT OF STATE
Sue M. Cobb
Secretary of State
DIVISION OF HISTORICAL RESOURCES

April 19, 2006

Mr. Rob Robbins
South Florida Water Management District
P.O. Box 24680
West Palm Beach, Florida 33416-4680

Re: DHR No. 2006-2552B / Received by DHR: March 31, 2006
Application No.: 060323-13
Applicant: Midway Properties, LLC, Willow Lakes, LLC, & Res River, LLC
Project: Provences
St. Lucie County

Dear Mr. Robbins:

Our office received and reviewed the referenced project in accordance with Chapters 267 and 373, *Florida Statutes*, Florida's Coastal Management Program, and implementing state regulations, for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places* (NRHP), or otherwise of historical, architectural or archaeological value. The State Historic Preservation Officer is to advise and assist state and federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

Our review of the Florida Master Site File indicates that no significant archaeological or historical resources are recorded within the project area. This office is rescinding its previous letter dated April 11, 2006 and is no longer requesting a survey be conducted. It was brought to our attention, by Kim Mayer of Carter & Burgess, Inc., that the area has been subjected to a professional cultural resource assessment survey Furthermore, due to the location and/or nature of the project it is unlikely that any such site will be affected.

If there are any questions concerning our comments or recommendations, please contact Scott Sorset, Historic Preservationist, by phone at (850)245-6333, or by electronic mail at srsorset@dos.state.fl.us. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely,

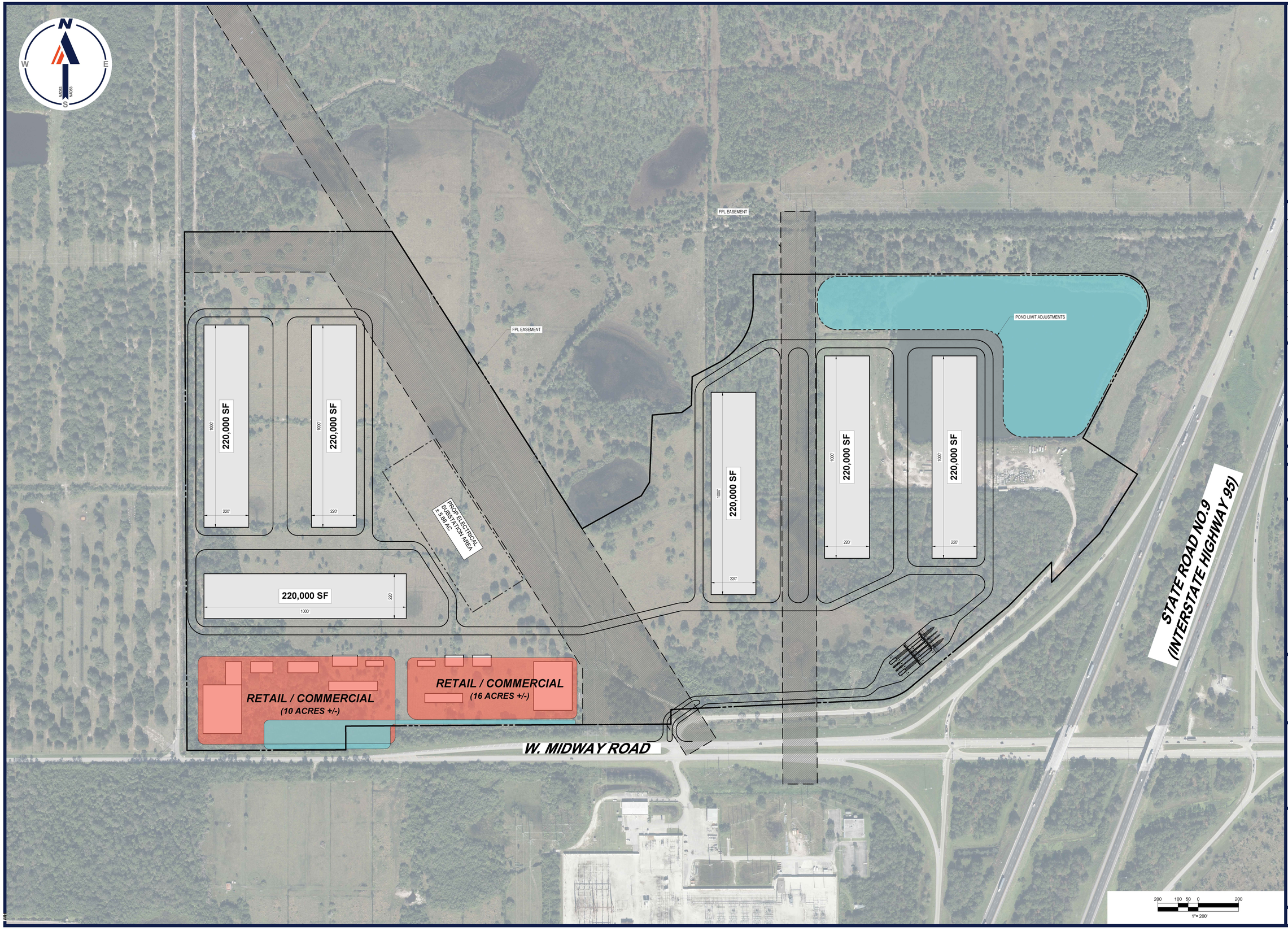
Frederick P. Gaske

Frederick P. Gaske, Director, and
State Historic Preservation Officer

Xc: Pamela Miller, Carter and Burgess, Inc.

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

☐ Director's Office (850) 245-6300 • FAX: 245-6435
☐ Archaeological Research (850) 245-6444 • FAX: 245-6452
☑ Historic Preservation (850) 245-6333 • FAX: 245-6437
☐ Historical Museums (850) 245-6400 • FAX: 245-6433
☐ Palm Beach Regional Office (561) 279-1475 • FAX: 279-1476
☐ St. Augustine Regional Office (904) 825-5045 • FAX: 825-5044
☐ Tampa Regional Office (813) 272-3843 • FAX: 272-2340



Apr 06, 2026
M:\MIA\2026\CTB260013.00\CAD\DRAWINGS\CONCEPTS\CONCEPT PLAN_A1\P-CPTA-SITE-CTB260013.00-0A.----\LAYOUT: CP01 SITE

BOHLER™

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL & PLANNING
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE EXPOSED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

FOR CONCEPT PURPOSES ONLY

THIS DRAWING IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	CTB260013.00-0A
DRAWN BY:	WH
CHECKED BY:	NK
DATE:	03/27/2026
CAD I.D.:	P-CPTA-SITE

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR

WILLOW LAKES, LLC

PROPOSED DEVELOPMENT

W. MIDWAY ROAD
CITY OF FORT PIERCE
ST. LUCIE COUNTY, FLORIDA
MAP ID: 33/02N

BOHLER™
65 LaSALLE ROAD, SUITE 401
WEST HARTFORD, CT 06107
Phone: (860) 333-8900
www.BohlerEngineering.com

SHEET TITLE:

CONCEPTUAL LAYOUT PLAN

SHEET NUMBER:

CP01

ORG. DATE - 03/27/2026

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, Florida 34953
772-462-1593 www.stlucietpo.org

August 14, 2026 **VIA EMAIL**

Mr. Vennis Gilmore, Historic Preservation Officer/Senior Planner
City of Fort Pierce
100 North U.S. Highway 1
Fort Pierce, Florida 34950

RE: Potential Transportation Impact Review (PTIR)
Willow Lakes Data Center – 10050 W. Midway Road
Fort Pierce, Florida

Dear Mr. Gilmore:

As the Federal and State-designated agency responsible for transportation planning for the City of Fort Pierce, City of Port St. Lucie, St. Lucie Village, and St. Lucie County, the St. Lucie Transportation Planning Organization (St. Lucie TPO) has completed a PTIR regarding the above-referenced proposed zoning amendment. The proposed rezoning would allow the construction of a six-building data center campus composed of six-one-story buildings totaling 220,000 square feet each with an additional 250,000 square feet of commercial development buildings that include 80,000 square feet of grocery and retail uses, approximately 110,000 square feet of large-format retail uses and approximately 60,000 square feet of additional complementary commercial uses on a 26-acre parcel. The proposed development would total 1.570 million square feet of commercial building space on currently undeveloped property. Based on the review, the following comments are provided:

- **Transportation Facilities Analysis:** The transportation facilities analysis provided reflects the approval of the previously approved land use, not the proposed change. A current traffic analysis should be provided to evaluate the potential transportation impacts from the proposed zoning change.

- **Roadway Network Impacts:** The Transportation Facilities Analysis for the proposed zoning change should be reviewed by the Florida Department of Transportation and St. Lucie County as transportation impacts from the proposed project will extend to their roadway networks.

- **Vested Trips**: The updated Transportation Facilities Analysis should include vested trips from nearby approved or proposed developments. Specifically, the vested trips associated with the following approved developments: Eden Oaks, Gordy Creek, McCarty PUD, Midway Commerce Park, Oak Ridge Ranch PUD, Sunrise Residential, and Wylder LTC, should be incorporated into the background traffic volumes to ensure cumulative impacts are accurately evaluated.

Please contact me should any additional information or clarification be required regarding this PTIR.

Sincerely,

Stephanie M. Torres

Stephanie M. Torres, CPM
PTIR Program Manager

cc: City of Fort Pierce Planning Department

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

To : Vennis Gilmore, Planner

From : Tanner Retherford, P.E., - Project Engineer

Thru: Mark Zrallack, P.E., - City Engineer

Re : 10050 W. Midway Road – Willow Lakes Data Center - Rezone PZZAM2026-00002

Date : August 17, 2026

This is to advise you that we have completed the review of the following documents as received by this office on August 17, 2026:

- [x] Zoning Atlas Map Amendment
- [ ] P/D Drawings
- [ ] Test Reports & Related Documents
- [ ] Certificate of Completion
- [ ] Record Drawings
- [ ] Permits from applicable Local, State & Federal Agencies
- [ ] Clearances from all applicable Local, State and Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend

- [x] Approval of Zoning Map Amendment
- [ ] Future Land Use

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

- [x] See attached for advisory comments

ENGINEERING ADVISORY COMMENTS:

1. This approval pertains to the Zoning Map Amendment request only and not to any proposed site improvements. Site review will be conducted when detailed plans are submitted for review and approval.
2. There are numerous recorded FPL Right-of-Ways and FPL Easement parcels located throughout the site. The applicant shall provide proof of FPL approval for improvements within the limits of the rights-of-way and easements at time of site plan submittal.

TR/MZ

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

Logan Wellmeier
Dean, Mead, Minton & Moore
1903 South 25th Street, Suite 200
Fort Pierce, FL 34947

Re: Zoning Atlas Map Amendment – Willow Lakes Data Center – Project #: PZZAM2026-00002
10050 W. Midway Road

Technical Review Committee Meeting: 8/20/26

Dear Mr. Wellmeier,

Your Zoning Atlas Map Amendment application will move forward; however, the Planning Department staff has a few questions concerning the proposed use:

1. How have the proposed projects information and potential community and regional impacts been communicated to the public?
2. How have effects on power and water costs and future availability for other consumers been evaluated?
3. What tangible benefits will host communities and regions receive in the short- and long-term?
4. What is the current experience and quality of life of residents near the proposed development? **(The Wylder Planned Development Community is to the south of the proposed Data Center, and it abuts existing estate and agricultural-residential lots.)**
5. How is the developer planning to mitigate potential light and noise pollution impacts to neighbors?
6. What facility designs were considered, and how do they relate to the community's landscape in scale, appearance, and presence?

7. Have opportunities to create mutually beneficial outcomes like greater infrastructure utilization or waste heat utilization been explored? If these innovative opportunities exist, what are their barriers?
8. How can new infrastructure costs be allocated fairly, and how can other consumers be protected? What costs would not be introduced "but for" the data center?
9. What are the facility's impacts on air quality, water stress, and water quality—both during normal operations and when using backup power? Has the developer evaluated low or zero carbon and low water-use systems for the facility?
10. What is the projected net economic and fiscal benefit to the host community or region over the life of the project, and has the information been communicated to the community in plain language?
11. Have developers met with local organizations to listen to community priorities and build partnerships? Has the developer considered workforce training options to ensure the host community benefits directly?

Please provide a written response to each comment to expedite the review of any subsequent submittals. Please contact me should you have any questions regarding the project at (772) 467-3741 or by e-mail: vgilmore@cityoffortpierce.com.

Sincerely,

Vennis Gilmore
Historic Preservation Office/Senior Planner

August 19, 2026

PROJECT: Willow lakes Data Center

REF: PZZAM2026-00002

TO: Vennis Gilmore

FROM: Grant Chambers

The following comments are offered by SLC PW - Engineering:

1. A Traffic analysis is required for review by the County's third party reviewer at the cost of the applicant. Please provide the traffic analysis email to Kori.Benton@stlucieco.gov with written acknowledgement of the cost and authorization to proceed.
2. Additional comments will be provided after review of a site plan.
3. A Site Development permit for access and drainage outfall from the County prior to initiation of site improvements is required. Please submit a site development permit application through the County's online permitting portal.
4. A Roadway Improvement Agreement and bonding will be required for permanent improvements within the County's Right-of-Way.
5. The parcel has been involved in a right-of-way swap with the County that has not yet been completed. Right-of-Way dedications shall be coordinated with the County's Property Acquisitions group. Please contact Kayla Chidgey at kayla.chidgey@stlucieco.gov.
6. For discussion regarding these comments and response, please contact me at 772-462-2741, chambersg@stlucieco.org.

Cc: Alicia Rosenthal

Technical Review Committee meeting

August 20, 2026

Case #: PZZAM2026-00002

Planner: City of Ft. Pierce Planning Department.

Zoning Atlas Map Amendment

10050 Midway Road., Ft. Pierce. (Willow Lakes Data Center)

Comments:

No Comments at this time.

Officer Damian Spotts

Crime Prevention Practitioner

Fort Pierce Police Department.

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 Ext 3473

Technical Review Committee Meeting

TECHNICAL REVIEW PROJECT: PZZAM2026-00002

Willow Lakes Data Center - 10050 W Midway Rd (Map Amendment)

W/WW Engineering: This submission is outside of the FPUA water/wastewater service area.

Electric Engineering: This submission is outside of the FPUA electric service area.

Gas: N/A

FPUAnet Fiber: N/A

FORMAL OPPOSITION TO REZONING

Willow Lakes Data Center Proposal - 10050 W. Midway Road

8/20/2026

Mayor Linda Hudson

Fort Pierce City Commissioners

100 N US1

Fort Pierce, Florida 34950

Via Email

RE: Formal Opposition to Willow Lakes, LLC Rezoning Request; approximately 200 acres at 10050 W. Midway Road; proposed rezoning from Planned Development (PD) to General Commercial (C-3) and Light Industrial (I-1) for a data center and related commercial uses

Dear Mayor Hudson and Commissioners:

I submit this formal opposition to the request by Willow Lakes, LLC to rezone approximately 200 acres at 10050 W. Midway Road. The proposal would convert approximately 26 acres along Midway Road to General Commercial (C-3) and approximately 174 acres to Light Industrial (I-1), with the industrial portion restricted by covenant to use as a data center. The commercial frontage could support a hotel, gas station, restaurants, fast-food establishments, and other retail uses.

The record presently available to the public does not justify approval of an industrial-scale data center on this property. The applicant's reliance on nearby FPL transmission facilities, a substation, and a man-made lake as supposed site advantages instead identifies the project's most serious unresolved public impacts: extraordinary electrical demand, cooling-water demand, heat rejection, noise, emergency-generator emissions, stormwater and groundwater effects, fire-response requirements, and the possibility that infrastructure costs will be shifted to utility customers and taxpayers.

A zoning vote is not a harmless preliminary step. Rezoning 174 acres to I-1 materially increases the property's development entitlement and value while transferring substantial risk to the surrounding community. A private restrictive covenant describing the intended use does not substitute for a complete, enforceable development order supported by objective engineering, environmental, utility, fiscal, and emergency-response evidence.

Grounds for Opposition

1. **No defined scale or enforceable operating envelope.** The public materials do not identify a binding maximum for building square footage, electrical load in megawatts, water withdrawal and consumption, cooling configuration, generator count and fuel storage, hours of operation, or phased expansion. Without those limits, neither the City nor the public can measure the project's actual impacts.

2. **Water and lake-cooling claims require independent proof.** The existence of a former aggregate-mining lake does not establish that it can lawfully or sustainably serve a data center cooling system. The City should require a sealed water-balance analysis addressing withdrawal, consumptive use, evaporation, thermal discharge, lake levels, groundwater interaction, water quality, drought conditions, treatment chemicals, and all state or regional permits before any entitlement is granted.
3. **Electrical and ratepayer impacts remain undisclosed.** Proximity to transmission lines and a substation does not prove that adequate capacity exists without new generation, transmission, substation, or distribution upgrades. The applicant must disclose its projected peak and average load, phased demand, required grid improvements, reliability effects, and who will pay every associated cost. Existing customers must not subsidize a private high-load user.
4. **Continuous noise, heat, lighting, and generator emissions have not been resolved.** Data centers operate around the clock. Cooling equipment, transformers, switchgear, rooftop mechanical systems, and emergency generators can create persistent low-frequency noise and cumulative air emissions. The City should require modeled property-line noise limits, nighttime limits, generator-testing restrictions, photometric plans, air-emissions analysis, and enforceable monitoring and violation remedies.
5. **Fire protection and hazardous-material demands must be established in advance.** Battery-energy systems, backup power equipment, diesel storage, electrical rooms, and large server halls present specialized fire and emergency-response demands. Approval should not precede a written capacity determination from the St. Lucie City Fire District identifying equipment, staffing, water supply, access, training, response-time, and cost requirements, with the applicant funding all project-created needs.
6. **Transportation and cumulative commercial impacts cannot be separated from the rezoning.** The proposed 26-acre commercial frontage, together with construction traffic, employee traffic, service vehicles, fuel deliveries, and emergency access, must be evaluated as one cumulative development program. Piecemeal review would understate impacts on Midway Road and nearby intersections.
7. **A private covenant is not sufficient public protection.** Any covenant can contain exceptions, interpretation disputes, amendment mechanisms, or enforcement limitations. If the City considers approval, every material promise must also appear as a condition of the zoning and development order, run with the land, bind successors and assigns, be enforceable by the City, and provide for suspension or revocation upon noncompliance.
8. **The City should not approve industrial entitlement first and investigate consequences later.** The applicant bears the burden of presenting competent substantial evidence that the requested zoning is compatible, adequately served, and consistent with the Comprehensive Plan. General statements about economic development or potential tax revenue cannot replace project-specific evidence of public-service capacity and impact mitigation.

Requested Action

I respectfully request that the Board deny the rezoning application on the present record. If the application is not denied, it should be postponed and remanded for a fully noticed public review only after the following materials are filed, published, and independently evaluated:

1. A binding conceptual site plan and phasing schedule stating maximum square footage, building height, electrical capacity, water demand, generator count, fuel storage, and hours of testing;
2. Sealed water-supply, cooling, hydrogeologic, thermal-discharge, water-quality, and drought-resilience analyses, together with all required agency determinations;
3. Written FPL capacity and upgrade documentation, including cost allocation and express protection of existing ratepayers from project-specific costs;
4. Independent noise, lighting, heat, air-emissions, stormwater, wetland, wildlife, and cumulative-impact studies based on the maximum buildout allowed by the requested zoning;
5. A Fire District and emergency-management capacity report, including applicant-funded mitigation and specialized equipment or staffing;
6. A cumulative traffic analysis covering the data center, construction phases, and all potential C-3 uses;
7. A fiscal-impact analysis comparing permanent jobs, public revenues, tax incentives, utility or infrastructure subsidies, and long-term public-service costs; and
8. Draft development-order conditions and covenants that are enforceable against the owner, operator, tenants, successors, and assigns, with monitoring, public reporting, penalties, and revocation provisions.

The City should also require a second neighborhood meeting after these materials are available, followed by sufficient time for public review before any Planning and Zoning Commission recommendation or Board vote.

The City is not obligated to exchange 174 acres of industrial entitlement for promises that have not been quantified, tested, funded, or made enforceable. The appropriate decision on the current record is denial. At an absolute minimum, no vote should occur until the City and its residents know the project's maximum size, total resource demands, full public cost, and enforceable safeguards.

Please place this letter and all attachments into the official record for every hearing or agenda item concerning Willow Lakes, LLC, 10050 W. Midway Road, and any related data center, commercial, rezoning, site-plan, development-order, utility, or incentive application.

Respectfully submitted,

/s/ Kevin S. Keene
Community Liaison / Fort Pierce Watch
5255 Palmetto Ave., Fort Pierce, FL 34982
kevinkeene1961@gmail.com | 772-275-2040

CC:

St. Lucie City Fire District (info@slcfd.org)
South Florida Water Management District (PublicRecords@sfwmd.gov)
Florida Department of Environmental Protection (Southeast.District@FloridaDEP.gov)
Florida Public Service Commission (contact@psc.state.fl.us)

Vennis Gilmore

From: Kevin Freeman
Sent: Thursday, August 20, 2026 3:54 PM
To: Vennis Gilmore
Cc: Christopher Suneson
Subject: Fw: Opposition to Willow Lakes, LLC Rezoning (10050 W. Midway Road)

Kev Freeman | Planning Director | City of Fort Pierce

Planning Department

Phone: 772.467.3730

100 North U.S. 1 Fort Pierce, FL 34950

From: Linda Purrazzella <purrazz@gmail.com>
Sent: Thursday, August 20, 2026 3:34 PM
To: Linda Hudson <LHudson@cityoffortpierce.com>; Chris Dzadovsky <cdzadovsky@cityoffortpierce.com>; Curtis Johnson <cjohnson@cityoffortpierce.com>; Arnold Gaines <againes@cityoffortpierce.com>; Michael Broderick <mbroderick@cityoffortpierce.com>; Kevin Freeman <kfreeman@cityoffortpierce.com>
Cc: Dana.Trabulsy@flhouse.gov <Dana.Trabulsy@flhouse.gov>; Erin@eringrall.com <Erin@eringrall.com>; brian.mast@mail.house.gov <brian.mast@mail.house.gov>; info@slcfd.org <info@slcfd.org>; PublicRecords@sfwmd.gov <PublicRecords@sfwmd.gov>; Southeast.District@floridadep.gov <Southeast.District@floridadep.gov>; contact@psc.state.fl.us <contact@psc.state.fl.us>; James.Clasby@stlucieco.gov <James.Clasby@stlucieco.gov>
Subject: Opposition to Willow Lakes, LLC Rezoning (10050 W. Midway Road)

[You don't often get email from purrazz@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

To: Fort Pierce City Commission and the Planning Board
100 N. U.S. Highway 1
Fort Pierce, FL 34950
Submitted via Email to: lcox@cityoffortpierce.com

Subject: Opposition to Willow Lakes, LLC Rezoning (10050 W. Midway Road)

Dear Mayor, Commissioners and elected officials

I am writing to express my strong opposition to the rezoning request by Willow Lakes, LLC for approximately 200

acres at 10050 W. Midway Road. Shifting this property from Planned Development (PD) to Light Industrial (I-1) and General Commercial (C-3) to facilitate an energy- and water-intensive data center creates irreversible ecological risks for Fort Pierce and the surrounding St. Lucie County ecosystem.

This proposed heavy use threatens our local quality of life. Data centers bring substantial noise pollution, heavy service traffic, and immense demands on local electricity grids and public utilities, potentially raising costs for residents.

A massive data center footprint is fundamentally incompatible with the fragile hydrology of the Midway Road corridor. This parcel directly borders regional water infrastructure, including North St. Lucie River Water Control District (NSLRWCD) canals, and sits in immediate proximity to the Ten Mile Creek system. Ten Mile Creek feeds directly into the North Fork of the St. Lucie River Aquatic Preserve.

Allowing an industrial operation that consumes millions of gallons of water daily for cooling threatens to draw down our local water table and alter natural hydroperiods. Furthermore, discharging chemically treated thermal runoff into adjacent drainage networks threatens the water quality of these connected, protected aquatic preserves.

Developing 200 acres of pasture and permeable land into an industrial complex will destroy local wildlife pathways. Our regional wetlands and pine flatwoods support vital Florida wildlife. The toxic stormwater runoff, light pollution, and high-frequency acoustic noise generated by data center cooling fans will severely disrupt native species including sandhill cranes, wood storks, wading birds, and threaten downstream species like the West Indian manatee that rely on the health of the St. Lucie River.

The City of Fort Pierce must prioritize water conservation, local water security, and ecological preservation over heavy industrial zoning. I urge the Planning Board and City Commission to protect our watersheds and deny this rezoning request.

Sincerely,
Linda Purrazzella
2400 S Ocean Drive , Unit 4233
purrazz@gmail.com
516-840-9047

Vennis Gilmore

From: Linda Cox
Sent: Friday, August 21, 2026 10:12 AM
To: Planning Department
Cc: Richard Chess; Sara Hedges
Subject: ONE WAY COMMUNICATION - Fw: Opposition to Willow Lakes. LLC rezoning (10050 Midway Road)

Linda W. Cox, MBA, CMC, FCRM | City Clerk| City of Fort Pierce
City Clerk's Office
Phone: 772.467.3065 Fax: 772.467.3841 100 North U.S. 1 Fort Pierce, FL 34950

Website | Facebook | Survey

"To provide community leadership, quality public service, and a safe environment for all citizens, by an empowered team of employees motivated by pride in themselves and their work."

From: Carol Hayes <callmycoach@aol.com>
Sent: Friday, August 21, 2026 7:40 AM
To: Linda Cox <lcox@cityoffortpierce.com>
Subject: Opposition to Willow Lakes. LLC rezoning (10050 Midway Road)

City of Fort Pierce

Warning: Sender callmycoach@aol.com has never sent any emails to your organization.
Please be careful before replying or clicking on the URLs.

This is UNSAFE: Report This is SPAM: Block This is SAFE

powered by Graphus®

[You don't often get email from callmycoach@aol.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

To: Fort Pierce City Commission and the Planning Board
100 N. U.S. Highway 1
Fort Pierce, FL 34950
Submitted via Email to: lcox@cityoffortpierce.com

Subject: Opposition to Willow Lakes, LLC Rezoning (10050 W. Midway Road)

Dear Mayor, Commissioners and elected officials:

I am writing to express my strong opposition to the rezoning request by Willow Lakes, LLC for approximately 200 acres at 10050 W. Midway Road. Shifting this property from Planned

Development (PD) to Light Industrial (I-1) and General Commercial (C-3) to facilitate an energy- and water-intensive data center creates irreversible ecological risks for Fort Pierce and the surrounding St. Lucie County ecosystem.

This proposed heavy use threatens our local quality of life. Data centers bring substantial noise pollution, heavy service traffic, and immense demands on local electricity grids and public utilities, potentially raising costs for residents.

A massive data center footprint is fundamentally incompatible with the fragile hydrology of the Midway Road corridor. This parcel directly borders regional water infrastructure, including North St. Lucie River Water Control District (NSLRWCD) canals, and sits in immediate proximity to the Ten Mile Creek system. Ten Mile Creek feeds directly into the North Fork of the St. Lucie River Aquatic Preserve.

Allowing an industrial operation that consumes millions of gallons of water daily for cooling threatens to draw down our local water table and alter natural hydroperiods. Furthermore, discharging chemically treated thermal runoff into adjacent drainage networks threatens the water quality of these connected, protected aquatic preserves.

Developing 200 acres of pasture and permeable land into an industrial complex will destroy local wildlife pathways. Our regional wetlands and pine flatwoods support vital Florida wildlife. The toxic stormwater runoff, light pollution, and high-frequency acoustic noise generated by data center cooling fans will severely disrupt native species including sandhill cranes, wood storks, wading birds, and threaten downstream species like the West Indian manatee that rely on the health of the St. Lucie River.

The City of Fort Pierce must prioritize water conservation, local water security, and ecological preservation over heavy industrial zoning. I urge the Planning Board and City Commission to protect our watersheds and deny this rezoning request.

Sincerely,
Carol Orlando-Hayes
201 Rosewood Drive
Fort Pierce, FL 34947
7725191972

Sent from my iPhone

From: Chris Karns
To: Planning Department
Subject: Willow lakes
Date: Friday, August 28, 2026 7:06:21 AM

[Some people who received this message don't often get email from firekarns@yahoo.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

I'm trying to let the planning and zoning board know that I am opposed to willow lakes re-zoning and data center.
Thanks
Sent from my iPhone

From: Mel K.
To: Planning Department
Subject: Ai Data center Midway
Date: Saturday, August 29, 2026 2:54:42 PM

City of Fort Pierce

Warning: Sender mk.legal29710@gmail.com is not yet trusted by your organization. Please be careful before replying or clicking on the URLs.

This is UNSAFE: Report This is SPAM: Block This is SAFE

powered by Graphus®

[Some people who received this message don't often get email from mk.legal29710@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

Concerned resident not sure why planning and development would even consider putting the strain on the utilities and allowing a data center to go so close to brand new residential developments! Nepture Ai data center or any data center proposal in the midway industrial area is a horrible idea. The area is still growing with residents and more housing and new proposed high school on port st lucie side so there will be a press on existing utilities already that their studies will not be considering and frankly if there is at all a hum or any effects of changes on water due to the frequencies of the said humming ai data centers cause or reduction in home prices because of this project, I will be the first to tell you a class action will be done against all politicians and city and county representatives, also bring in Port St Lucie decision makers since this affects them as well not just Ft Pierce plus I will bring in all the local builders and developers that this will affect. Please keep me updated on the status!

Sent from my iPhone

From: Mel K.
To: Vennis Gilmore
Cc: Planning Department
Subject: Re: Ai Data center Midway
Date: Monday, August 31, 2026 11:01:30 AM

City of Fort Pierce

Warning: The sender mk.legal29710@gmail.com sending email from domain gmail.com is not yet trusted by your organization.
There is a URL in the email asking for login credentials. It could be a phishing attempt.
This is UNSAFE: Report This is SPAM: Block This is SAFE
powered by Graphus®

You don't often get email from mk.legal29710@gmail.com. Learn why this is important

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

Also keep in mind if there was a fire or anything you have other industrial with chemicals and gas that could explode, do you really have the resources to even handle chemical or a big fire like that? Like what happened in Ohio?

Sent from my iPhone

> On Aug 31, 2026, at 10:03 AM, Vennis Gilmore <vgilmore@cityoffortpierce.com> wrote:
>
> Good Morning,
>
> Thank you, received. I will add your concern to the project file.
>
> **Vennis Gilmore | Historic Preservation Officer/Senior Planner | City of Fort Pierce**
> Planning Department
> Phone: 772.467.3741 100 North U.S. 1 Fort Pierce, FL 34950
>
> Website | Facebook | Survey
>
> 
>
> ---
>
> **From:** Mel K. <mk.legal29710@gmail.com>

Sent: Saturday, August 29, 2026 2:11 PM
To: Planning Department <planning@cityoffortpierce.com>
Subject: Ai Data center Midway

City of Fort Pierce

Warning: Sender @mk.legal29710@gmail.com is not yet trusted by your organization.

Please be careful before replying or clicking on the URLs.

This is UNSAFE: Report This is SPAM: Block This is SAFE

powered by Graphus®

[Some people who received this message don't often get email from mk.legal29710@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

Concerned resident not sure why planning and development would even consider putting the strain on the utilities and allowing a data center to go so close to brand new residential developments!
Nepture Ai data center or any data center proposal in the midway industrial area is a horrible idea. The area is still growing with residents and more housing and new proposed high school on port st lucie side so there will be a press on existing utilities already that their studies will not be considering and frankly if there is at all a hum or any effects of changes on water due to the frequencies of the said humming ai data centers cause or reduction in home prices because of this project, I will be the first to tell you a class action will be done against all politicians and city and county representatives, also bring in Port St Lucie decision makers since this affects them as well not just Ft Pierce plus I will bring in all the local builders and developers that this will affect.
Please keep me updated on the status!

Sent from my iPhone

From: Hector Millan
To: Planning Department
Subject: NO DATA CENTERS
Date: Monday, August 31, 2026 12:48:17 PM

City of Fort Pierce

Warning: Sender hmillan.usa25@gmail.com is not yet trusted by your organization.
Please be careful before replying or clicking on the URLs.

This is UNSAFE: Report This is SPAM: Block This is SAFE

powered by Graphus®

[Some people who received this message don't often get email from hmillan.usa25@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

We do not need a data center in the treasure coast.

From: Amber Kourofsky, Esq.
To: Planning Department
Subject: Fwd: Data center
Date: Thursday, September 3, 2026 2:37:15 PM

Some people who received this message don't often get email from amkourofs@gmail.com. Learn why this is important

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

As a resident of St. Lucie County, I object and voice my dissent to building a data center at I95 and Midwsy. Do not approve that application.

That space would be great for a fruit park, like the Fruit and Spice Park in Homestead. Google it, its amazing. We cAn do that here in PSL!!

Thank you,
Amber Kourofsky, Esq.

This communication, together with any attachments hereto or links contained herein is intended for the use of the intended recipient(s) only and may contain information that is confidential or legally privileged. If you are not the intended recipient, you are hereby notified that any review, disclosure, copying, dissemination, distribution or use of this communication is STRICTLY PROHIBITED. If you are not the intended recipient, please notify the sender immediately by return email message and delete all copies of the original communication, along with any attachments hereto or links herein, from your system. Thank you for your cooperation.

From: Just4 Tv
To: Planning Department
Cc: Vennis Gilmore
Subject: Support for PZZAM2026-00002 — Willow Lakes Data Center / Project Neptune
Date: Saturday, August 29, 2026 11:43:30 AM

City of Fort Pierce

Warning: Sender tvjust64@gmail.com is not yet trusted by your organization.
Please be careful before replying or clicking on the URLs.

This is UNSAFE: Report This is SPAM: Block This is SAFE

powered by Graphus®

[Some people who received this message don't often get email from tvjust64@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

SECURITY WARNING: This email has been generated from external sources and is not affiliated with the City of Fort Pierce systems. Exercise caution while clicking on links or opening attachments. If you have any questions or concerns, please reach out to the IT department promptly.

Planning Staff and Members of the Planning Board:

My name is Fransergy. I live in Port St. Lucie and work as a technology educator and local technologist in St. Lucie County. I am writing in support of PZZAM2026-00002, the Willow Lakes Data Center proposal at 10050 W. Midway Road.

I believe this project can bring an important category of digital infrastructure investment to our region and create pathways into construction, electrical, mechanical, networking, hardware operations, facilities, security, engineering, technical support, and local supplier work. I am personally interested in building a career in this sector without having to leave the Treasure Coast.

The location also appears more appropriate than many alternatives. It is directly accessible from I-95, is adjacent to major transmission infrastructure, and the transportation analysis filed with the city projects substantially fewer daily external trips than the property's existing mixed-use entitlement.

I support advancing the rezoning while requiring the proposed 50-year data-center-only covenant to be executed and recorded and requiring complete site-specific engineering for cooling and water use, stormwater, noise, lighting, emergency generators, fire-rescue capacity, environmental protection, utility-cost allocation, and construction impacts at the appropriate approval stages.

I also encourage the city and developer to create a formal local-workforce partnership with Indian River State College, CareerSource Research Coast, local schools, skilled-trade programs, and St. Lucie County employers, including early notification of jobs, apprenticeships, internships, contractor opportunities, and technical training requirements.

Please place this correspondence in the application record and provide it to the Planning Board. Please also notify me when the Planning Board and City Commission hearing dates are noticed and advise whether the September 17 Planning Board agenda will include this application.

Respectfully,
Fransergy
Port St. Lucie, St. Lucie County

Planning Board - 2:00 PM **6. d.**

Meeting Date: 09/17/2026

Re: Determination of Zoning Category - Data Center

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

Determination of Zoning Category - Data Center

SUMMARY:

Determination of **Authorization of similar use.**
The City's current zoning regulations do not expressly identify "data center" as a separate use category, so its classification would need to be based on the use that is most similar in its current operational characteristics.
Sec. 125-6. - Authorization of similar use.
The city planning board may permit in a particular zone a use not listed in this chapter, provided the use is of the same general type as the uses permitted there by this chapter. This item proposes the allocation of the use described as 'Data Center' to the appropriate zoning district.

Sec. 125-6. - Authorization of similar use.
The city planning board may permit in a particular zone a use not listed in this chapter, provided the use is of the same general type as the uses permitted there by this chapter. However, this section does not authorize the inclusion, in a zone where it is not listed, of a use specifically listed in another zone, or one which is of the same general type and is similar to a use specifically listed in another zone.

The City's current zoning regulations do not expressly identify "data center" as a separate use category, so its classification would need to be based on the use that is most similar in its actual operational characteristics.

The City's zoning districts include I-1 Light Industrial, I-2 Marine Industrial, and I-3 Heavy Industrial. The use is not appropriate for a Commercial Zoning District.

Staff Analysis
I-1 The purpose of the I-1 District is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

I-2 Marine Uses - Not appropriate.
I-3 The purpose of the I-3 District is to provide for heavy industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged.
A conventional data center has the following characteristics:

1. A large, secure, warehouse-like building;
2. Computer servers and data-processing equipment rather than manufacturing machinery;
3. Limited employees and customer traffic;
4. No public access;
5. Loading, equipment replacement, maintenance and service activity;
6. Continuous HVAC and cooling operations;
7. Significant electrical service and telecommunications infrastructure;
8. Emergency generators, fuel storage, transformers and switchgear; and
9. Potential noise from chillers and mechanical equipment.

Although the principal activity is electronic data storage and processing, the physical form and infrastructure intensity will be closer to a light-industrial facility, warehouse, laboratory or technology plant than to conventional office use.

RECOMMENDATION:

The use aligns reasonably with the City’s description of light-industrial activities as facilities involving processing, storage, distribution, laboratories, warehouses and plants and would therefore be recommended to be reviewed as a Conditional Use within the City's Zoning Regulations.

ALTERNATIVES:

Recommend an alternative Zoning Category

RESPONSIBLE STAFF:

Kevin Freeman, Planning Director

COORDINATED WITH:

City Attorney

Fiscal Impact

Budgeted Y/N: N

OTHER INFORMATION:

None

Attachments

State Statute
Staff Zoning Analysis

Form Review

Form Started By: Kev Freeman
Started On: 09/11/2026 08:08 AM
Final Approval Date: 09/11/2026

DATA CENTERS

Data Centers are covered by SB 484, which strengthens the City's authority to regulate data centers, including noise and compatibility impacts. But it does not clearly override SB 180's temporary restriction on adopting more restrictive or burdensome regulations after a hurricane, such as: Setbacks or buffers; noise studies; generator testing limits; water-use documentation; utility-capacity studies; architectural screening; operational performance standards; or any other additional site-plan submittal requirements.

So, although SB 484 confirms local regulatory authority, SB 180 (s. 252.422 FS) may still limit the adoption of stricter regulations - until October 2027. City Attorney/Legal opinion is required.

Section 373.203(4), Florida Statutes:

"Large-scale data center" means a single location, with a data center on site, that has an anticipated monthly peak load of **50 megawatts or more**, calculated as the highest average load over a **15-minute interval**. The term does not include a load aggregated across multiple locations owned by the same customer. However, the term includes all customers or other entities that have entered into a colocation or similar agreement at a single location that otherwise meets the anticipated monthly peak load provided in this subsection.

Section 373.203(3), Florida Statutes:

"Data center" means a facility that primarily contains electronic equipment used to process, store, and transmit digital information, which may be:

(a) A free-standing structure; or
(b) A facility within a larger structure which uses environmental control equipment to maintain the proper conditions for the operation of electronic equipment.

Section 366.043(2)(d), Florida Statutes:

"Large load customer" means a customer with an anticipated monthly peak load of **50 megawatts or more**, calculated as the highest average load over a **15-minute interval** at a single location. The term does not include a load aggregated

across multiple locations owned by the same customer. However, the term includes all customers or other entities that have entered into a colocation or similar agreement at a single location that otherwise meets the anticipated monthly peak load provided in this paragraph.

Review of Conditional Use should consider the following:

Water supply, reclaimed-water availability, cooling technology, consumptive-use permitting, and comprehensive-plan consistency are the most important review items. The applicant will need to provide: Water-demand calculations, cooling-system descriptions, reclaimed-water feasibility analysis, and SFWMD/DEP permit status as part of the review.

The timeline for development needs to account for water-permit requirements.

Noise impact study required. A professional acoustical analysis prepared by a qualified acoustical engineer before site plan approval.

Property-line and receptor-based limits, what are the maximum allowable decibel levels at the property line and at the nearest residential, institutional, or other sensitive receptors. Separate daytime and nighttime standards/hours.

Low-frequency and tonal noise review. Require evaluation of tonal, impulsive, and low-frequency noise, not just average A-weighted decibel levels.

Generator testing restrictions. Limit routine testing of backup generators to weekday daytime hours, prohibit simultaneous testing unless specifically approved, and require mufflers or enclosures.

The City's current zoning regulations do not expressly identify "data center" as a separate use category, so its classification would need to be based on the use that is most similar in its actual operational characteristics.

Sec. 125-6. - Authorization of similar use.

The city planning board may permit in a particular zone a use not listed in this chapter, provided the use is of the same general type as the uses permitted there by this chapter. However, this section does not authorize the inclusion, in a zone where it is not listed, of a use specifically listed in another zone, or one which is of the same general type and is similar to a use specifically listed in another zone.

The City's zoning districts include I-1 Light Industrial, I-2 Marine Industrial, and I-3 Heavy Industrial. The use is not appropriate for a Commercial Zoning District.

Staff Analysis

I-1 The purpose of the I-1 District is to provide for industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged. Uses in the district may perform a support role for uses in other industrial areas.

I-2 Marine Uses - Not appropriate.

I-3 The purpose of the I-3 District is to provide for heavy industrial and related uses with limited objectionable external effects in areas that are suitable for such operations due to the desirability of site characteristics, adequacy of utilities, appropriateness of transportation facilities and other factors. Acceptable manufacturing, warehousing, heavy commercial and similar uses are encouraged.

Within the City's zoning framework, a data center is most appropriately treated as comparable to an I-1 Light Industrial use, rather than an office, general commercial, utility, or heavy industrial use.

Recommendation

A conventional data center has the following characteristics:

1. A large, secure, warehouse-like building;
2. Computer servers and data-processing equipment rather than manufacturing machinery;
3. Limited employees and customer traffic;
4. No public access;
5. Loading, equipment replacement, maintenance and service activity;
6. Continuous HVAC and cooling operations;
7. Significant electrical service and telecommunications infrastructure;
8. Emergency generators, fuel storage, transformers and switchgear; and
9. Potential noise from chillers and mechanical equipment.

Although the principal activity is electronic data storage and processing, the physical form and infrastructure intensity will be closer to a light-industrial facility, warehouse, laboratory or technology plant than to conventional office use.

This aligns reasonably with the City's description of light-industrial activities as facilities involving processing, storage, distribution, laboratories, warehouses and plants.

Similar to the Amazon refrigerated warehouse?