City of Stuart

AGENDA

REGULAR MEETING OF THE STUART CITY COMMISSION
TO BE HELD MARCH 28, 2022
AT 5:30 PM
COMMISSION CHAMBERS
121 SW FLAGLER AVE.
STUART, FLORIDA 34994

CITY COMMISSION

Mayor Merritt Matheson
Vice Mayor Troy McDonald
Commissioner Becky Bruner
Commissioner Eula R. Clarke
Commissioner Mike Meier

ADMINISTRATIVE

City Manager, David Dyess
City Attorney, Michael J. Mortell
City Clerk, Mary R. Kindel

Agenda items are available on our website at http://www.cityofstuart.us
Phone: (772) 288-5306. Fax: (772) 288-5305. E-mail: mkindel@ci.stuart.fl.us

In compliance with the Americans with Disabilities Act (ADA), anyone who needs a special accommodation to attend this meeting should contact the City's ADA coordinator at 772-288-5306 at least 48 hours in advance of the meeting, excluding Saturday and Sunday.

If a person decides to appeal any decision made by the Board with respect to any matter considered at this meeting, he will need a record of the proceeding, and that for such purpose he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

(RC) next to an item denotes there is a City Code requirement for a Roll Call vote.
(QJ) next to an item denotes that it is a quasi-judicial matter or public hearing.

WHAT IS CIVILITY? Civility is caring about one's identity, needs and beliefs without degrading someone else's in the process. Civility is more than merely being polite. Civility requires staying "present" even with those persons with whom we have deep-rooted and perhaps strong disagreements. It is about constantly being open to hear, learn, teach and change. It seeks common ground as a beginning point for dialogue. It is patience, grace, and strength of character. Civility is practiced in our City Hall.

PUBLIC COMMENT: If a member of the public wishes to comment upon ANY subject matter, including quasi-judicial matters, please submit a Request to Speak form. These forms are available in the back of the Commission Chambers, and should be given to the City Clerk prior to introduction of the item number you would like to address.

CONSENT CALENDAR: Those matters included under the Consent Calendar are self-explanatory, non-controversial, and are not expected to require review or discussion. All items will be enacted by one motion. If discussion on an item is desired by any City Commissioner that item may be removed by a City Commissioner from the Consent Calendar and considered separately. If an item is quasi-judicial it may be removed by a Commissioner or any member of the public from the Consent Calendar and considered separately.

QUASI-JUDICIAL HEARINGS: Some of the matters on the Agenda may be "quasi-judicial" in nature. City Commissioners will disclose all ex-parte communications, and may be subject to voir dire by any interested party reg3rding those communications. All witnesses testifying will be "sworn" prior to their testimony. However, the public is permitted to comment without being sworn. Unsworn testimony will be given appropriate weight and credibility by the City Commission.

ROLL CALL

PLEDGE OF ALLEGIANCE

COMMENTS BY CITY COMMISSIONERS

COMMENTS BY CITY MANAGER

APPROVAL OF AGENDA

COMMENTS FROM THE PUBLIC (3 Minutes Max.)

CONSENT CALENDAR

1. APPROVAL OF 03/14/2022 CCM MINUTES (RC)

2. AWARD RFP #2022-202, PROFESSIONAL ENGINEERING SERVICES FOR THE CITY COURTESY DOCK AND WAVE ATTENUATOR (RC):

RESOLUTION No. 34-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING THE AWARD OF RFP #2022-202: PROFESSIONAL ENGINEERING SERVICES FOR THE CITY COURTESY DOCK AND WAVE ATTENUATOR TO THE TOP RANKED FIRM, CUMMINS CEDERBERG, INC. OF JUPITER, FLORIDA PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

3. AUTHORIZATION TO APPLY FOR A DEO GRANT (RC):

RESOLUTION No. 37-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY TO THE DEPARTMENT OF ECONOMIC OPPORTUNITY FOR A COMMUNITY PLANNING

TECHNICAL ASSISTANCE GRANT; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

END OF CONSENT CALENDAR

COMMISSION ACTION

4. LETTER TO U.S. REPRESENTATIVE BRIAN MAST REGARDING SAINT LUCIE RIVER TRAIN BRIDGE LEGISLATION

ORDINANCE SECOND READING

ORDINANCE FIRST READING

5. ABANDONMENT OF A PORTION RIGHT-OF-WAY AS REQUIRED BY THE PALMETTO COVE RPUD (RC):

ORDINANCE No. 2484-2022; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA PROVIDING FOR THE ABANDONMENT OF A CERTAIN PUBLIC RIGHT-OF-WAY WITHIN THE CITY BEING THAT PORTION OF A PLATTED 11 FOOT-WIDE ALLEY AS SHOWN ON THE PLAT OF HALPATIOKEE PARK, MORE CLEARLY DESCRIBED AND DEPICTED IN EXHIBIT 'A' ATTACHED; FOR PAYMENT OF A PRIVILEGE FEE; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

6. SILVERTHORN RESIDENTIAL PUD (QUASI-JUDICIAL) (RC):

ORDINANCE No. 2472-2022; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR A 9.43 ACRE PARCEL ANNEXED BY ORDINANCE NO. 1527-97, OWNED BY TED GLASRUD ASSOCIATES FL LLC, LOCATED ON THE SOUTH EAST CORNER OF SE INDIAN STREET AND SE COMMERCE AVENUE, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY BE REZONED FROM COMMERCIAL PLANNED UNIT DEVELOPMENT "CPUD" TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; ESTABLISHING THE SILVERTHORN RPUD CONSISTING OF SEVENTY SEVEN (77) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

DISCUSSION AND DELIBERATION

ADJOURNMENT

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Susej Meleqi

Title of Item:
APPROVAL OF 03/14/2022 CCM MINUTES (RC)

Summary Explanation/Background Information on Agenda Request:
APPROVAL OF 03/14/2022 CCM MINUTES (RC)

Funding Source:
N/A

Recommended Action:
Approve Minutes.

ATTACHMENTS:
1. 03142022 CCM

MINUTES
REGULAR MEETING OF THE STUART CITY COMMISSION
HELD MARCH 14, 2022
AT 4:00 PM
COMMISSION CHAMBERS
121 SW FLAGLER AVE.
STUART, FLORIDA 34994

CITY COMMISSION

Mayor Merritt Matheson
Vice Mayor Troy McDonald
Commissioner Becky Bruner
Commissioner Eula R. Clarke
Commissioner Mike Meier

ADMINISTRATIVE

City Manager, David Dyess
City Attorney, Michael J. Mortell
City Clerk, Mary R. Kindel

ROLL CALL

4:00 PM
PRESENT: Vice Mayor McDonald, Commissioner Bruner, Commissioner Clarke, Commissioner Meier
ABSENT: Mayor Matheson

PLEDGE OF ALLEGIANCE

1. ARTS MOMENT - LAYLA FORS, SONG PERFORMANCE

Layla Fors sang "Stay" by Rihanna.

PROCLAMATIONS

2. IRISH AMERICAN HERITAGE MONTH - MARCH 2022

Raymond Linch, Florida State President for the AOH accepted the Proclamation and thanked the Commission.

3. COMMEMORATION OF THE 50TH ANNIVERSARY OF THE VIETNAM WAR & VIETNAM WAR VETERANS DAY ON MARCH 29, 2022

Proclamation read, no one in attendance to accept.

(4:37 PM Donna DeBois arrived and accepted the Proclamation on behalf of the DAR.)

4. 50TH ANNIVERSARY OF THE FLORIDA ASSOCIATION OF CITY CLERKS

Mary Kindel, City Clerk and Susej Meleqi, Deputy Clerk, accepted the Proclamation and thanked the Commission for the FACC recognition.

PRESENTATIONS

5. SERVICE AWARDS - MARCH 2022

Jessica Tharp	Community Service	5 Years	
James Minor	Fire Rescue	15 Years	
Derek Wallace	Fire Rescue	15 Years	
John Reddick	Police	25 Years	(not in attendance)
Joseph Tumminelli	Police	25 Years	

6. EMPLOYEE SPOTLIGHT - MARCH 2022

Postponed until April.

7. OFFSITE IMPROVEMENTS AND INFRASTRUCTURE CONNECTED TO THE AVONLEA MASTER PUD (PLANNED UNIT DEVELOPMENT)

4:23 PM
Kev Freeman, Development Director, presented on the History of the Avonlea PUD, including a map, open space calculations, the improvement plan, and FDOT Tap Grant.

Commissioner Meier commented on staff bringing back the topic for discussion on areas of conservation, sidewalks, and bike lanes.

Commissioner Bruner commented on the improved conditions and noted she would like to see more lighting.

4:37 PM
Donna DeBois arrived and accepted the 50th Anniversary of the Vietnam War & Vietnam Veteran's Day Proclamation on behalf of the DAR.

COMMENTS BY CITY COMMISSIONERS

Commissioner Meier

- Commented on the legislative session, noting his disappointment with some bills, but is hopeful for good relationships with new legislators in the future.

Commissioner Bruner

- Announced that citizen, Helen McBride will be receiving the Sage Award on March 31st.

Commissioner Clarke

- Thanked Helen McBride for all she does in the community.
- Commented on parking in downtown and that the public can use the tram and bring awareness to the program.
- Commended the Commissioners for their participation in community events.

Vice Mayor McDonald

- Commented on the Bike to Work day.

COMMENTS BY CITY MANAGER

City Manager Dyess

- Announced the City won an award from Southern Living, The South's Best Small Towns, coming out soon.

APPROVAL OF AGENDA

Commissioner Meier noted that at the time the first Commission Meetings of the month were changed to 4:00 p.m., it was discussed that official business would begin at 5:30 p.m. He inquired whether a recess should be in effect or if the meeting should continue.

City Manager Dyess noted that the meeting continues unless a specific item is identified with a time certain for the meeting. City Attorney Mortell confirmed that the meeting is noticed to begin at 4:00 p.m. but it is at the pleasure of the board.

PUBLIC COMMENT:
1) Helen McBride - Flamingo Avenue; Commented that she was glad to see the Fire medics on bikes at a recent event and would like to see that at all public events.

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Eula Clarke
Motion approved unanimously.

COMMENTS FROM THE PUBLIC (3 Minutes Max.)

No Comments.

CONSENT CALENDAR

8. APPROVAL OF 02/28/2022 CCM MINUTES (RC)

9. DOWNTOWN COURTESY DOCK WAVE ATTENUATION PHASE I FIND GRANT APPLICATION AUTHORIZATION (RC):

RESOLUTION No. 30-2022; A RESOLUTION OF THE CITY COMMISSION OF

THE CITY OF STUART, FLORIDA, AUTHORIZING THE UTILITIES AND ENGINEERING DEPARTMENT TO APPLY FOR AND, IF SUCCESSFUL, DESIGNATE THE UTILITIES AND ENGINEERING DIRECTOR AS THE AUTHORIZED REPRESENTATIVE TO EXECUTE THE GRANT, AND SUBSEQUENTLY APPROVE THE EXPENDITURE OF THE GRANT FUNDS FROM THE FLORIDA INLAND NAVIGATION DISTRICT WATERWAYS ASSISTANCE PROGRAM, TO FUND THE IMPROVEMENTS ASSOCIATED WITH THE DOWNTOWN COURTESY DOCKS AND WAVE ATTENUATION PROJECT: PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

10. PLAT OF "AVONLEA PARCEL 16" (RC):

RESOLUTION No. 33-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA TO APPROVE A PLAT TITLED “AVONLEA PARCEL 16”, A REPLAT OF LOT 16, NEW AVONLEA P.U.D. RECORDED IN PLAT BOOK 17, PAGE 35, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, LYING IN SECTIN 29,TOWNSHIP 37 SOUTH, RANGE 41 EAST CITY OF STUART, MARTIN COUNTY, FLORID, CONTAINING 4.14 ACRES, MORE OR LESS PREPARED BY RICHARD H. SMITH, PROFESSIONAL SURVEYOR AND MAPPER NO. 5239, PROVIDING FOR AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

END OF CONSENT CALENDAR

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Eula Clarke
Motion approved unanimously.

COMMISSION ACTION

11. LAND USE CHANGE FOR PREVIOUS ANNEXED PROPERTIES (RC):

RESOLUTION No. 31-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA INITIATING THE PROCESS TO AMEND THE FUTURE LAND USE MAP AND ASSIGN CITY FUTURE LAND USE(S) AND CITY ZONING CATEGORY(S) FOR PROPERTIES PREVIOUSLY VOLUNTARILY ANNEXED INTO THE CITY LIMITS, FLORIDA, PROVIDING AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

Kev Freeman, Development Director presented and requests a vote to direct staff to commence the City initiated process to amend the FLU of the four properties subject of Resolution No. 31-2022.

City Attorney Mortell noted that Intervenor in the Kanner Hwy. LLC, Mr. DiVentura sent a letter to the City requesting to move forward on this.

Commissioner Meier made a motion and commented on discussion pertaining to the Neme Rice property, and is interested in staff's comments.

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Becky Bruner
Motion approved unanimously.

12. BA #10 ARPA FUNDING - NW DIXIE HIGHWAY DITCH IMPROVEMENTS & SE MANGO PLACE DRAINAGE IMPROVEMENTS PROJECTS (RC):

RESOLUTION No. 32-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AUTHORIZING BUDGET ADMENDMENT No. 10 TO THE 2021-2022 ENTERPRISE FUND; APPROPRIATING AND AUTHORIZING THE EXPENDITURE OF FUNDS FOR THE NW DIXIE HIGHWAY DITCH IMPROVEMENTS PROJECT & SE MANGO PLACE DRAINAGE IMPROVEMENTS PROJECT; PROVIDING AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

City Manager Dyess reported that this item is under Commission Action simply to point out that the funding is coming from the American Rescue Plan fund balance under the category specifically allocated for utilities, designated for stormwater. This gets two projects identified in the master plan design ready so the City can start applying for grants for the construction phase.

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Becky Bruner
Motion approved unanimously.

13. NOTICE TO ABANDON RIGHT-OF-WAY FOR PALMETTO COVE RPUD (RC):

RESOLUTION No. 35-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA DECLARING PURSUANT TO CHAPTER 36 OF THE CODE OF ORDINANCES OF THE CITY OF STUART, FLORIDA THE INTENTION OF THE CITY COMMISSION TO ABANDON AND TO SET PUBLIC HEARINGS ON MARCH 28, 2022, AT 5:30 P.M. AND APRIL 11, 2022, AT 4:00 P.M. IN THE CITY COMMISSION CHAMBERS TO CONSIDER THE ABANDONMENT OF CERTAIN PUBLIC RIGHT-OF-WAY WITHIN THE CITY, BEING THAT PORTION OF A PLATTED 11 FOOT WIDE ALLEY AS SHOWN ON THE PLAT OF DYER ESTATES, MORE CLEARLY DESCRIBED IN EXHIBIT “A” ATTACHED; PROVIDING FOR THE REPEAL OF RESOLUTION 106-2021, AND FOR OTHER PURPOSES.

Tom Reetz, Senior Planner briefly explained the notice changes.

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Eula Clarke
Motion approved unanimously.

14. LICENSE AGREEMENT DOWNTOWN VALET PARKING:

RESOLUTION 36-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE EXECUTION OF A LICENSE AGREEMENT BETWEEN THE CITY OF STUART AND HUDSON'S ON THE RIVER, LLC TO UTILIZE PARKING LOCATED AT NORTH END OF FLAGLER AVENUE FOR THE PURPOSE OF OPERATING A DOWNTOWN VALET PARKING SERVICES PILOT PROGRAM.

City Manager Dyess provided a brief explanation of the parking agreement and the pilot program. The velvet services will be used to maximize the 33 parking in the circle area at the end of Flagler Avenue, there are several spaces not included in the allocated valet area that are used for fisherman.

Commissioner Bruner suggested better lighting in the parking area and would like to see a couple of parking spaces reserved for fisherman using the pier under the bridge.

Commissioner Meier feels the valet parking needs to be monitored and the signage needs to be clear, that the free valet parking is for all the public and not just for the restaurant.
Vice Mayor McDonald agrees pertaining to the signage and feels the signage should be reviewed over time.

Commissioner Bruner made a motion to include two parking spots for fisherman closest to the pier.

Commissioner discussion on the specific spaces, enforcement, additional pervious parking,

Revised Motion: Approve as is, not including the two designated parking spaces.

MOTION: Approve as is.
MOVED BY: Becky Bruner
SECONDED BY: Eula Clarke
Motion approved unanimously.

ORDINANCE SECOND READING

15. AMENDMENT TO THE LAND DEVELOPMENT CODE TO INCORPORATE TREE REMOVAL PENALTIES (RC):

ORDINANCE No. 2478-2022; AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING SECTION OF CHAPTER V RESOURCE PROTECTION STANDARDS OF THE CITY'S LAND DEVELOPMENT CODE, ESTABLISHING "PENALTIES FOR VIOLATIONS" FOR THE REMOVAL OF TREES IN VIOLATION OF THE CODE; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR CODIFICATION; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

5:16 PM
Tom Reetz, Senior Planner, reviewed the changes to the Ordinance at Second Reading;

removed "and/or" statement and added the agreement between the City and the violator to agree on the penalty.

Brief review of the penalty among the Board.

MOTION: Approve
MOVED BY: Mike Meier
SECONDED BY: Eula Clarke
Motion approved unanimously.

ORDINANCE FIRST READING

DISCUSSION AND DELIBERATION

ADJOURNMENT

5:20 PM - Meeting Adjourned

Mary R. Kindel, City Clerk **Merritt Matheson, Mayor**

Minutes to be approved at the Regular Commission Meeting this 28th day of March, 2022.

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Alaina Knofla

Title of Item:
AWARD RFP #2022-202, PROFESSIONAL ENGINEERING SERVICES FOR THE CITY COURTESY DOCK AND WAVE ATTENUATOR (RC):

RESOLUTION No. 34-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING THE AWARD OF RFP #2022-202: PROFESSIONAL ENGINEERING SERVICES FOR THE CITY COURTESY DOCK AND WAVE ATTENUATOR TO THE TOP RANKED FIRM, CUMMINS CEDERBERG, INC. OF JUPITER, FLORIDA PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:
R34-2022, Award RFP #2022-202: Professional Engineering Services for the City Courtesy Dock and Wave Attenuator

This solicitation was advertised in the Palm Beach Post on November 10, 2022. DemandStar notified six hundred and three (603) potential bidders, there were eighteen (18) plan holders, and nine (9) bid packages issued for this project. Four (4) proposals were received on or before the bid opening date and time of 2:30 pm. November 10, 2021.

A five (5) member selection committee evaluated the responses based on the following criteria: firm qualifications/knowledge in marine or coastal engineering, project understanding, operational plan/task approach/schedule, previous jobs familiar to request, quality of submittal. After detailed evaluation by the selection committee, and two proposers presented their submittal. City staff requested authorization to negotiate with Cummins Cederberg, Inc. The negotiations were completed on March 1, 2022.

Funding Source:
1230/563
Project No. PWP00394

Recommended Action:
Adopt Resolution No. 34-2022

ATTACHMENTS:
1. R34-2022 Award of Courtesy Dock

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

RESOLUTION NUMBER 34-2022

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING THE AWARD OF RFP #2022-202: PROFESSIONAL ENGINEERING SERVICES FOR THE CITY COURTESY DOCK AND WAVE ATTENUATOR TO THE TOP RANKED FIRM, CUMMINS CEDERBERG, INC. OF JUPITER, FLORIDA PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * *

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA that:

WHEREAS, the City entered into the competitive Request for Proposal process in order to solicit a licensed firms or individuals to provide professional engineering services for the City Courtesy Dock and Wave Attenuator Project.

WHEREAS, the services requested are in compliance with the requirements of Chapter 287.055 Florida Statute Consultants Competitive Negotiation Act (CCNA).

SECTION 1: The City Commission of the City of Stuart hereby approves the award of RFP #2022-202: Professional Engineering Services for the City Courtesy Dock and Wave Attenuator to the top ranked Cummins Cederberg with authorization to execute final agreement subsequent to review and approval by City Attorney.

SECTION 2: This resolution shall take effect upon adoption.

Resolution No.34-2022
Approve Award of RFP #2022-202, Professional Engineering Services for the City Courtesy Dock and Wave Attenuator

Commissioner _____ offered the foregoing resolution and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MERRITT MATHESON, MAYOR				
TROY MCDONALD, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
EULA R. CLARKE, COMMISSIONER				
MIKE MEIER, COMMISSIONER				

ADOPTED this 28th day of March 2022.

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MERRITT MATHESON
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL, ESQ.
CITY ATTORNEY

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Kevin Freeman

Title of Item:
AUTHORIZATION TO APPLY FOR A DEO GRANT (RC):

RESOLUTION No. 37-2022; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY TO THE DEPARTMENT OF ECONOMIC OPPORTUNITY FOR A COMMUNITY PLANNING TECHNICAL ASSISTANCE GRANT; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

The Florida Department of Economic Opportunity (DEO) anticipates that the Florida Legislature will appropriate funding for Community Planning Technical Assistance (CPTA) Grants for state fiscal year 2022-2023.

The CPTA Grants provide the opportunity to create innovative plans and development strategies to promote a diverse economy and meet the requirements of the Community Planning Act. Additionally, the program promotes innovative planning solutions to protect Florida's natural resources. Communities may receive up to $75,000 in CPTA grant awards. Funding is contingent upon appropriations by the Florida Legislature and the Governor’s approval of the state’s budget.

Any grant request for funding will need to be submitted to DEO on or before end of Monday, April 11, 2022. Submitting a request for funding does not guarantee that funding will be provided.

The City's grant application will focus on the planning and economic development of the Commerce Avenue area and surrounding properties as a 'Innovation Area' within the city to support economic development and employment opportunities. The area is particularly important as it fulfills a number of economic and community planning needs within the City.

Funding Source:
To be determined, a successful grant will operate on a reimbursement process. A consultant will need to be procured through City procurement policy.

Recommended Action:
Move approval of Resolution 37-2022 authorizing the City Manager to execute the application for a DEO Technical Assistance Grant.

ATTACHMENTS:
1. R37-2022 Authorization to apply for the Community Planning Technical Assistance Grant

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

RESOLUTION NUMBER 37-2022

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY TO THE DEPARTMENT OF ECONOMIC OPPORTUNITY FOR A COMMUNITY PLANNING TECHNICAL ASSISTANCE GRANT; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City of Stuart is interested in applying to the Florida Department of Economic Opportunity (FDEO) for Community Planning Technical Assistance Grants**.**

WHEREAS, the grant funding will be used for community planning and economic development strategies that implement the requirements in the Community Planning Act.

WHEREAS, the funds shall be used in respect of community development needs of a particular urgency because existing conditions pose a serious and immediate threat to the health and welfare of the community.

WHEREAS, the City Commission believes it is in the best interest of the City of Stuart to pursue Community Planning Technical Assistance Grant(s).

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AS FOLLOWS:

SECTION 1: The City Manager or its designee is hereby authorized to apply for the Community Planning Technical Assistance Grants.

SECTION 2: Further staff is authorized to pursue the Community Planning Technical Assistance Grants to address community planning and economic development strategies in respect of resilience, housing, neighborhood revitalization, commercial revitalization and economic development.

SECTION 3: This resolution shall take effect on adoption.

Commissioner _____ offered the foregoing resolution and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MERRITT MATHESON, MAYOR				
TROY MCDONALD, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
EULA R. CLARKE, COMMISSIONER				
MIKE MEIER, COMMISSIONER				

ADOPTED this ___ day of _____, 2022.

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MERRITT MATHESON
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL, ESQ.
CITY ATTORNEY

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Ben Hogarth

Title of Item:
LETTER TO U.S. REPRESENTATIVE BRIAN MAST REGARDING SAINT LUCIE RIVER TRAIN BRIDGE LEGISLATION

Summary Explanation/Background Information on Agenda Request:
The City previously sent a letter to U.S. Representative Brian Mast in support of federal funding for the construction of a new Saint Lucie River Train Bridge, which would have a higher elevation in order to allow more volume of maritime traffic to safely move beneath the bridge without impacting railway traffic. A new train bridge with modern lift capabilities could also improve "down times" between transition of the bridge from the down to up position.

Since this correspondence was provided, Representative Mast filed a new amendment to federal legislation that would balance the down and up time of the railway bridge to align with the U.S. Coast Guard protocols in the "Waterways Analysis and Management System for Intracoastal Waterway Miles 925-1005 (WAMS #07301).” The new draft letter supports this amendment and reaffirms the CIty's position on federal funding for a new Saint Lucie River Bridge.

Funding Source:
N/A

Recommended Action:
Motion to approve letter to U.S. Representative Brian Mast

ATTACHMENTS:
1. Brian Mast Support Letter - Train Bridge Amendment

City of Stuart
121 SW Flagler Ave. Stuart Fl. 34994
Phone: 772.288.5312

March 28, 2022

The Honorable Brian Mast
2182 Rayburn House Office Building
Washington, DC 20515
Phone: 202-225-3026
Fax: 202-225-8398

Dear Congressman Mast,

We are writing in support of your proposed amendment relating to the operation of the St. Lucie River Railroad Bridge. Requiring the U.S. Coast Guard to operate the bridge in a manner reflected in the "Waterways Analysis and Management System for Intracoastal Waterway Miles 925-1005 (WAMS #07301)" will provide for better maritime navigation and appropriate emergency response times on the St. Lucie waterway.

The more than 95-year-old railroad bridge, which is single tracked and approximately 6.5 feet above the mean high tide, will be a detriment to our marine community once Brightline begins running passenger trains, estimated to start in the first quarter of 2023. The current height of the bridge blocks the passage of almost all marine traffic when it is in the closed position. Projections show that the bridge may be in the closed position for up to 45 minutes of every hour and this location is the only area that we know of that will be single tracked once the passenger rail begins service.

Due to these impending impacts, we also reaffirm our request for federal assistance in the construction of a new train bridge over the St. Lucie River, which bisects Stuart and the surrounding communities. With marine passage East and West being severely impacted for significant time periods, a consequential safety hazard may be on the horizon. Response time for first responders during marine emergencies may also not be acceptable in the future. However, the construction of a modern bridge and lift system would substantially reduce "down time" between the conveyance of maritime, automotive, and railway traffic, while providing for a safer and reliable bridge operation.

We thank you again for your time and consideration on this matter and please accept this letter of support for your draft amendment on the operation of the St. Lucie River Railroad Bridge.

Sincerely,

Merritt Matheson
Mayor

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Tom Reetz

Title of Item:
ABANDONMENT OF A PORTION RIGHT-OF-WAY AS REQUIRED BY THE PALMETTO COVE RPUD (RC):

ORDINANCE No. 2484-2022; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA PROVIDING FOR THE ABANDONMENT OF A CERTAIN PUBLIC RIGHT-OF-WAY WITHIN THE CITY BEING THAT PORTION OF A PLATTED 11 FOOT-WIDE ALLEY AS SHOWN ON THE PLAT OF HALPATIOKEE PARK, MORE CLEARLY DESCRIBED AND DEPICTED IN EXHIBIT 'A' ATTACHED; FOR PAYMENT OF A PRIVILEGE FEE; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:
On March 14, 2022, the City Commission approved Resolution 35-2022 declaring its intention to abandon a portion of the 11 foot wide alley as shown on the plat of Halpatiokee Park. The abandonment of unimproved right of way was a condition of approval for the Palmetto Cove RPUD, a 13-unit multifamily town home project.

The applicant has submitted a sketch and legal description of the portion of alley-way to be abandoned along with an Access and Maintenance agreement for the balance of alley-way being improved for the project.

The City's Public Works Department has determined that the use of the portion of R.O.W. to be abandoned is no longer in the public's best interest and does not object to the abandonment of the City's interest. A fair market appraisal of the real property has determined that the market value of the property is $14,500. As provided in Section 36-2 of the City's Code of Ordinances, staff recommends payment of a privilege fee in the amount of **100% of the market value, or $14,500**, prior to the abandonment of the City's interest.

The procedure for abandonment of the City owned Right-Of-Way is set out in **Section 36-3 Vacation or change of name of streets, alleys, etc. of The City's Code of Ordinances**. *(a) The vacation or change of any street, alley, road or public way shall be accomplished by Ordinance. The city commission, in vacating any street or part of a street or changing the name of any street, may include in one ordinance the changes of name or vacation or narrowing of more than one street, avenue or alley, but before vacating any street or part thereof, or narrowing any street, avenue or alley, the city commission shall first pass a resolution declaring its intention to do so.*

Funding Source:
N/A

Recommended Action:
Approve Ordinance No. 2484-2022, abandonment of certain Right-of-Way within the City's limits.

ATTACHMENTS:

1. A.1 Ordinance No. 2484-2021 Palmetto Cove ROW Abandonment
2. B.1 Updated Appraisal
3. B.2 Access and Maintenance Agreement
4. C.1 Application
5. D.1 Approved Palmetto Cove Site Plan
6. D.2 Ordinance 2463-2021 Palmetto Cove - recorded
7. D.3 Ordinance 2463-2021 Palmetto Cove Exhibit D - recorded

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2484-2022

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA TO PROVIDE FOR THE ABANDONMENT OF CERTAIN PUBLIC RIGHT-OF-WAY WITHIN THE CITY BEING THAT PORTION OF PLATTED 11 FOOT-WIDE ALLEY AS SHOWN ON THE PLAT OF HALPATIOKEE PARK, MORE CLEARLY DESCRIBED AND DEPICTED IN EXHIBIT 'A' ATTACHED; FOR PAYMENT OF A PRIVILEGE FEE; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * * * *

WHEREAS, Nicolas Calle, manager of 924 Palm City, LLC, a Florida limited liability company (APPLICANT) has filed a petition for abandonment relating to the public right-of-way described below that conforms to the requirements of Section 36 of the Code of Ordinances of the City of Stuart, Florida; and

WHEREAS, at the public hearing to consider the requested abandonment the City Commission has determined that it is the best public interest that the said right-of-way be abandoned as said right-of-way is needed to satisfy condition No. 15 of the approving RPUD Ordinance 2463-2021 for the Palmetto Cove multi-family town home project.

WHEREAS, CTE Valuation Services conducted a fair market appraisal of said property on February 8, 2022 and determined that the market value of the real property is fourteen thousand, five hundred dollars ($14,500) for the portion of right-of-way described in 'Exhibit A';

NOW, THEREFORE, THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA ordains, as follows:

SECTION 1: That any interest vested with the City of Stuart in that certain 11 foot ± wide alley, as set forth as that portion of a platted alley according to the plat of Halpatiokee Park, as recorded in plat book 14, page 36, public records of Palm Beach (now Martin) County, Florida, Public Records as described and depicted in **Exhibit "A"** attached hereto is hereby abandoned.

SECTION 2: A location map depicting the subject area is hereby attached as **Exhibit "B".**

SECTION 3: The Applicants agree to pay the privilege fee in the amount of **FOURTEEN THOUSAND FIVE HUNDRED DOLLARS ($14,500) for right-of-way** to be received and deposited into the city's property management fund within 90 days of approval, otherwise this Ordinance shall become null and void.

SECTION 4: Conflicts. All ordinances or parts of ordinances in conflict herewith shall be repealed.

SECTION 5: Severability: If any word, clause, sentence, paragraph, section, or part thereof contained in this Ordinance is declared to be unconstitutional, unenforceable, void, or inoperative by a court of competent jurisdiction, such declaration shall not affect the validity of the remainder of this ordinance.

SECTION 6: Effective Date: This Ordinance shall become effective immediately upon adoption.

SECTION 7: The complete execution and recording of this Ordinance by the City Clerk shall occur no later than 60 days from the date of adoption, failing which this ordinance shall be void.

PASSED on First Reading this day of _____, 2022.

Commissioner _____ offered the foregoing Ordinance and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MERRITT MATHESON, MAYOR				
TROY MCDONALD, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
EULA R. CLARKE, COMMISSIONER				
MIKE MEIER, COMMISSIONER				

ADOPTED on second and final reading this _____day of _____, 2022.

ATTEST:

_____ _____
MARY R. KINDEL MERRITT MATHESON
CITY CLERK MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL, ESQ.
CITY ATTORNEY

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

Palmetto Cove,
Nicolas Calle, Manager

_____ By: _____

Print Name: _____

_____

Print Name: _____

Petitioner's Acknowledgment

The above Ordinance, Acceptance and Agreement was acknowledged before me by means of ☐ physical presence or ☐ online notarization this _____ day of _____, 2022, by Nicolas Calle, who ☐ is personally known to me or ☐ has produced _____as identification.

(Notary Seal)

_____
Signature of Notary Public
Printed Name: _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before The above Ordinance, Acceptance and Agreement was acknowledged before me by means of ☒ physical presence or ☐ online notarization this _____ day of _____, 2022, Merritt Matheson, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation, who ☐ are personally known to me or ☐ have produced _____as identification.

(Notary Seal)

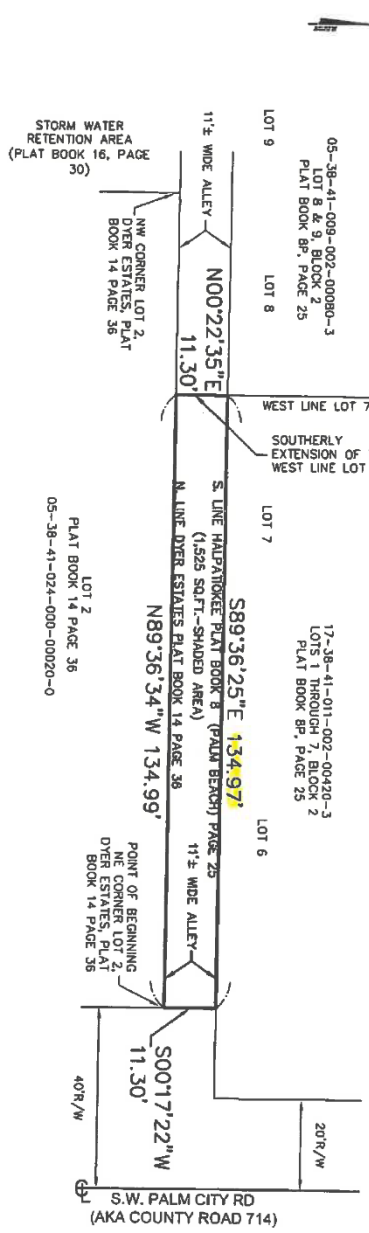
_____
Signature of Notary Public
Printed Name: _____

Exhibit "A"

EXHIBIT A

SKETCH & DESCRIPTION
(THIS IS NOT A BOUNDARY SURVEY)

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.



LEGAL DESCRIPTION

A PORTION OF THE 11 FOOT WIDE ALLEY, AS SHOWN ON THE PLAT OF DYER ESTATES AS RECORDED IN PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF LOT 2, DYER ESTATES, PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE NORTH 89°36'34" WEST ALONG THE NORTH LINE OF SAID LOT 2, DYER ESTATES, A DISTANCE OF 134.99 FEET, MORE OR LESS, TO THE SOUTHERLY EXTENSION OF THE WEST LINE OF LOT 7, BLOCK 2, PLAT OF HALPATIOKEE PARK, AS RECORDED IN PLAT BOOK 8, PAGE 25, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; THENCE NORTH 00°22'35" EAST, ALONG SAID SOUTHERLY EXTENSION OF SAID WEST LINE LOT 7, BLOCK 2, A DISTANCE OF 11.30 FEET TO A POINT ON THE SOUTH LINE OF SAID PLAT OF HALPATIOKEE PARK; THENCE SOUTH 89°36'25" EAST ALONG SAID SOUTH LINE PLAT OF HALPATIOKEE PARK, A DISTANCE OF 134.97 FEET; THENCE SOUTH 00°17'22" WEST, A DISTANCE OF 11.30 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,525 SQ.FT. MORE OR LESS

CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
ENVIRONMENTAL CONSULTING
3401 SW 72ND AVE., PALM CITY, FLORIDA
P.O. BOX 2533, PALM CITY, FL 34991
PH.(772)283-2977 EMAIL SURVEYSBYFENEX@GMAIL.COM
LICENSED BUSINESS # 6858

FLORIDA REGISTRATION #3102
CHRISTIAN FENEX

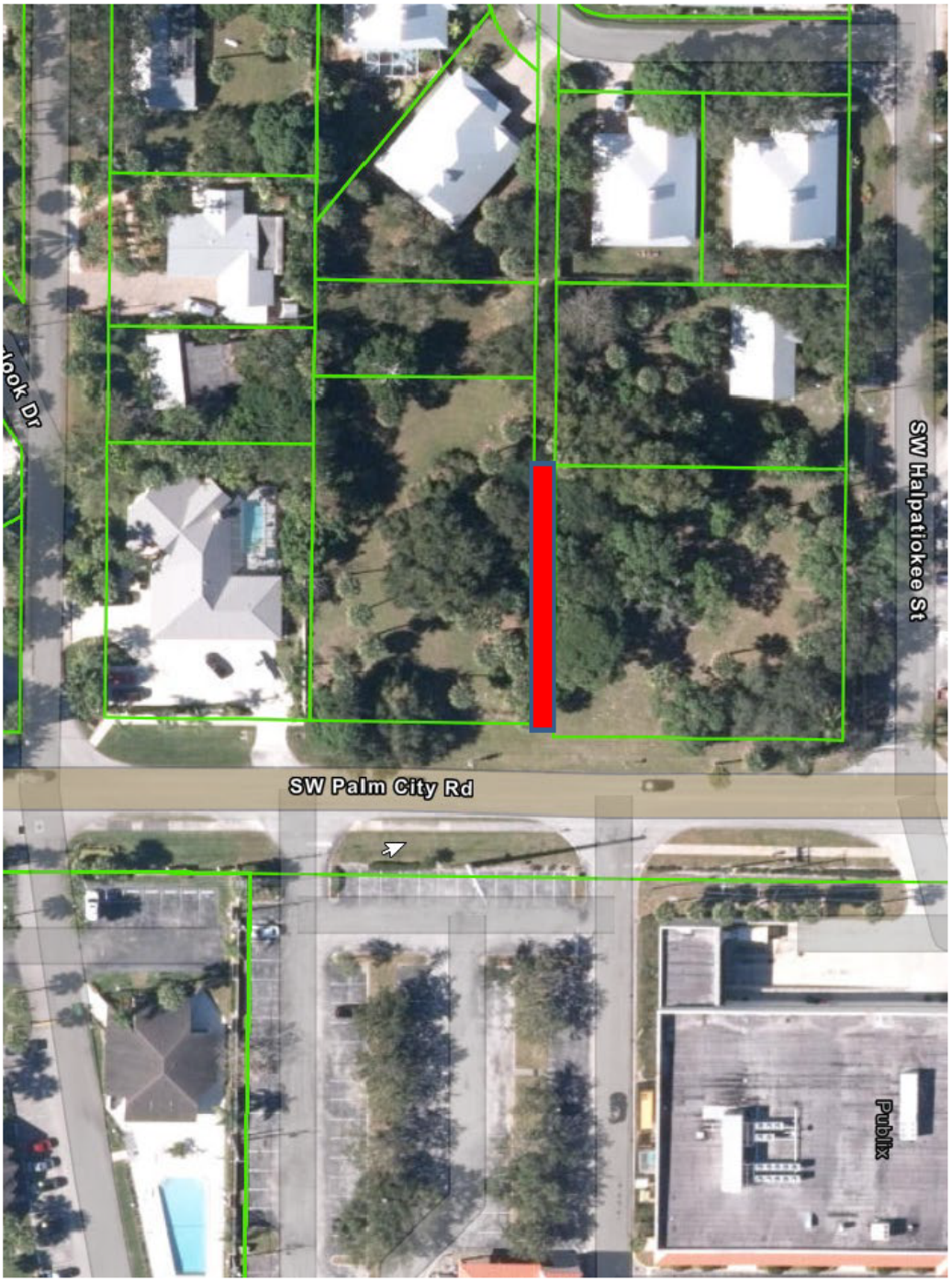
NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

DRAWING DATE	F.B.	PG.	SCALE	W.O.#
01/07/2022	folder		1" = 30'	219051

SHEET 1 OF 1

SKETCH NO. 219051_ALLEY
DESCRIPTION

Exhibit "B"



AN APPRAISAL OF

A 1,525 SF RIGHT OF WAY ABANDONMENT FOR THE PALMETTO CALLE TOWNHOME PROJECT

LOCATED BETWEEN
924 SW PALM CITY ROAD & 501 HALPATIOKEE STREET
STUART, FL 34994

PREPARED FOR
MR. NICOLAS CALLE
ASSET MANAGER
SEAHORSE CAPITAL
12917 MIZNER WAY
WELLINGTON , FL 33414

Date of Valuation: July 23, 2021
Date of Report: February 8, 2022

By:

CRE VALUATION SERVICES
100 SW ALBANY AVENUE
SUITE 200
STUART, FL 34994

CRE Job#3745772180

February 8, 2022

Mr. Nicolas Calle
Seahorse Capital

Re: A 1,525 SF Right of Way Abandonment for the Palmetto Calle Townhome Project Located between 924 SW Palm City Road & 501 Halpatiokee Street Stuart, FL 34994

We have performed an appraisal on the above referenced property, the conclusions of which are set forth in the attached Summary Report. The type of value sought in our appraisal of the subject was a market value opinion of the property using the "across the fence method" as of July 23, 2021 subject to the general assumptions and limiting conditions cited herein.

The subject property is a 1,525 square foot right of way abandonment situated between two parcels located at 924 SW Palm City Road and 501 Halpatiokee Street in Stuart, Florida. Situated along the west side of SW Palm City Road between SW Halpatiokee Street and SW Riverview Street, the right of way abandonment bifurcates the proposed Palmetto Calle Townhome project containing (13) proposed townhomes. We previously appraised the subject right of way abandonment in August of 2021 utilizing a survey which stated the right of way abandonment contained 2,032 square feet. The client has provided us with an updated survey which states that the right of way abandonment contains 1,525 square feet which is utilized in the report herein.

Currently, the subject is not known to be under contract and is not listed for sale.

The subject property is an owner/user property and is not encumbered by any arms-length lease but as a right of way is encumbered. We have assumed the subject is available for assemblage and have appraised the subject as unencumbered within the report herein. Therefore, the right of ownership appraised herein are that of the Fee Simple Estate

This report is intended for use only by Seahorse Capital and use by others is not intended by CRE Valuation Services. This report's intended use is to provide an opinion of Market Value of a right of way that bifurcates the site using the "across the fence" methodology only and is not intended for any other use. The intent of this report is conformance with the Ethical Standards of the Appraisal Institute as well as meeting with the standards of USPAP.

In view of the following facts and data in conjunction with this appraisal, it is the opinion of CRE Valuation Services that the market value "as is" of the Fee Simple interest in the property using the "across the fence" methodology as of July 23, 2021, and subject to the general assumptions and limiting conditions, was:

$14,500

Hypothetical Conditions and Extraordinary Assumptions –

We were provided with the Palmetto Cove Site Development Plans, Abandonment Application Package, and a Boundary Survey for the Palmetto Cove project as well as the right of way. We have relied on this information within the report within. We have assumed the subject is available for assemblage and have appraised the subject as unencumbered within the report herein utilizing the across the fence methodology. If we are provided with any data to the contrary, we retain the right to amend this appraisal and the value found herein.

The estimated reasonable marketing period for the subject at the indicated value is six (6) months.

COVID-19 Statement: The analysis in this appraisal has specifically considered the market conditions pre and post COVID-19 pandemic. Although there have nationally and globally been significant economic impacts, the impacts locally to Martin, St. Lucie and Indian River County have been contained to specific industries and businesses and have not indicated a large scale slow-down in economic activity. Home builders report robust sales activity, higher than pre-Covid. Property managers across Industrial, Office and Retail properties report less than 10% tenant default rates and report most of the default activity is contained to tenants who were struggling prior to the pandemic. Land brokers report that home builders have ramped up land acquisition and this has fueled speculation in land and development. Overall, the Treasure Coast real estate market has not had a significant negative impact from Covid, with the impact largely balancing a market that had been in a state of demand outweighing supply.

After conducting broker interviews and market analysis within the Stuart neighborhood, we have determined that there has been no negative impact on the subject's immediate neighborhood.

Our firm appreciates the opportunity to have performed this appraisal assignment on your behalf. If we may be of further service, please contact us.

Respectfully submitted,

CRE Valuation Services
Nikolaus M. Schroth, CCIM
State Certified General Real Estate Appraiser RZ3704
Managing Partner

CRE Valuation Services
Thomas J. Johnson MAI, SRA
State Certified General Real Estate Appraiser RZ798
Senior Appraiser

Erik Odegard
Registered Trainee Appraiser RI24196

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View of Subject

View of Subject

View of Subject

View of Subject

Property Data

Property	1,525 SF (GLA) Vacant Land 1,525 SF Right of Way Abandonment for the Palmetto Calle Townhome Project 924 SW Palm City Road & 501 Halpatiokee Street Stuart, FL 34994
Date of Valuation	July 23, 2021
Date of Report	February 8, 2022
Interest Appraised/Type of Value	Fee Simple As Is
Owner of Record	924 SW Palm City Road LLC

Physical Data

Land Area	0.035 Acres (1,525 SF)
Zoning/Land Use Classification	R-3/RPUD Stuart
Highest and Best Use As Part of the Whole	
"As if Vacant"	Residential development to maximum density
"As Improved"	N/A

Market Value Indications

"As Is" As Part Of The Whole

Sales Comparison Approach	$14,500
Cost Approach	N/A
Income Capitalization Approach	N/A
Market Value "As Is"	$14,500
Value/(Square Foot)	$9.50
Exposure Time	months
Market Time	6 months

ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal report has been made with the following general assumptions:

1. Any legal description or plats reported herein are assumed to be accurate. Any sketches, surveys, plats, photographs, drawings, or other exhibits are included only to assist the intended user to better understand and visualize the subject property, the environs, and the competitive data. We have made no survey of the property and assume no responsibility in connection with such matters.
2. The appraiser has not conducted any engineering or architectural surveys in connection with this appraisal assignment. Information reported pertaining to dimensions, sizes, and areas is either based on measurements taken by the appraiser or the appraiser's staff or was obtained or taken from referenced sources and is considered reliable. No responsibility is assumed for the costs of preparation or for arranging geotechnical engineering, architectural, or other types of studies, surveys, or inspections that require the expertise of a qualified professional.
3. No responsibility is assumed for matters legal in nature. Title is assumed to be good and marketable and in leased fee unless otherwise stated in the report. The property is considered to be free and clear of existing liens, easements, restrictions, and encumbrances, except as stated.
4. Unless otherwise stated herein, it is assumed there are no encroachments or violations of any zoning or other regulations affecting the subject property and the utilization of the land and improvements is within the boundaries or property lines of the property described and that there are no trespasses or encroachments.
5. CRE Valuation Services assumes there are no private deed restrictions affecting the property which would limit the use of the subject property in any way.
6. It is assumed the subject property is not adversely affected by the potential of floods, unless otherwise stated herein.
7. It is assumed all water and sewer facilities (existing and proposed) are or will be in good working order and are or will be of sufficient size to adequately serve any proposed buildings.
8. Unless otherwise stated within the report, the depiction of the physical condition of the improvements described herein is based on visual inspection. No liability is assumed for the soundness of structural members since no engineering tests were conducted. No liability is assumed for the condition of mechanical equipment, plumbing, or electrical components, as complete tests were not made. No responsibility is assumed for hidden, unapparent, or masked property conditions or characteristics that were not clearly apparent during our inspection.
9. If building improvements are present on the site, no significant evidence of termite damage or infestation was observed during our physical inspection, unless so stated in the report. No termite inspection report was available, unless so stated in the report. No responsibility is assumed for hidden damages or infestation.
10. Any proposed or incomplete improvements included in this report are assumed to be satisfactorily completed in a workmanlike manner or will be thus completed within a reasonable length of time according to plans and specifications submitted.
11. No responsibility is assumed for hidden defects or for conformity to specific governmental requirements, such as fire, building, safety, earthquake, or occupancy codes, except where specific professional or governmental inspections have been completed and reported in the appraisal report.

12. Responsible ownership and competent property management are assumed.
13. The appraisers assume no responsibility for any changes in economic or physical conditions which occur following the effective date of value within this report that would influence or potentially affect the analyses, opinions, or conclusions in the report. Any subsequent changes are beyond the scope of the report.
14. The value estimates reported herein apply to the entire property. Any proration or division of the total into fractional interests will invalidate the value estimates, unless such proration or division of interests is set forth in the report.
15. Any division of the land and improvement values estimated herein is applicable only under the program of utilization shown. These separate valuations are invalidated by any other application.
16. Unless otherwise stated in the report, only the real property is considered, so no consideration is given to the value of personal property or equipment located on the premises or the costs of moving or relocating such personal property or equipment.
17. Unless otherwise stated, it is assumed that there are no subsurface oil, gas or other mineral deposits or subsurface rights of value involved in this appraisal, whether they are gas, liquid, or solid. Nor are the rights associated with extraction or exploration of such elements considered, unless otherwise stated. Unless otherwise stated it is also assumed that there are no air or development rights of value that may be transferred.
18. Any projections of income and expenses, including the reversion at time of resale, are not predictions of the future. Rather, they are our best estimate of current market thinking of what future trends will be. No warranty or representation is made that these projections will materialize. The real estate market is constantly fluctuating and changing. It is not the task of an appraiser to estimate the conditions of a future real estate market, but rather to reflect what the investment community envisions for the future in terms of expectations of growth in rental rates, expenses, and supply and demand. The forecasts, projections, or operating estimates contained herein are based on current market conditions, anticipated short-term supply and demand factors, and a continued stable economy. These forecasts are, therefore, subject to changes with future conditions.
19. Unless subsoil opinions based upon engineering core borings were furnished, it is assumed there are no subsoil defects present, which would impair development of the land to its maximum permitted use or would render it more or less valuable. No responsibility is assumed for such conditions or for engineering which may be required to discover them.
20. CRE Valuation Services representatives are not experts in determining the presence or absence of hazardous substances, defined as all hazardous or toxic materials, wastes, pollutants or contaminants (including, but not limited to, asbestos, PCB, UFFI, or other raw materials or chemicals) used in construction or otherwise present on the property. We assume no responsibility for the studies or analyses which would be required to determine the presence or absence of such substances or for loss as a result of the presence of such substances. Appraisers are not qualified to detect such substances. The client is urged to retain an expert in this field.
21. We are not experts in determining the habitat for protected or endangered species, including, but not limited to, animal or plant life that may be present on the property. We assume no responsibility for the studies or analyses which would be required to determine the presence or absence of such species or for loss as a result of the presence of such species. The appraiser hereby reserves the right to alter, amend, revise, or rescind any of the value opinions based upon any subsequent endangered species impact studies, research, and investigation that may be provided.

22. No environmental impact studies were either requested or made in conjunction with this analysis. The appraiser hereby reserves the right to alter, amend, revise, or rescind any of the value opinions based upon any subsequent environmental impact studies, research, and investigation that may be provided.

23. The appraisal is based on the premise that there is full compliance with all applicable environmental regulations and laws unless otherwise stated in the report; further, that all applicable zoning, building, and use regulations and restrictions of all types have been complied with unless otherwise stated in the report; further, it is assumed that all required licenses, consents, permits, or other legislative or administrative authority, local, state, federal and/or private entity or organization have been or can be obtained or renewed for any use considered in the value estimate.

24. Neither all nor any part of the contents of this report or copy thereof, shall be conveyed to the public through advertising, public relations, news, sales, or any other media, without the prior written consent and approval of the appraisers. This limitation pertains to any valuation conclusions, the identity of the analyst or the firm and any reference to the professional organization of which the appraiser is affiliated or to the designations thereof.

25. Although the appraiser has made, insofar as is practical, every effort to verify as factual and true all information and data set forth in this report, no responsibility is assumed for the accuracy of any information furnished the appraiser either by the client or others. If for any reason, future investigations should prove any data to be in substantial variance with that presented in this report, the appraiser reserves the right to alter or change any or all analyses, opinions, or conclusions and/or estimates of value.

26. Often real estate sales prices and other data, such as rents, prices, and financing, are not a matter of public record. If this is such, although extensive effort has been expended to verify pertinent data with buyers, sellers, brokers, lenders, lessors, lessees, and other sources considered reliable, it has not always been possible to independently verify all significant facts. In these instances, the appraiser may have relied on verification obtained and reported by appraisers outside of our office. Also, as necessary, assumptions and adjustments have been made based on comparisons and analyses using data in the report and on interviews with market participants. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.

27. The appraiser has not made a specific compliance survey or analysis of the property to determine whether or not it is in conformity with various disability requirements. Since the appraiser has no direct evidence relating to this issue, possible noncompliance with the requirements was not considered in estimating the value of the property.

28. This appraisal report has been prepared for the exclusive benefit of the client. It may not be used or relied upon by any other party. Any other party who is not the identified client within this report who uses or relies upon any information in this report does so at their own risk and may be subject to legal action. Written consent must be obtained prior to any third-party use.

29. The dollar amount of any value opinion herein rendered is based upon the purchasing power and price of the US Dollar as of the effective date of value. This appraisal is based on market conditions existing as of the date of this appraisal.

30. The right is reserved by the appraiser to make adjustments to the analyses, opinions, and conclusions set forth in this report as may be required by consideration of additional or more reliable data that may become available. No change of this report shall be made by anyone other than the appraiser or appraisers. The appraiser(s) shall have no responsibility for any unauthorized change(s) to the report.

31. If the client instructions to the appraiser were to inspect only the exterior of the improvements in the appraisal process, the physical attributes of the property were observed from the street(s) as of the inspection date of the appraisal. Physical characteristics of the property were obtained from tax assessment records, available plans, if any, descriptive information, and interviewing the client and other knowledgeable persons. It is assumed the interior of the subject property is consistent with the exterior conditions as observed and that other information relied upon is accurate.

32. The submission of this report constitutes completion of the services authorized. It is submitted on the condition the client will provide reasonable notice and customary compensation, including expert witness fees, relating to any subsequent required attendance at conferences, depositions, and judicial or administrative proceedings. In the event the appraiser is subpoenaed for either an appearance or a request to produce documents, a best effort will be made to notify the client immediately. The client has the sole responsibility for obtaining a protective order, providing legal instruction not to appear with the appraisal report and related work files and will answer all questions pertaining to the assignment, the preparation of the report, and the reasoning used to formulate the estimate of value. Unless paid in whole or in part by the party issuing the subpoena or by another party of interest in the matter, the client is responsible for all unpaid fees resulting from the appearance or production of documents regardless of who orders the work.

33. Use of this appraisal report constitutes acknowledgement and acceptance of the general assumptions and limiting conditions, special assumptions (if any), on which this estimate of market value is based.

Hypothetical Conditions and Extraordinary Assumptions – We were provided with the Palmetto Cove Site Development Plans, Abandonment Application Package, and a Boundary Survey for the Palmetto Cove project as well as the right of way. We have relied on this information within the report within. We have assumed the subject is available for assemblage and have appraised the subject as unencumbered within the report herein utilizing the across the fence methodology. If we are provided with any data to the contrary, we retain the right to amend this appraisal and the value found herein.

We certify that, to the best of our knowledge and belief:

A viewing of the subject site, the improvements and the market area was conducted on July 23, 2021 by Nikolaus Schroth and Erik Odegard.

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this evaluation.
- Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Appraisal Institute and USPAP.
- Erik Odegard provided real property appraisal assistance to the persons signing this certification.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- As of the date of this report the undersigned has completed the requirements of the continuing education program of the Appraisal Institute for members.
- Erik Odegard currently holds the appropriate Trainee License allowing the performance of real estate appraisals in connection with federally related transactions in the state in which the subject property is located, under the supervision of Thomas J. Johnson.
- It is acknowledged that Erik Odegard, Registered Trainee Appraiser RI24196, under the direct supervision of Thomas J. Johnson, MAI, SRA, State Certified General Real Estate Appraiser RZ798, made a significant professional contribution to this evaluation, consisting of participating in the property inspection, conducting research on the subject, competitive markets and comparable data, performing appraisal analyses, and assisting in the report writing, all under the appropriate supervision.
- I, Thomas J. Johnson, MAI, SRA, the supervisory appraiser of a registered trainee who contributed to the development or communication of this appraisal, hereby accepts full and complete responsibility

for any work performed by the registered appraiser trainee named in this report as if it were my own work.

- We previously appraised the subject property in August of 2021.

CRE Valuation Services
Nikolaus M. Schroth, CCIM
State Certified General Real Estate Appraiser RZ3704
Managing Partner

CRE Valuation Services
Thomas J. Johnson MAI, SRA
State Certified General Real Estate Appraiser RZ798
Senior Appraiser

Erik Odegard
Registered Trainee Appraiser RI24196

Property Appraised

1,525 SF Right of Way Abandonment for the Palmetto Calle Townhome Project
Situated between
924 SW Palm City Road & 501 Halpatiokee Street
Stuart, FL 34994

Property Identification

The subject property is a 1,525 square foot right of way abandonment situated between two parcels located at 924 SW Palm City Road and 501 Halpatiokee Street in Stuart, Florida. Situated along the west side of SW Palm City Road between SW Halpatiokee Street and SW Riverview Street, the right of way abandonment bifurcates the proposed Palmetto Calle Townhome project containing (13) proposed townhomes. The location of the subject is ranked as average compared to other properties in the area. Overall, the subject is considered a desirable site within the city of Sturt with close proximity to Downtown Stuart.

Advantages:

- Located within the city of Stuart
- Land use/zoning allow for a variety of residential projects
- Good density at 13 UPA

Challenges:

- Site faces a large Publix shopping center

Type of Value, Intended Use & User of Appraisal

The type of value sought in our appraisal of the subject was a market value opinion "as is" for the fee simple interest in the property of July 23, 2021 utilizing the "across the fence" methodology, subject to the extraordinary assumptions and limiting conditions cited herein.

It is our understanding that this appraisal will be used by our client, Seahorse Capital, for to provide an opinion of Market Value of a right of way that bifurcates the site using the "across the fence" methodology and is not intended for any other use.

Property Rights Appraised

The subject property is an owner/user property and is not encumbered by any arms-length lease but as a right of way is encumbered. We have assumed the subject is available for assemblage and have appraised the subject as unencumbered within the report herein. Therefore, the right of ownership appraised herein are that of the Fee Simple Estate

Scope of Appraisal/Extent of the Data Collection Process

This appraisal considered all three approaches to value, (1) Sales Comparison Approach, (2) Income Capitalization Approach and the (3) Cost Approach. The procedures and methodologies employed in these approaches are outlined in the Appraisal Process section of this report. Following is a summary of steps completed by the appraisers in this assignment.

1. The subject was viewed on July 23, 2021. The surrounding area and influences were also viewed at this time. Specific information relative to the subject property was provided by representatives of the owners which included Palmetto Cove Site Development Plans, Abandonment Application Package, and a Boundary Survey for the Palmetto Cove project.
2. Gathered information from various secondary data sources regarding regional and local economic and demographic data specifically relating to the regional, city and neighborhood analyses.
3. Analyzed trends in the market through confirmation of comparable sales. Market participants active in this market were also interviewed.
4. Reviewed a plat involving the subject property.
5. Analyzed the highest and best use of the site "as if vacant" and "as improved". Supply, demand, and absorption potential, as well as construction costs and required yields, were analyzed relative to the subject market and specifically the subject property. Alternative uses were also analyzed relative to their financial feasibility.
6. Confirmed recent sales of comparable land sales throughout the region, if applicable.
7. Analyzed comparable rentals, if applicable. This data was utilized to form a market rent opinion in the Income Capitalization Approach.
8. A Reconstructed Operating Statement was prepared with projected rent and projected expenses, if applicable.
9. Analyzed the data to arrive at conclusions of value via all applicable approaches to value.
10. Reconciled the results of these analyses into a probable range of value, and finally, a market value conclusion as of July 23, 2021 on an "Fee Simple" basis.
11. Opined to the exposure time and marketing period inherent in the value opinions.
12. Prepared a Summary Report.

History of the Subject Property

The parcel to the north and south of the subject property was purchased by the current owner, 924 SW Palm City Road LLC, from Lynn K Fessler for the sum of $350,000 according to public records. The requested abandonment will provide private access to the Palmetto Cove residents and will protect existing private residences to the west from unexpected and unnecessary intrusion of vehicles from Palm City Road.

Currently, the subject is not known to be under contract and is not listed for sale.

CRE has requested from the property contact copies of all pertinent information related to the property. A copy of the information request is contained in the addendum of this report. CRE reserves the right to amend this report, the scope of work and the engagement letter terms should additional information be provided after the date of Report Date herein.

Competency

The appraisers involved in this assignment have, collectively, considerable experience in appraising commercial properties within the region. The appraisers have historically been engaged in appraisal work in the geographical area of the subject property. The company maintains a database on this area for similar properties. Further, we are versed in the analytical methods typically employed in appraising this property type. In summary, we believe we have adequate knowledge of the property type, geographical location, and analytical methods necessary to comply with the competency requirements of USPAP.

Introduction

The subject site is a mostly rectangular shaped right of way located along the west side of SW Palm City Road between SW Halpatiokee Street and SW Riverview Street in Stuart, Florida. Zoned R-3 with a future land use of RPUD by Stuart, the right of way contains 0.035 acres or 1,525 square feet and does contains minimal frontage along SW Palm City Road, which is an arterial roadway within the neighborhood. The parcels bordering the subject are as follows:

North – Multi-Family Residential
South – Single-Family Residential
East – Publix Shopping Center
West – Single-Family Residential

Martin County Neighborhood Analysis

Martin County, Florida is located on Florida's Treasure Coast and contains a total area of 753 square miles (1,950 km^2) of which 543 square miles (1,410 km^2) is land and (27.8%) is water. It is the fifty-third largest county by total area. Martin County contains five incorporated cities including Stuart, Jupiter Island, Sewall's Point, Ocean Breeze and, as of December 2017, Indiantown. Of the five incorporated cities, Stuart is the largest. Unincorporated areas in Martin County include Hobe Sound, Hutchinson Island, Port Salerno, Jensen Beach and Rio.

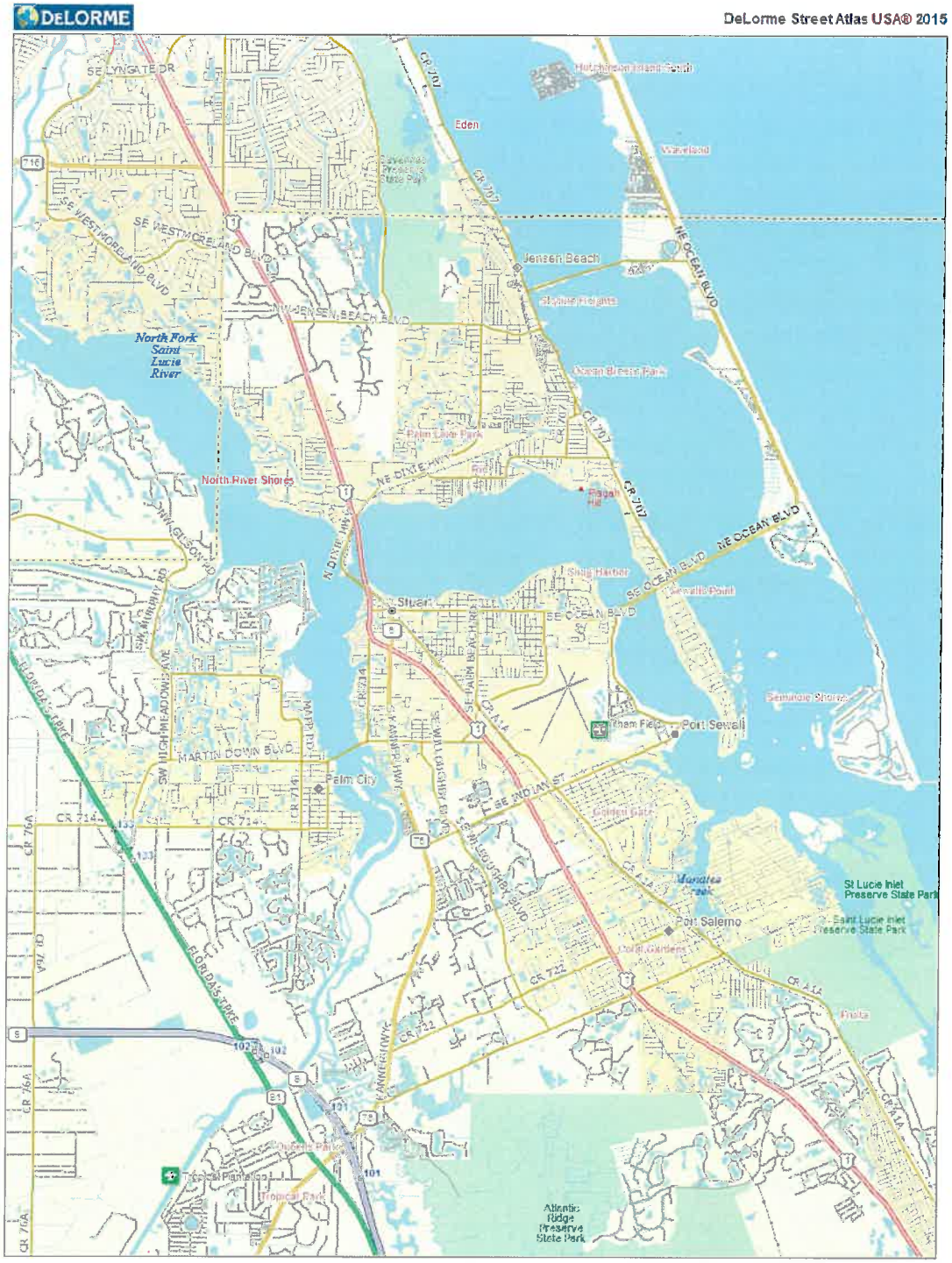
Neighborhood Access

There are nine (9) airports located in Martin County, two (2) are public, seven (7) are private. The two closest major airports are West Palm Beach International Airport, approximately 30 miles to the south and Melbourne International Airport, approximately 60 miles to the north. Witham Field Airport, one of the two public airports is located in Stuart. In June 2018, the construction of 3,210 square foot U.S. Customs Facility at Witham Field was completed. The project planning began in September 2010 during the Airport Master Planning Process with the Martin County Board of County Commissioners. The facility processes international travelers arriving in Martin County via aircraft and marine vessels and allows Martin County boaters, pilots, residents, and visitors to clear U.S. Customs without having to travel to Fort Pierce or West Palm Beach.

A significant north/south road in the area is U.S. Highway 1 (aka Federal Highway) which is the main north/south road running through Stuart. Another main road, Kanner Highway (State Road 76), is the principal Interstate 95 gateway to the Stuart area. There are two bridges connecting south Martin County to North Martin County; the old Roosevelt Bridge, a draw bridge and the new Roosevelt Bridge. Both are still operable.

The primary east/west arteries are Salerno Road and Cove Road in the southern part of Stuart, Monterey Road and Indian Street in the central area and East Ocean Boulevard in the north. Indian Street is a four-lane divided highway, which is a collector street for subdivisions like Willoughby and Fisherman's Cove. It runs between Kanner Highway and Saint Lucie Boulevard, east of Stuart. Monterey Road, a four-lane divided artery between U.S. Highway 1 and Mapp Road, provides access to Martin Downs Boulevard and Florida's Turnpike. East Ocean Boulevard (A1A) connects Dixie Highway and U.S. Highway 1 with Hutchinson Island and communities along the Atlantic Ocean in northern Martin County. Monterey Road and Indian Street are the only two roads that offer a connection between Stuart and Palm City

These arteries have traffic characteristics that are similar to one another, but all have lower traffic flows than the U.S. Highway 1 corridor. Each of these arteries are developed with a variety of commercial uses including neighborhood shopping centers, smaller strip type and self-standing retail centers, restaurants, professional office buildings, gasoline service stations, and convenience stores. There are also some uses exclusive to the neighborhood like motels, boat yards, churches, and cemeteries.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MARTIN DOWN BLVD
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Growth Management

The City of Stuart is the primary location of most employment in Martin County. It also has the greatest concentration of residential, commercial and industrial development in the area. Employment consists of a variety of small-to-medium sized commercial ventures with no large-scale employers aside from the school district, hospitals and other institutions. Industries making up Stuart and Martin Counties employment base consist of Aviation tied to Witham Airfield, Boat Manufacturing located primarily in the SPS and Gran Park Industrial areas with ties to the Manatee Pocket and trades and construction which flows with the residential housing market in the area. Banking has made a rebound with the recent economic expansion and Seacoast Bank is the local bank, founded in Martin County in 1926 with a Market Cap of $2.17 billion and growing through acquisitions of other banks. The professional and medical sectors also contribute significantly to employment within the county, as the age and income demographics lend the county to wealth management and medical needs.

Cleveland Clinic, formerly Martin Health Systems, has several hospitals in various locations throughout Martin and Saint Lucie Counties. Its primary campus is located just north of East Ocean Boulevard along the south shore of the St. Lucie River within Downtown Stuart. At the end of 2017, city commissioners approved a development agreement allowing the hospital to raise some of its buildings above the city of Stuart's four-story height limit. Another outpatient facility is located at Salerno Road and Willoughby Boulevard adjacent to the Indian River State College Campus. Tradition in Port St. Lucie is home to Cleveland Clinic's Tradition Medical Center which opened in 2013. Expansions that were completed in 2018 and include expansion of the maternity and neonatal ICU, a 12-bed progressive care unit and a second medical office building that will contain an outpatient surgery center and pharmacy. In the beginning of 2018, a new pediatric unit was added as well. The complete campus contains a total of nine stories and 180 patient rooms and was recently expanded to include the former VGTI building to the south of the campus. An outpatient facility was completed at the corner of Kanner Highway and Indian Street in 2019 and contains 85,872 square feet with 90 exam rooms, 6 procedure rooms and more than 50 offices.

Martin County School District, also referred to officially as the School Board of Martin County, is a public-school district that covers Martin County, Florida. This School District is a top-rated school district in Florida with excellent testing scores and graduation rates. There is a total of 20 schools administered by the Martin County School District which include three public high schools, five middle schools and twelve elementary schools. In 2019 the school district purchased the former TC Palm Building after the paper was sold again and staffing was significant cut in the region.

Martin County historically has embraced a controlled to low growth attitude. Land use and zoning changes are difficult to obtain and preserve requirements are strictly enforced, with no provision for mitigation of wetlands, which encumber much of the remaining vacant land within the urban service boundary. The overall climate is negative for new development but represents a positive for existing properties because of the time and cost involved in planning new construction in Martin County. In the City of Stuart, land

use and zoning changes are more easily obtained. Most of the development occurring today in Martin County has been achieved through annexation into the City of Stuart.

Development Activity

Since 2017 there has been a significant uptick in development activity in Martin County, mostly within the city of Stuart. The following are some of the more impactful developments that can be seen in the market today:

- Axis Stuart is a 284 unit Luxury apartment complex on Federal Highway near the Treasure Coast Mall developed by Thompson Thrift development, the project has been completed and is in lease up. d
- Farrell Development is nearing completion on a new storage facility on Jensen Beach Boulevard, just west of the intersection with Savannah Road.
- Seawalk is a single family home community developed on a portion of the former Ocean Breeze property west of the railroad tracks. DR Horton is the builder and the community is being developed under their DR Horton brand.
- The West Jensen PUD is in its final phase of single family build out. DR Horton is also the sole builder here, building under their Freedom Homes Brand. The corner of Federal Highway and Goldenrod Road is the last section of the PUD and is proposed for a commercial power center. Space is being advertised but there has been no development to date.
- Carmax completed a new facility in Jensen Beach along Jensen Beach Boulevard in 2018.
- Rooms-to-Go Patio completed a new store just south of the mall on one of the last remaining vacant parcels on the Federal Highway corridor near the mall.
- Savonna at Stuart is a 182 unit 55+ rental community being developed behind Rooms to Go Patio. The project was approved in 2018 and is now under construction with a 2022 completion anticipated.
- A Home 2 hotel and medical office building was developed at the corner of Baker Road and Federal Highway in 2019.
- The New Avonlea PUD has two projects approved, a 69 unit cottage rental community being developed by New Urban Communities and a 62 lot community to be built by KHovnanian Homes. Two apartment communities and three commercial parcels remain undeveloped but in the planning stages at this site.
- Savannah Trace apartments was approved by the City of Stuart and the land closing has occurred. Ground breaking is scheduled for spring 2021. The site is at the intersection of Savannah Road and Baker Road and will be home to 285 market rate apartment units.
- To the north, also along Savannah Road is an 197 unit apartment community currently under construction.
- Langford Landing is a community of single family homes being developed on the former Langford Estate. The community suffered a slow start but Meritage Homes seems to be realizing a better pace of sales and should be built out by 2022.

- The Harbor Chase ALF was completed in 2020 and is in lease-up. The 134 unit facility is located just north of the Roosevelt Bridge.
- In Downtown Stuart, New Urban Communities developed the 49-unit Azul project, completing the development in 2019 and selling the project in 2020 for $15.5 million or $316,326 per unit. The site is on a land lease with the City of Stuart.
- Pulte Homes has broken ground on the Ocean Cove townhome community on East Ocean Boulevard just before the St. Lucie River and ten cent bridge. The community will feature 80 townhomes for sale as 55+ age restricted community.
- The former Sundance Marine sales center at 700 SW Federal Highway was redeveloped as a 115,000 square foot storage facility after plans for a Racetrac gas station were rejected by the city.
- WaWa has constructed two locations in the City, both by demolishing bank buildings, with another under construction further south on US 1 at Cove Road.
- Smaller commercial developments within the city include a Culvers, Waters Edge dermatology, Barron Shoppes a small retail center, a car was at the corner of Monterey Road and two more proposed car washes, Racetrac, Autozone, Taco Bell, Mid Florida Credit Union, Circle K.
- The Dubner Estate sold their land holdings in the industrial area along Commerce Avenue and east of Federal to Ted Glasrud. Since the sale, Glasrud has sold several parcels. Hogg technologies expanded their facility to a 110,000 square foot footprint, Market Place Business Centre was constructed consisting of three warehouses 57,000 square feet of area and two residential projects, a 324 unit apartment complex by AHS and a townhome community by Meritage Homes, are all now being constructed on land formerly owned by Dubner. Glassrud is also under construction on a self storage facility.
- A Comfort Suites was constructed behind Checkers at Federal Highway and Fisher Street.
- Konover South has developed Stuart Landings, located at the southeast corner of Miami Street and Federal in front of the Super Walmart. The site, constructed in 2016, is home to an Aldi, Mattress Firm, Aspen Dental and T-Mobile. An additional outparcel is approved for a drive thru out restaurant and additional retail space.
- The Audi/Infinity Campus was expanded to include a Maserati/Alfa Romeo Dealership.
- To the west, between I-95 and Florida's Turnpike in the Treasure Coast Commerce Center, there has been several new industrial buildings constructed. A mix of owner/user and lease space has been developed. In total this amounts to about 100,000 square feet plus in warehouse/flex space. Proposed by FLF Properties is a 96,231 square foot industrial flex project south of Kanner Highway.
- ALF development in south Stuart consists of three facilities between 2017 and 2020. Two proposed projects were put on hold in 2020 due to Covid, but are more recently being brought back to life by the property owners.
- Publix has broken ground on a site long owned by Publix at the corner of Osprey and Federal Highway.
- Micheal Jordan Developed the Grove 23 private Golf Club on Bridge Road west of town.

Many projects throughout Martin County have been proposed and are still in the beginning stages, many have not even broken ground yet. Amongst those projects includes a 5.3-square-mile, mixed-use development in western Palm City known as Pineland Prairie. The proposed project will consist of 4,200 new residence, 150,000 square feet of retail space, an industrial district and approximately 70% of the property will be left as open space. In April 2020, city commissioners voted 4-1 in favor of the project, and efforts are currently being made to change the zoning. Also proposed in Stuart is the addition of a Costco which initially submitted an application to construct the store in Palm City but subsequently withdrew the application. The new Costco, should the plans be approved, will be located on Kanner Highway, north of Indian Street.

The retail market to the south of the Roosevelt Bridge contains a number of large retail centers that have developed over the past approximate 15-to-20 years. The expansion of the Stuart Centre, located along U. S. Highway No. 1 was taken to completion in 2016. Major anchor tenants currently include a Homegoods, TJMaxx, Office Depot and Petco with several outparcels containing drive thru fast food restaurants and banks located directly along US Highway 1.

The approximate two-mile stretch of U. S. Highway No. 1, south of the Treasure Coast Square Mall to the Roosevelt Bridge, has experienced the greatest ongoing retail development. 20+/- acres of land at the corner of Goldenrod Road and US 1 in Jensen Beach is proposed for development of 175,000 square feet of retail space by developer Atlantic Retail. Both anchor space and outparcels are available for lease. Windemere Point consists of 9.16 acres and features a 40,200 square foot freestanding LA Fitness. Other tenants include a Dunkin Donuts and an Elements Fitness.

Housing

Residential single-family and multiple-family housing is scattered throughout the greater neighborhood. There is a wide variety and mixture of age and quality of housing ranging from older single-family homes to contemporary waterfront residences that cost more than $1,000,000+.

Monthly Market Detail - January 2021
Single Family Homes
Martin County

FloridaRealtors

Summary Statistics	January 2021	January 2020	Percent Change Year-over-Year
Closed Sales	174	144	20.8%
Paid in Cash	73	66	10.6%
Median Sale Price	$449,900	$406,375	10.7%
Average Sale Price	$727,707	$499,969	45.6%
Dollar Volume	$126.6 Million	$72.0 Million	75.9%
Median Percent of Original List Price Received	97.0%	94.3%	2.9%
Median Time to Contract	25 Days	52 Days	-51.9%
Median Time to Sale	68 Days	104 Days	-34.6%
New Pending Sales	310	253	22.5%
New Listings	250	320	-21.9%
Pending Inventory	484	310	56.1%
Inventory (Active Listings)	403	926	-56.5%
Months Supply of Inventory	1.8	4.6	-60.9%

Residential development stalled in the 2008 to 2011 time period following the Great Recession. During that time Tres Belle by Kolter was the only open project with models and homes. The Tres Belle Estates in Stuart FL is a Kolter Homes development of approximately 167 homes located just east of Kanner Highway on Cove Road in Stuart FL. The first homes were completed in 2007 and construction and sales of new homes continue to this date (March 2018). Villa Franka Homes constructed a gated community along Kanner Highway containing 16 custom built single-family homes. The last house was constructed in 2016, however development in the neighborhood is still on going. Banayn Bay was purchased by Chesapeake Partners and finished with a development take down agreement with NVR Ryan Homes. The project is nearing build out.

There is limited housing supply in Martin County outside of the City of Stuart as there is limited land within the urban services boundary suitable for new development. Within residential subdivisions at the upper end of the scale are single-family residences in the newer golf course subdivisions and communities, such as Willoughby Golf Community. Other subdivisions in the neighborhood vary widely in desirability. St. Lucie Estate is the largest single-family residential area in the neighborhood with mid-range prices. Also, in the area are older subdivisions such as Fisherman's Cove, Rustic Hills and Rocky Point.

Conclusion

The subject's close proximity to Historic Downtown Stuart would make the property desirable if exposed to the market. There have been recent redevelopments of small townhome properties within the Stuart market area within the past year. Broker interviews are reporting increased demand for residential projects within the City of Stuart. The subject's City of Stuart zoning designation is also highly desirable when compared to a Martin County Zoning designation and allows more flexibility in regards to development.

PRIMARY MARKET ANALYSIS

Market Area Map

General Description:

The subject is located in close proximity to Historic Downtown Stuart in a desirable area of town with uses being mostly residential in nature. There are several projects taking place in the downtown Stuart area presently and several improvements have already been completed. The subject is not located within the City of Stuart CRA.

Access:

The subject property is located along SW Palm City Road, a local arterial roadway providing access between two major commercial corridors SW Federal Highway and SW Monterey Road. that shares a non-signalized intersection with SE Ocean Boulevard and SW Monterey Road are the primary east/west commercial corridors within the neighborhood with SW Federal Highway, SE Dixie Highway and S Kanner Highway being the primary north/south commercial corridors.

Land Use Patterns:

The City of Stuart has always had a more pro-growth and development outlook compared to Martin County. Many developers and owners that purchase property zoned by Martin County will apply to have their properties annexed into the zoning jurisdiction of the City of Stuart.

Life Stages and Trends:

Stability to Growth. There have been numerous projects recently constructed within nearby Downtown Stuart and the greater market area, with more projects proposed and currently underway.

Public Facilities/Services:

The subject is adequately served by public utilities.

Opportunity Zone:

The subject does not lie within an opportunity zone.

Conclusion:

The subject is considered to have an average location within the City of Stuart, being situated along SW Palm City Road and sits in close proximity to SW Federal Highway and SW Monterey Boulevard. The subject property is not located within the City of Stuart CRA but is situated within the city limits and will benefit from the upward growth trend in the neighborhood. The subject's close proximity to Historic Downtown Stuart is desirable to investors and users alike.

Land Description

Land Area	0.035 Acres; 1,525 SF
Primary Road Frontage	SW Palm City Road
Type of Road	Arterial
AADT	1
Secondary Road Frontage	Halpatiokee Street
Type of Road	Arterial
Number of Parcels	1
Shape	Rectangular
Corner	No
Topography	grade and typically level
Functional Obsolescence	None Noted

Zoning & Land Use

Zoning	R-3
Future Land Use	RPUD
Zoning Jurisdiction	Stuart
Is the Property in a CRA	No

Site Ranking

General Site Ranking	Average
Appeal Ranking	Average
Frontage to Depth Ranking	Average
Size/Shape/Dimension Ranking	Average
Access Ranking	Average
Exposure Ranking	Average

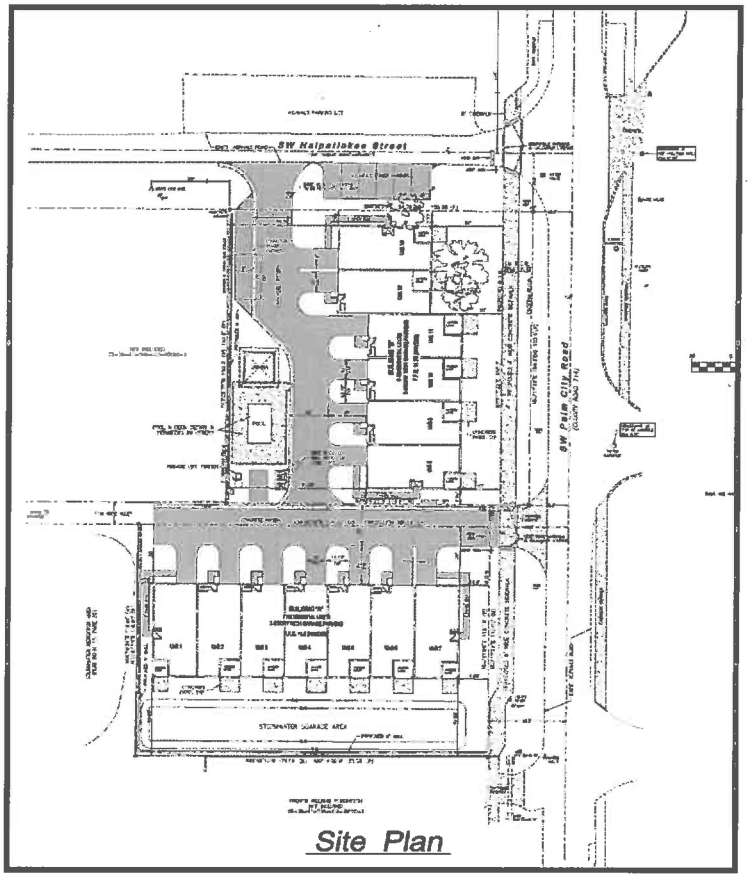
Utilities

Water	City of Stuart
Sewer	City of Stuart
Electricity	FP&L

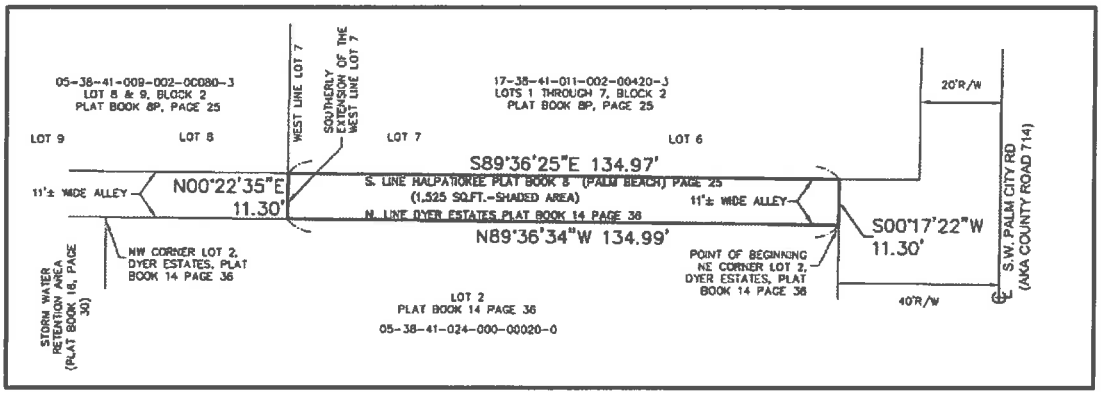
General Description/Conclusions

The subject property is a 1,525 square foot right of way abandonment situated between two parcels located at 924 SW Palm City Road and 501 Halpatiokee Street in Stuart, Florida. Situated along the west side of SW Palm City Road between SW Halpatiokee Street and SW Riverview Street, the right of way abandonment bifurcates the proposed Palmetto Calle Townhome project containing (13) proposed townhomes.

Overall, the subject as part of the whole is considered average when compared to similar sites within the competitive market area. Furthermore, given the nature of the surrounding uses, the location, and all physical characteristics, the subject would be considered to have average appeal if exposed to the market. Generally rectangular in shape, the subject's tract as part of the whole shape does not present a detriment to the site and is generally conducive to development.



Palmetto Cove Site Plan



Boundary Survey

Soil/Subsoil Conditions

A current geotechnical analysis describing the soil and subsoil conditions at the subject was not provided. Soil conditions appear to be conducive to development of the subject to its highest and best use. The appraisers assume there are no hidden or unapparent conditions of the property, soil, subsoil, or structures that would render the subject more or less valuable. Proper design and careful installation are needed to overcome any limitations of this soil. The appraisers assume no responsibility for such conditions, or for engineering which might be required to discover such conditions.

Hazards/Nuisances

CRE Valuation Services was not provided a current Environmental Site Assessment (ESA) concerning the subject. No apparent hazards or nuisances, such as smoke and hazardous materials, were noted on or near the subject upon inspection. Unless otherwise stated in this report, the existence of hazardous materials, which may or may not be present on the property, was not observed by the appraisers. We have no knowledge of the existence of such materials on or in the property. The appraisers, however, are not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, radon, mold and other potentially hazardous materials may affect the value of the property. The value opined is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for such conditions or for any expertise or engineering knowledge required to discover them.

Legal-Government Factors

Legal Description

LEGAL DESCRIPTION

A PORTION OF THE 11 FOOT WIDE ALLEY, AS SHOWN ON THE PLAT OF DYER ESTATES AS RECORDED IN PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF LOT 2, DYER ESTATES, PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE NORTH 89°36'34" WEST ALONG THE NORTH LINE OF SAID LOT 2, DYER ESTATES, A DISTANCE OF 134.99 FEET, MORE OR LESS, TO THE SOUTHERLY EXTENSION OF THE WEST LINE OF LOT 7, BLOCK 2, PLAT OF HALPATIOKEE PARK, AS RECORDED IN PLAT BOOK 8, PAGE 25, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; THENCE NORTH 00°22'35" EAST, ALONG SAID SOUTHERLY EXTENSION OF SAID WEST LINE LOT 7, BLOCK 2, A DISTANCE OF 11.30 FEET TO A POINT ON THE SOUTH LINE OF SAID PLAT OF HALPATIOKEE PARK; THENCE SOUTH 89°36'25" EAST ALONG SAID SOUTH LINE PLAT OF HALPATIOKEE PARK, A DISTANCE OF 134.97 FEET; THENCE SOUTH 00°17'22" WEST, A DISTANCE OF 11.30 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,525 SQ.FT. MORE OR LESS

Development Restrictions/Easements

We assume there are no easements or encumbrances detrimental to development of the site.

Restrictions

We are unaware of any restrictions that would preclude development and/or mitigate achievable density of the subject; however, updated title work and a survey are recommended to confirm such.

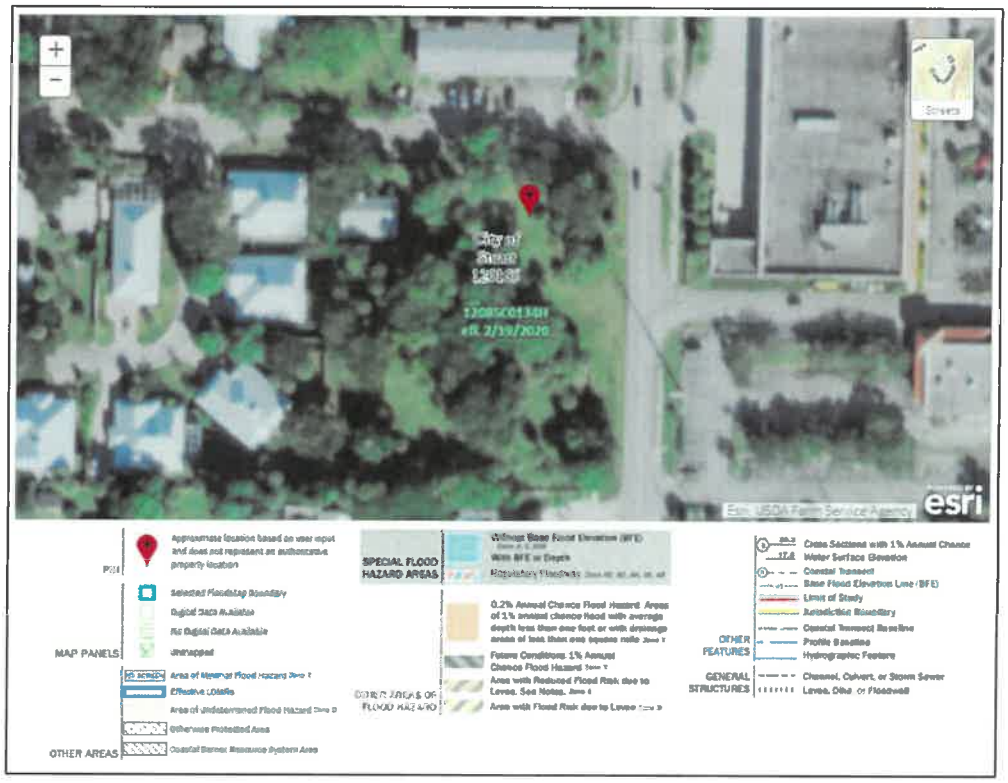
Land Planning and Land Use Law is beyond the scope of this assignment. Any assumptions herein related to the development potential of a particular site, and the implications of such assumptions on

value, are subject to amendment should CRE be provided with alternate information from a Land Planner and/or Land Use Attorney.

Zoning/Land Use

The subject is zoned R-3 with a future land use of RPUD by the city of Stuart. We have not been provided with a zoning determination letter specific to the subject property. As such, we have relied upon observations noted during our site visit and Municode. Should a zoning determination letter provide an opinion which contradicts any of the assumptions herein, we retain the right to amend this report and the value estimated herein.

Flood Zone and Census Tract



Census Tract: 7.00

The above data was taken from publicly available information on FEMA's website and GEO CODE website. We do not warranty this information to be accurate. A surveyor should be consulted before relying upon this information.

Analysis as if Vacant

In formulating an opinion of optimum use of a tract of land, it is important that a careful analysis be made of the property, its size, shape and physical characteristics, topography, zoning, market conditions, and demand for the various legally permitted uses, and other economic factors and conditions. The subject parcel as itself is ot developable; however, the site is valued "across the fence" as part of the adjoining property. The analysis considers the subject as part of the whole.

Legally Permissible

Except for a legally nonconforming property, the first step in determining what is legally permissible is to analyze private restrictions, zoning, building codes, historic district controls and environmental regulations. The subject site is zoned R-3 with a future land use of RPUD by the local zoning authority. This zoning district allows for a variety of residential development.

Physically Possible

The physical characteristics of a site can affect the uses. These characteristics include: (1) size; (2) shape; (3) terrain or topography; (4) soil condition; (5) utilities; (6) access characteristics; and (7) surrounding land uses. Each of these site characteristics was described and discussed in the Site Analysis section of this report. A number of uses are physically possible on the subject site. The 1,525 SF site in conjunction with the parcel to the north and the south could accommodate a variety of single or multi-family development.

Financially Feasible

In determining which uses are legally permissible and physically possible, an appraiser eliminates some uses from consideration. Then the uses that meet the first two criteria are analyzed further. If the uses are income-producing, the analysis will study which are likely to produce an income or return equal to or greater than the amount needed to satisfy operating expenses, financial obligations, and capital amortization. All uses that are expected to produce a positive return are regarded as financially feasible.

Within the Stuart market, there has been an increase in smaller residential projects such as the subject project Palmetto Cove. Over the last couple years, there have been several townhome projects developed within the City of Stuart including both waterfront and non-waterfront projects. The most financially feasible use of the subject site is residential development to maximum density.

Maximally Productive

Among financially feasible uses, the use that provides the highest rate of return or value (given a constant rate of return) is the highest and best use. Given the legally permissible and physically possible discussions set forth above, the most maximally productive use of the site is residential development to maximum density.

Conclusion

In our opinion the highest and best use "as if vacant" would be residential development to maximum density.

Analysis as Improved

Conclusion

N/A Vacant Land

Introduction

he following table illustrates the current estimated assessed value and associated taxable value to the improvements for the subject. The value was estimated using the county website and comparing that with the actual tax liability paid by the owner. Utilizing the most recent tax rate and calculating that on 100% of the assessed value, an estimate for property taxes is illustrated as follows. Where applicable, non-advalorm taxes are shown.

Taxes for the two parcels owned by 924 SW Palm City Road LLC were believed to be paid as of the effective date.

The subject property has not been assessed as the subject is a right of way. It is noted that if the right of way is abandoned, the subject will incur taxes.

Overview

The three traditional approaches to valuing improved properties are:

1. Sales Comparison Approach - a comparison of the property appraised with reasonable similar, recently conveyed properties for which the price, terms and conditions of sale are known.

2. Income Capitalization Approach - the processing of a projected net income into a valuation estimate via one or more capitalization techniques.

3. Cost Approach - an estimate of the replacement cost of all structural improvements as if new, less loss in value attributable to depreciation from all causes plus the value of the land as if vacant.

The Sales Comparison Approach is founded upon the principle of substitution that holds that the cost to acquire an equally desirable substitute property without undue delay ordinarily sets the upper limit of value. At any given time, prices paid for comparable properties are construed by many to reflect the value of the property appraised. The validity of a value indication derived by this approach is heavily dependent upon the availability of data on recent sales of properties similar in location, size, and utility to the appraised property.

The Income Capitalization Approach is based on the principle of anticipation that recognizes the present value of the future income benefits to be derived from ownership in a particular property. The Income Approach is most applicable to properties that are bought and sold for investment purposes and is considered very reliable when adequate income and expense data are available. Since income producing real estate is most often purchased by investors, this approach is valid and is generally considered the most applicable when the property being appraised was designed for, or is easily capable of producing a rental income.

The Cost Approach is based on the premise that the value of a property can be indicated by the current cost to construct a reproduction or replacement for the improvements minus the amount of depreciation evident in the structures from all causes plus the value of the land and entrepreneurial profit. This approach to value is particularly useful for appraising new or nearly new improvements.

The Appraisal Process is concluded by a review and re-examination of each of the approaches to value that was employed. Consideration is given to the type and reliability of data used, the applicability of each approach to the type of property being appraised and the definition of value being sought.

Subject Specific

Each property has a type of buyer or buyers who would be most attracted to the property and have the greatest motivation to pay the highest price for the property. This is not to say specific buyers would pay more for the property than market but rather, to identify the type of buyer who would gain the most utility from a property. The subject is a right of way which is considered vacant land property and the typical buyer profile for the subject would be that of an owner/user .

The Cost Approach was not developed as the subject is vacant land and the approach is not applicable.

The Sales Comparison Approach is considered the only indicator of value in the valuation of vacant land such as the subject. Therefore, it is the only approach developed herein.

The Income Approach is not developed herein due to the fact that the subject is vacant land and is not leased. Although land leases can be found within the subject market, it has been determined that the subject would not typically be leased or purchased for the income potential of the site for lease.

Introduction

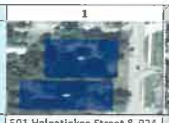
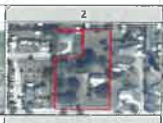
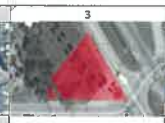
The Sales Comparison Approach is premised upon the Principle of Substitution - a valuation principle that states that a prudent purchaser would pay no more for real property than the cost of acquiring an equally desirable substitute on the open market. The Principle of Substitution presumes that the purchaser will consider the alternatives available to him, that he will act rationally or prudently on the basis of his information about those alternatives, and that time is not a significant factor. Substitution may assume the form of the purchase of an existing property with the same utility, or of acquiring an investment which will produce an income stream of the same size with the same risk as that involved in the property in question.

The applicability of this approach is based upon the assemblage of similar market sales and offerings for comparison to the subject. Land sales must be compared based on Highest and Best Use and therefore the Highest and Best Use of the comparables must be similar to that of the subject. In the case of the subject we have concluded a Highest and Best Use of residential development to maximum density. Properties with this Highest and Best Use are best compared on a price per Square Foot basis. Any adjustments to the sales price of market sales to provide indications of market value for the subject must be market-derived; therefore, the actions of typical buyers and sellers are reflected in the comparison process.

The physical unit of comparison can be adjusted to account for dissimilarities between market sales and the subject property. This unit of comparison is then applied to the subject's Square Foot to indicate a value for the subject.

The sales utilized within this analysis were taken from the subject market area and are considered to be most similar. A map and summary chart of comparable sales is included in the following pages.

DELORME
DeLorme Street Atlas USA® 2015
Sevannas Preserve State Park
SE GREEN RIVER PKWY
SE WESTMORELAND BLVD
NW JENSEN BEACH BLVD
Jensen Beach
NE JENSEN BEACH BLVD
Atlantic Ocean
North Fork Saint Lucie River
Ocean Breeze Park
Palm Lake Park
North River Shores
NE DIXIE HWY
N DIXIE HWY
NE OCEAN BLVD
SE OCEAN BLVD
Snug Harbor
Sewalls Point
Stuart
CR A1A
SE MONTEREY RD
SE PALM BEACH RD
SE SAINT LUCIE BLVD
Port Sewall
SW MURPHY RD
SW HIGH MEADOWS AVE
MARTIN DOWN BLVD
MAPP RD
CR 714
CR 707
CR 723
Sale 1
Sale 2
Sale 3
Sale 4
Sale 5
Location
City
South Fork Saint Lucie River
SE WILLOUGHBY BLVD
SE INDIAN ST
Golden Gate
Manatee Creek
Port Salerno
Coral Gardens
CR 722
SE COVE RD
SYKOMMER HWY
Data use subject to license.
© DeLorme. DeLorme Street Atlas USA® 2015.
www.delorme.com
MN (7.2° W)
0 ½ 1 1½ 2 mi
Data Zoom 11-5

Summary of Comparable Land Sales							
Internal Comp No.							
Sale No.	Subject	1	2	3	4	5	6
Photo							
Name/Address	Palm City Road & 501 Halpa	501 Halpatiokee Street & 924 SW Palm City Road (Parent Parcel)	1275 NE Dixie Highway	920 & 924 SE Dixie Highway	1810 NE Savannah Road	XXX SW Mapp Road	XXX SW Mapp Road
City	Stuart	Stuart	Jensen Beach	Stuart	Jensen Beach	Palm City	Palm City
County	Martin	Martin	Martin	Martin	Martin	Martin	Martin
Date of Sale	N/A	1-Jan-2019 & 18-Jul-2019	24-Aug-20	30-Jan-20	5-Feb-20	9-Jun-21	3-May-21
Land Size (SF)	1,525	44,588	49,658	16,533	45,738	54,258	31,363
Land Size (Ac)	0.035	1.02	1.14	0.38	1.05	1.25	0.72
Overall Ranking	Average	Average	Average	Average	Average	Average	Average
Zoning/FLU	R-3A, RPUD	R-3A; Office/Residential	Rio CRA; CRA Center	B-2; Commercial	R-3A; COR	LC; Commercial Limited	R-3A; COR
Municipality	Stuart	Stuart	Martin County	Stuart	Martin County	Martin County	Martin County
Utilities	Available	Available	Available	Available	Available	Available	Available
Corner	No	No	No	Yes	No	Yes	Yes
Proposed Dev.	Residential	Residential	Office	Retail	Residential	Office or Residential	Office
Density/Intensity	13 UPA	13 UPA	13 UPA	N/A	8 UPA	N/A	N/A
Sales Price	N/A	$420,000	$432,000	$155,000	$350,000	$450,000	$395,000
SP/Ac ($)	N/A	$9.42	$8.70	$9.38	$7.65	$8.29	$12.59

Sales Price Per Square Foot Analysis

The Sales Price per Square Foot comparison is a common physical unit of comparison for properties similar to the subject. The sales were analyzed and adjusted for differences in physical characteristics.

Property Rights Conveyed

No data supports a substantive difference between a leased fee or fee simple estates. We are appraising the subject property on a fee simple basis; thus, no adjustments were necessary for property rights conveyed.

Cash Equivalency/Financing

In an analysis of sales, any advantageous financing should be extracted from the sales prices due to the fact that favorable financing agreements can result in inflated value indications. In this particular instance, no adjustments were required to the sales for financing terms.

Conditions Of Sale

No adjustments were considered necessary on this basis.

Market Conditions

Next, an adjustment for changing market conditions was considered. The sales comparable transactions occurred from January 2019 to June 2021. We researched the economic data during this time period and concluded market conditions have improved and have thus applied an upward time adjustment of 0.5% per month to each sale.

Location

Sale 1 is the parcel to the north and the south of the right of way so no adjustment for location is merited. Sale 2 is located along a busy commercial corridor within Jensen Beach which is considered an inferior market so an upward adjustment for location is merited. Sale 3, Sale 4, Sale 5 and Sale 6 are considered to have similar locations so no adjustment for location is merited.

Size

The comparable sales ranged from 16,533 square feet to 54,258 square feet with a mean of 54,258 square feet. Often, smaller parcels in the local market sell for higher per square foot prices due to the

larger investor pool and, therefore, greater demand, for the same and therefore the opposite is also true. Due to the fact that we are utilizing the "across the fence" methodology within this appraisal, we have not adjusted for size.

Comparative Appeal

The subject is partially wooded. All of the sales are partially wooded except Sale 6 which was cleared at the time of sale. As such, we have applied a downward adjustment for appeal to Sale 6.

Zoning

The subject is zoned R-3 with a future land use of RPUD by the city of Stuart. All of the comaprables have similar zoning so no adjsutment for zoning is merited.

Utilities

All of the comparables have similar availability to utilities as the subject so no adjustment for utilities is merited.

Adjustment Summary

When considering the comparables as a whole we believe that they represent the most similar comparison to the subject in the immediate market area, however they still are not truly comparable. The following tables summarize the aforementioned adjustments applied to the sales.

Comparable Sales Adjustment Grid							
Comparable Sale Number	Subject Data	1	2	3	4	5	6
Address	924 SW Palm City Road & 501 Halpatiokkee	501 Halpatiokee Street & 924 SW Palm City Road (Parent Parcel)	1275 NE Dixie Highway	920 & 924 SE Dixie Highway	1810 NE Savannah Road	XXX SW Mapp Road	XXX SW Mapp Road
City	Stuart	Stuart	Jensen Beach	Stuart	Jensen Beach	Palm City	Palm City
Date of Sale	N/A	1-Jan-2019 & 18-Jul-2019	24-Aug-20	30-Jan-20	5-Feb-20	9-Jun-21	3-May-21
Location	urban	Similar	Inferior	Similar	Inferior	Inferior	Inferior
Land Size (SF)	1,525	44,588	49,658	16,533	45,738	54,258	31,363
Land Size (AC)	0.04	1.02	1.14	0.38	1.05	1.25	0.72
Density/Intensity	13 UPA	13 UPA	13 UPA	N/A	8 UPA	N/A	N/A
Comparative Appeal	Average	Similar	Similar	Similar	Similar	Similar	Superior
Sales Price	N/A	$420,000	$432,000	$155,000	$350,000	$450,000	$395,000
UnAdjusted Price Per SF	N/A	$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Transactional Adjustments							
Price / SF		$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Property Rights Conveyed		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adjusted Price		$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Financing Terms	Conventional	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adjusted Price		$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Conditions of Sale	None	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adjusted Price		$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Expenditures Imm. After Sale		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adjusted Price		$9.42	$8.70	$9.38	$7.65	$8.29	$12.59
Market Conditions	23-Jul-2021	6.0%	3.0%	4.0%	4.0%	0.0%	0.0%
Adjusted $/SF - With Transactional Adjustments		$9.98	$8.96	$9.75	$7.96	$8.29	$12.59
Physical Adjustments							
Location	urban	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%
Size	1,525	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Comparative Appeal	Average	0.0%	0.0%	0.0%	0.0%	0.0%	-10.0%
Zoning	R-3A; RPUD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Utilities	Available	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Physical Adjustments		0.0%	10.0%	0.0%	0.0%	0.0%	-10.0%
Value Indication Per Square Foot		**$9.98**	**$9.86**	**$9.75**	**$7.96**	**$8.29**	**$11.34**

Value Ranges	Before Adjustment	After Adjustment
Minimum Price	**$7.65**	**$7.96**
Maximum Price	**$9.42**	**$11.34**
Mean Price	**$9.34**	**$9.53**
Standard Deviation	**$1.73**	**$1.23**
Median	**$9.04**	**$9.80**

Conclusion

Many of our adjustments have been based on typical market considerations and we believe this provides support for our overall value indication. In our research we found the following listings that provide some forward-looking comparison to the subject and the comparables. The listings are summarized below and ranked in comparison to the subject.

After adjustments, the comparable sales ranged from $7.96/Square Foot to $11.34/Square Foot with a mean of $9.53/Square Foot . A value conclusion of $9.50/Square Foot is considered reasonable. As such, the subject's Fee Simple Market Value via the Sales Price per Square Foot Analysis was concluded to be as follows:

Market Value		
1,525 SF @	$9.50 /SF =	$14,484
Rounded: $14,500		

INCOME CAPITALIZATION APPROACH- MULTIFAMILY

Introduction

We have determined that the Income Approach would not result in a reliable indicator of value and have not included an Income Approach Analysis in this report. The appraiser has fully considered this approach and after research and deliberation it has been determined, as discussed in the Scope of Work, that the approach would not result in a reliable value indication.

Introduction

The Cost Approach considers the depreciated cost of replacing or constructing the property in today's market. Depreciation refers to a market-derived estimate and must consider the physical and economic life of the property or component being depreciated. The subject property is divided for valuation purposes in this approach into land and improvements. Land value is estimated by sales comparison, and the improvements are valued by determining their depreciated replacement cost, which are then summed to derive a total property value estimate.

This approach to value is based upon the replacement cost concept, i.e., Principle of Substitution. The concept, from a buyer's standpoint, proposes that a property's value is no more than the cost of producing a substitute with equal utility. The Cost Approach, in applying this concept, assumes that time is not an important element in the buyer's decision, that the buyer is able and willing to produce the substitute, and that land is available for this purpose. A major limitation of this approach, in addition to the limitations implied by these assumptions, is the difficulty of determining the amount of depreciation, especially in older properties.

The Cost Approach was not developed as the subject is vacant land and the approach is not applicable.

Reconciliation

Reconciliation and correlation of value is performed when more than one approach to value is used to value real property and weighs the relative significance, applicability, and defensibility of each value indication and relies most heavily on the one that is most appropriate to the type and definition of value sought. The conclusion drawn in the reconciliation is based on the appropriateness, accuracy, and quantity of evidence in the entire appraisal. These values are summarized in the following table.

Summary of Values		
	Total	PSF
Sales Comparison Approach	$14,500	$9.50
Income Capitalization Approach	N/A	N/A
Cost Approach	N/A	N/A
Market Value	**$14,500**	**$9.50**

In view of the following facts and data in conjunction with this appraisal, it is the opinion of CRE Valuation Services that the market value of the Fee Simple interest in the property "as is" utilizing the "across the fence" methodology as of July 23, 2021, and subject to the general assumptions and limiting conditions, was:

$14,500

Hypothetical Conditions and Extraordinary Assumptions –We were provided with the Palmetto Cove Site Development Plans, Abandonment Application Package, and a Boundary Survey for the Palmetto Cove project as well as the right of way. We have relied on this information within the report within. We have assumed the subject is available for assemblage and have appraised the subject as unencumbered within the report herein utilizing the across the fence methodology. If we are provided with any data to the contrary, we retain the right to amend this appraisal and the value found herein.

Market and Exposure Time

Market Time is best defined as a "reasonable marketing time" which is an estimate of the amount of time it might take to sell a property interest at the estimated Market Value during the period immediately after the effective date of the appraisal. It is not intended to be a prediction of a specific date of sale and, therefore, may be expressed as a range. Exposure time is defined as the estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at As-is on the effective date of appraisal.

Based on market and exposure times of comparable sales and interviews with active participants in the local market, the above Market Value opinion could be achieved with a market time and an equal exposure time of approximately six months. This conclusion is predicated on the assumption that the

subject is offered at a price near the value opinion set forth herein, and is supported by recent sales of similar properties, a sampling of which has been presented in this report.

CLIENT ENGAGEMENT LETTER ..... A
PROFESSIONAL QUALIFICATIONS C

CLIENT ENGAGEMENT LETTER

Gmail

CRE Research <research@crevaluationservicestc.com>

Fwd: CRE Job #3745772155 - Nicolas Calle/Seahorse Capital

1 message

Nik Schroth <nikschroth@naisouthcoast.com>
To: CRE Research <research@crevaluationservicestc.com>

Tue, Jan 18, 2022 at 1:21 PM

Aaron,

Log this as a new job, but an update of an old one. Assign it to Erik, I think he had it last time. Tell him to give me a call when he gets his focus on it.

Thanks,

Nik

Nikolaus M. Schroth, CCIM
Principal
nikschroth@naisouthcoast.com

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Sent via Superhuman

------ Forwarded message ------
From: Donna Dempsey <DAD@mccarthysummers.com>
Date: Tuesday, January 18 2022 at 11:59 AM EST

Subject: CRE Job #3745772155 - Nicolas Calle/Seahorse Capital
To: "nikschroth@naisouthcoast.com" <nikschroth@naisouthcoast.com>

Good afternoon, Nik,

Terry has asked that I contact you regarding the above-referenced Appraisal which was performed by Erik Odegard for CRE Valuation Services

With regards to the attached surveys, please note that the area previously appraised has been reduced due to the proposed abandonment, and our client is requesting an updated appraisal to show the adjusted valuation.

The attached surveys are:

Survey #1	**Original survey which includes the 11'+/- alley**
Survey #2	**Updated survey which indicates separation of the 11'+/- alley – current appraisal area**
Survey #3	**Update survey outlined in red to show the current appraisal area**

Should you have any questions, please call Terry.

Thank you very much!

Donna

Donna Dempsey, FRP

Florida Registered Paralegal

Assistant to Terence P. McCarthy

McCARTHY SUMMERS WOOD NORMAN MELBY & SCHULTZ PA
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3 attachments

SURVEY #1 .pdf
59K

SURVEY #2.pdf
63K

SURVEY #3.pdf
316K

PROFESSIONAL QUALIFICATIONS

THOMAS J. JOHNSON, MAI, SRA
State Certified General Real Estate Appraiser RZ798

Personal
Resident, Palm Beach County, Florida since 1951
Licensed Broker, Florida Real Estate Commission #135591

Professional Designation
Member - The Appraisal Institute. MAI Certificate No. 8851
SRPA - Senior Real Property Appraiser

Education
Graduate, University of South Florida, College of Business Administration, BSBA (Major: Finance)

Professional Courses

Developing A Suitable Work File		2016
Tightening the Appraisal		2016
7- Hour USPAP Update Course		2016
The Tough Ones – Mixed Use Properties		2016
Fundamentals of Separating Real Property, Personal & Tangible Business		2016
Assets		2012
Florida Appraisal Law		2012
7-Hour National USPAP Update		2012
Appraising the Appraisal		2012
Sales Contract Seminar		2012
7-Hour Appraisal Review-Residential		2012
7-Hour Appraisal Institute & Florida Real Estate Appraisal Board #08935		2012
AIREA-	Mastering Unique & Complex Appraisals	2010
AIREA-	Florida Supervisor/Trainee Roles & Relationships	2010
AIREA-	Appraisal Institute's Course	2010
AIREA-	Florida Law for R.E Appraisers	2010
AIREA-	Business Practices & Ethics	2009
AIREA –	Litigation Skills for the Appraiser	2008
AIREA –	Florida Law for Real Estate Appraisers	2008
AIREA –	Spotlight on USPAP: Hypothetical Conditions & Extraordinary	2008
AIREA -	Supervisor Trainee Roles and Rules	2008
7-Hour National USPAP Update Course		2006
7-Hour National USPAP Update Course		2005
7-Hour National USPAP Update Course		2004
USPAP –	Florida Law Update	2000
Standards of Professional Practice, Parts A & B, Appraisal Institute		1998
SREA 101	Introduction to Appraising Real Property	
SREA R2	Case Study of Single Family Residence	
SREA 201	Principles of Income Property Appraising	

SREA 202	Case Study of Income Property Valuation
SREA	Income Property Demonstration Report
AIREA 1A-1	Real Estate Appraisal Principles
AIREA 1A-2	Basic Valuation Procedures
AIREA 8 -1	Real Estate Appraisal Principles
AIREA 2 -1	Case Studies in Real Estate Valuation
AIREA 1B-A	Capitalization Theory and Techniques
AIREA 1B-B	Capitalization Theory and Techniques
AIREA 2 -2	Case Studies
AIREA	Comprehensive Exam

Seminars Attended

Liability Management for Residential Appraisers, Appraisal Institute	2006
Professional's Guide to the Uniform Residential Appl. Report, Appraisal Institute	2005
Subdivision Valuation, Appraisal Institute	2005
Business Practices and Ethics, Appraisal Institute	2005
Florida Real Estate Appraisers, Appraisal Institute	2006
Scope of the Work: Expanding Your Range of Services, Appraisal Institute	2003
Florida State Law for Real Estate Appraisers, Appraisal Institute	2003
Condemnation Appraising: Advanced Topics and Applications, Appraisal Institute	2003
Houses to Hotels – The Income Approach, Appraisal Institute	2002
Florida State Law and USPAP Review for Real Estate Appraisers, Appraisal Institute	2002
Introduction to Appraising and Analysis of Proposed Subdivisions And Condominiums, Appraisal Institute	2002
FHA 4150.2 Seminar, Gold Coast	2000
Residential Cost Depreciation Seminar, Gold Coast	2000
Sales Comparison Valuation of Small, Mixed-Use Properties, Appraisal Institute	1998
Understanding & Using DCF Software: A Comparison of Argus, Project and Dynalease, Appraisal Institute	1998
Financial Analysis, CCIM	1997
Advanced Applications, Appraisal Institute	1995
Limited Appraisal/Evaluations, Appraisal Institute	1995
How to Prepare a Market Study for an Appraisal Practice, Appraisal Institute	1994
Understanding Limited Appraisals and Appraisal Reporting Options, Appraisal Institute	1994
Professional Standards USPAP Update Core Law for Appraisers, Appraisal Institute	1994
Appraising Complex Residential Properties, Appraisal Institute	1993
Mock Trial, Appraisal Institute	1993
Litigation Valuation, Appraisal Institute	1993
Appraising the Tough Ones, Appraisal Institute	1993
Appraisal Theory Update, Appraisal Institute	1992

Discounted Cash Flow Analysis, Appraisal Institute	1991
Comprehensive Appraisal Workshop	1990
Condemnation Seminar	1988
Rates, Ratios & Reasonableness	1988
Uniform Residential Appraisal Report Writing	1986
R4I-B & the Appraiser, FHLBB Appraiser Standards & Guidelines	SREA 1985
Advanced Appraisal Techniques	SREA 1983
Market Extraction	SREA 1981
Valuation of Leases and Leaseholds	SREA 1979

Types of Valuation/Consultation Services Performed

Appraisals, Appraisal Reviews, Condemnation, Court Testimony, Estate Valuations, Feasibility Studies, Highest and Best Use Studies, Market Studies, Leasehold & Leased Fee Valuations, Tax Assessment Appeals/Impact Studies, Reproduction/ Replacement Cost Estimates

Types of Property Appraised

Residences, Condominiums, Shopping Centers, Industrial Properties, Marinas, Vacant Lots, Acreage, Residential Projects, Mobile Home Parks, Motels, Office Buildings, Warehouses, Restaurants, Churches, Night Clubs, Special Purpose Properties, Apartment Projects, Environmentally Sensitive Properties/Wetlands

Professional Service

Member SREA Chapter 200 Experience Review Committee
Chairman SREA Chapter 200 Employee Opportunities Committee
Qualified Expert Witness: Palm Beach County, Martin County, St. Lucie County, Okeechobee County Circuit Court, and Federal Bankruptcy Court
Special Master to Oversee Tax Appeals for Palm Beach County
Member Board of Directors Appraisal Institute Chapter 200

Ron DeSantis, Governor

Halsey Beshears, Secretary

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

FLORIDA REAL ESTATE APPRAISAL BD

THE CERTIFIED GENERAL APPRAISER HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

JOHNSON, THOMAS J
2055 SOUTH KANNER HIGHWAY
STUART FL 34994

LICENSE NUMBER: RZ798
EXPIRATION DATE: NOVEMBER 30, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

QUALIFICATIONS OF APPRAISER

Nikolaus M. Schroth, CCIM

4729 SE Rocky Point Way, Stuart, FL 34997 – 772-403-3752

Personal

Resident, Palm Beach County, Florida, since 2005- Florida Native
Licensed Real Estate Broker Associate, FREC BK3157525
Certified General Appraiser RZ3704

Professional Designations and Affiliations

Member – Martin County Board of Realtors - 2006
Associate Member of the Appraisal Institute – 2007
CCIM Candidate – 2007
CCIM Designee – 2013
Urban Land Institute- 2015
Stuart Main Street – Board Member

Education

Graduate, University of Central Florida, College of Business Administration, BSBA (Major: Finance) 2005

Professional Courses

7-Hour National USPAP Update Course – Appraisal Institute - 2016
3- Hour Florida Appraisal Law – Appraisal Institute – 2016
14- Hour Real Estate Finance Statistics & Valuation Modeling – Appraisal Institute – 2016
6- Methodology & Application of Sales Comparison – Bert Rodgers Schools – 2016
Tax Deferred 1031 Exchanges LANDU Course – National Association of Realtors – 2015
General Appraiser Report Writing and Case Studies – Appraisal Institute – 2014
CI 104 Investment Analysis for Commercial Real Estate – CCIM Institute – 2012
General Appraiser Sales Comparison Approach- Appraisal Institute – 2011
General Appraiser Site Valuation and Cost Approach – Appraisal Institute – 2011
General Appraiser Market Analysis and Highest & Best Use – Appraisal Institute – 2011
CI 102 Market Analysis for Commercial Real Estate – CCIM Institute – 2009
CI 103 User Decision Analysis for Investment Real Estate – CCIM Institute – 2009
Income Approach Part 2 – Appraisal Institute – 2008
7-Hour Business Law and Ethics – Appraisal Institute – 2007
CI 101 Financial Analysis for Commercial Real Estate– CCIM Institute- 2007
Real Estate Investment Analysis – University of Central Florida – 2005
Real Estate Finance – University of Central Florida - 2005
Appraisal Principals 110 - University of Central Florida - 2005
Appraisal Procedures 120 - University of Central Florida – 2005
Real Estate Law – University of Central Florida - 2005
15-Hour National USPAP Course – Appraisal Institute – 2005

Seminars Attended

Subdivision Valuation – Appraisal Institute – 2005
Retailer One on One – Orlando – 2012
NAI Florida Forum – Miami 2014
NAI Florida Forum – Miami 2015
International Council of Shopping Centers – Orlando 2015

Types of Valuation/Consultation Services Performed

Feasibility Studies, Market Studies, Leasehold & Leased Fee Valuations, Reproduction/ Replacement Cost Estimates, expert witness testimony

Types of Property Appraised

Commercial Office, Retail and Industrial Buildings, Commercial Land, Residential Development Land, Pasture Land, Grove Land, Row Crop Land, Organic Farms, Gas Stations and Convenience Stores, Proposed Commercial Office and Retail Buildings, Mobile Home Parks, Restaurants, Proposed Residential Development

Brokerage Experience

Transaction volume totaling over $50 million in sales and leasing since 2010 and over $23 million in transactions in 2016. Properties sold or leased include Professional and Medical Offices, Retail Centers, Industrial Buildings, Marina's, Vehicle Sales Facilities, Residential Vacant Land, Commercial Vacant Land, Agricultural Land, Bowling Alley, Church facility among others.

Work Experience

2005 to 2006- Researcher – Johnson & Parrish of the Treasure Coast
2006 to 2014 – Trainee Appraiser – Johnson & Parrish of the Treasure Coast
2006 to 2010 – Sales Associate – Southcoast Incorporated
2014 to 2015 – Certified Appraiser – Thomas Johnson and Associates
2015 to Present – Certified Appraiser & Managing Partner – Thomas Johnson and Associates
2010 to Present – Broker Associate/Vice President – NAISouthcoast Incorporated
2012 to Present – Information Officer – Erfolg Holdings, Inc.
2014 to Present – Founding Partner/Director Islamorada Beer Company

Ron DeSantis, Governor

Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

FLORIDA REAL ESTATE APPRAISAL BD

THE CERTIFIED GENERAL APPRAISER HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

SCHROTH, NIKOLAUS MARTIN

2055 S KANNER HWY
STUART FL 34994

LICENSE NUMBER: RZ3704

EXPIRATION DATE: NOVEMBER 30, 2022

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Ron DeSantis, Governor

Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

FLORIDA REAL ESTATE APPRAISAL BD

THE REGISTERED TRAINEE APPRAISER HEREIN HAS REGISTERED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

ODEGARD, ERIK

18744 SE JUPITER RIVER DRIVE
JUPITER FL 33458

LICENSE NUMBER: RI24196

EXPIRATION DATE: NOVEMBER 30, 2022

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

This Instrument Prepared By:
Christen Spake, Esq.
McCarthy, Summers, Wood,
Norman, Melby, & Schultz P.A.
2400 S.E. Federal Highway, Fourth Floor
Stuart, Florida 34994

ACCESS AND MAINTENANCE AGREEMENT

This Access and Maintenance Agreement is made this _____ day of _____, 2022, by The City of Stuart, a political subdivision of the State of Florida ("City"), and 924 SW Palm City Road, LLC, a Florida limited liability company, whose mailing address is 12917 Mizner Way, Wellington, FL 33414 (the "Developer"), as follows:

W I T N E S S E T H

WHEREAS, Developer is the owner of the land described as set forth in the attached **Exhibit "1,"** incorporated herein by this reference (the "Property"), that it intends to develop for residential and attendant use; and

WHEREAS, the parcels comprising the Property are separated by an unimproved public right-of-way; and

WHEREAS, City abandoned a portion of the right-of-way to the ownership of Developer, and maintains its interest in the remaining portion of the right-of-way identified on the attached **Exhibit "2,"** made a part hereof by this reference (the "Maintenance Area"); and

WHEREAS, City granted Developer's application for an RPUD on the Property, as set forth in Ordinance Number 2463-2021, recorded in Official Records Book 3247, Page 1338, of the Public Records of Martin County, Florida (the "Ordinance"), a condition of which is performance of certain maintenance obligations by Developer or its successor property owner's association ("POA"); and

WHEREAS, the Ordinance requires Developer and City enter into an agreement to improve and maintain the Maintenance Area in perpetuity prior to obtaining a site permit; and

WHEREAS, Developer has agreed to pave and maintain the Maintenance Area in exchange for use by residents of the Property and their invitees; and

WHEREAS, City and Developer have agreed that Developer and residents of the Property may make use of the Maintenance Area and shall maintain the Maintenance Area, all in accordance with the terms and conditions that follow.

NOW THEREFORE, in consideration of the foregoing premises, the beneficial covenants, agreements, representations and warranties contained herein, and for other good

and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties covenant and agree as follows:

1. Recitals. The recitals set forth in each of the foregoing "Whereas" clauses are true and correct, and are incorporated herein by this reference.

2. Use of Maintenance Area. City hereby grants Developer, for the benefit of the Property, a perpetual right to use and improve the Maintenance Area for the purposes of access, including without limitation ingress and egress of vehicular and pedestrian traffic, underground and above-ground utilities, drainage, and landscaping and maintenance. Developer is authorized to install fencing and/or other barriers upon and/or around the Maintenance Area, and can close or limit access to the Maintenance Area in its sole and absolute discretion. Moreover, the parties specifically acknowledge that Developer may limit access to the Maintenance Area only to residents of the development located on the Property and their invitees. Notwithstanding the foregoing, Developer and its successors and assigns shall comply with all regulations relating to access by emergency and law enforcement vehicles and personnel.

3. Maintenance. Developer shall be responsible for maintenance of the Maintenance Area at its sole cost and expense. Developer shall cause the Maintenance Area to be paved and shall in all cases maintain the Maintenance Area clear of obstructions and materials that would make it impassible by automotive, bicycle, and other pedestrian and motor-vehicle traffic. Developer shall remove, fill, and/or repair, as necessary, obstructions, potholes, washouts, and other defects that may arise on the Maintenance Area and maintain the Maintenance Area in a safe, attractive, and serviceable condition.

4. No Abandonment. During the pendency of this Agreement City shall not abandon and/or vacate the interests of the City in and to the Maintenance Area or any portion thereof, or otherwise take action that would frustrate, impede, or invalidate the rights, interest, and intent of this Agreement or Developer's rights in the Maintenance Area.

5. Insurance. Developer shall maintain, at its sole expense, a policy of liability insurance in the minimum amount of One Million and no/100 Dollars ($1,000,000.00) covering the Property and naming City as an additional insured. Developer may elect to maintain, or not maintain, additional insurance coverage on the Property in its sole and absolute discretion.

6. Damage to Maintenance Area. Developer shall be responsible for repairing all damage to the Maintenance Area, except that any damage caused by City shall be repaired at City's expense. This Section does not limit Developer's ability to recover damages and other sums from liable parties in accordance with applicable law.

7. Covenants Running with the Land.

a. All of the covenants, agreements, benefits, and burdens described herein constitute covenants running with the land and are binding upon any and all individuals and entities, and their respective successors in interest (including without limitation

assigns, tenants, heirs, and personal representatives), having or hereafter acquiring any right, title or interest in and to all or a portion of the Maintenance Area.

b. Responsibility for the performance of any duty or obligation set forth herein will be binding on City and Developer and Developer's successors and/or assigns. The liability of Developer in connection herewith will terminate upon Developer's assigning, delegating, or turning over maintenance and management of the Maintenance Area to a successor, assign, or POA.

8. Term. The term of this Agreement shall be in perpetuity. This Agreement may be terminated only by written agreement of the Parties.

9. Default. If Developer fails or refuses to satisfy its obligations hereunder, City may perform such maintenance or requirement as is reasonably necessary to comply with this Agreement, the costs of which shall constitute a lien against the Property dedicated to common ownership and use of the residents of the Property on the to-be-recorded plat of the Property ("Common Areas"), foreclosable in the same manner as a mortgage. This provision shall not be interpreted to provide an exclusive remedy, and either party may pursue any appropriate remedy in the event the other party or its successors in interest fail to abide by the provisions of this Agreement.

10. Assignment. Developer may assign this Agreement to a successor, including without limitation the POA or such other entity as is charged with ownership and maintenance of the Common Areas.

11. Miscellaneous.

a. Attorneys' Fees. In the event a party institutes any legal or equitable action or proceeding for the enforcement of any right or obligation herein contained, the prevailing party after a final adjudication shall be entitled to recover its costs and reasonable attorneys' fees incurred in the preparation and prosecution of such action or proceeding, including at the trial and all appellate levels.

b. Amendment. The provisions of this Agreement may be modified or amended, in whole or in part, or terminated, only by the written consent of Developer or its successor and City, evidenced by a document that has been fully executed and acknowledged and recorded in the official records of the County Recorder of Martin City, Florida.

c. No Waiver. No waiver of any default of any obligation by a party shall be implied from any omission to take any action with respect to such default. Any party may waive the benefit of any provision or condition contained in this Agreement, and such waiver shall not constitute a subsequent waiver of any provision or condition.

d. No Agency. Nothing in this Agreement shall be deemed or construed by any

party or by any third person to create the relationship of principal and agent or of limited or general partners or of joint venturers or of any other association between or among the parties.

e. Severability. Each provision of this Agreement, and the application thereof, are hereby declared to be independent of, and severable from, the remainder of this Agreement if any provision contained herein shall be held to be invalid or to be unenforceable or not to run with the land, and such holding shall not affect the validity or enforceability of the remainder of this Agreement. In the event the validity or enforceability of any provision of this Agreement is held to be dependent upon the existence of a specific legal description, the Owner of the property for which a legal description is required agrees to promptly cause such legal description to be prepared. Ownership of the Property and the Maintenance Area by the same person or entity shall not terminate this Agreement nor in any manner affect or impair the validity or enforceability of this Agreement.

f. Time of Essence. Time is of the essence as to the obligations set forth in this Agreement.

g. Entire Agreement. This Agreement contains the complete understanding and agreement of the parties with respect to all matters referred to herein, and all prior representations, negotiations, and understandings are superseded hereby.

h. Governing Law. The laws of the State of Florida shall govern the interpretation, validity, performance, and enforcement of this Agreement without giving effect to any choice or conflict of law provision or rule (whether of the State of Florida or any other jurisdiction), and venue for any civil action brought hereunder shall lie in Martin County, Florida.

i. Bankruptcy. In the event of any bankruptcy affecting any party, the parties agree that this Agreement shall, to the maximum extent permitted by law, be considered an agreement that runs with the land and that is not rejectable, in whole or in part, by the bankrupt person or entity.

IN WITNESS WHEREOF, the parties hereto have accepted, made, and executed this Agreement upon the terms and conditions above stated on the date first written above.

– REMAINDER OF PAGE INTENTIONALLY BLANK –
SIGNATURE PAGES FOLLOW

ATTEST:

CITY OF STUART:

_____
MARY L. KINDEL
CITY CLERK

_____
MERRITT MATHESON
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL, ESQUIRE
CITY ATTORNEY

DEVELOPER:

Signed, sealed and delivered in the presence of:

924 SW Palm City Road, LLC, a Florida limited liability company

_____

By:_____

Print:_____

As:_____

_____

Print:_____

STATE OF _____

CITY OF _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this _____ day of October, 2022 by _____ as _____ of 924 SW Palm City Road, LLC, a Florida limited liability company, who is ☐ personally known to me or ☐ has produced _____ as identification.

_____

Notary Public

{Notary Seal}

Printed Name:_____

My Commission Expires

EXHIBIT "1"

Property

LEGAL DESCRIPTION:

LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

EXHIBIT "2"

Maintenance Area

LEGAL DESCRIPTION:

A PORTION OF THE 11 FOOT WIDE ALLEY, AS SHOWN ON THE PLAT OF DYER ESTATES AS RECORDED IN PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF LOT 2, DYER ESTATES, PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE NORTH 89°36'34" WEST ALONG THE NORTH LINE OF SAID LOT 2, DYER ESTATES, A DISTANCE OF 179.87 FEET, MORE OR LESS, TO THE NORTHWEST CORNER OF SAID LOT 2, DYER ESTATES; THENCE NORTH 00°19'34" EAST, A DISTANCE OF 11.30 FEET TO A POINT ON THE SOUTH LINE OF PLAT OF HALPATIOKEE, AS RECORDED IN PLAT BOOK 8, PAGE 25, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; THENCE SOUTH 89°36'25" EAST ALONG SAID SOUTH LINE PLAT OF HALPATIOKEE, A DISTANCE OF 179.80 FEET; THENCE SOUTH 00°17'22" WEST, A DISTANCE OF 11.30 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THE FOLLOWING:

BEGIN AT THE NORTHEAST CORNER OF LOT 2, DYER ESTATES, PLAT BOOK 14, PAGE 36, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE NORTH 89°36'34" WEST ALONG THE NORTH LINE OF SAID LOT 2, DYER ESTATES, A DISTANCE OF 134.99 FEET, MORE OR LESS, TO THE SOUTHERLY EXTENSION OF THE WEST LINE OF LOT 7, BLOCK 2, PLAT OF HALPATIOKEE PARK, AS RECORDED IN PLAT BOOK 8, PAGE 25, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; THENCE NORTH 00°22'35" EAST, ALONG SAID SOUTHERLY EXTENSION OF SAID WEST LINE LOT 7, BLOCK 2, A DISTANCE OF 11.30 FEET TO A POINT ON THE SOUTH LINE OF SAID PLAT OF HALPATIOKEE PARK; THENCE SOUTH 89°36'25" EAST ALONG SAID SOUTH LINE PLAT OF HALPATIOKEE PARK, A DISTANCE OF 134.97 FEET; THENCE SOUTH 00°17'22" WEST, A DISTANCE OF 11.30 FEET TO THE POINT OF BEGINNING.

Stuart DEVELOPMENT

CITY OF STUART
DEVELOPMENT DEPARTMENT
RIGHT OF WAY ABANDONMENT APPLICATION

Reviewed By: _____

RECEIVED
MAY 25 2021
DEVELOPMENT
Received By: _____

Application must be legible with all relevant fields completed.

Project ID# Z21050005
(Staff Entry)

Pre-App Conference Date:	Application Date:
Project Name: **Palmetto Cove**	
Parcel ID# **05-38-41-009-002-00010-8** and **05-38-41-024-000-00020-0**	Project Address: **Southwest corner of Halpatiokee Street and Palm City Road**
Zoning/CRA Sub-district: **RPUD**	
Subdivision:	Lot(s):

Fee: $787.00 plus 100% of appraised value *(This does not include fees that may be charged as a result of application reviews by the City's consultants or any required recording fees)*

Submittal Requirements: A completed application form, the payment of fees, and pertinent information as determined by the Development Director.

Approving Authority: The Development Director is required to prepare a staff report and recommendation concerning this application for the City Commission public hearing.

Justification: Please provide justification supporting the request for the abandonment, vacation or change of name of any street, alley, road, or public way *(include additional pages if needed):*

The requested abandonment will provide private access to the Palmetto Cove residents and will protect existing private residences to the west from unexpected and unnecessary intrusion of vehicles from Palm City Road. The alleyway sought to be abandoned was created by a plat recorded at a time far removed from today with access concepts that are inappropriate for this area today.

(over)

General Information

(Please Print or Type)

1. Property Owner, Lessee, Contract Purchaser, or Applicant (circle one):

Name:	City/State/Zip Code: **Wellington, FL 33414**
Title:	Telephone Number: **(561) 307-2998**
Company: **924 SW Palm City Road, LLC**	Facsimile Number:
Company Address: **12917 Mizner Way**	Email Address (optional): **niccolasdanielcalle@gmail.com**

2. Agent of Record (if any): The following individual is designated as the Agent of Record for the property owner, lessee, or contract purchaser and should receive all correspondence related to the application review.

Name: **Terence P. McCarthy, Esquire**	City/State/Zip Code: **Stuart, FL 34994**
Title:	Telephone Number: **(772) 286-1700**
Company: **McCarthy Summers Wood Norman Melby & Schultz, P.A.**	Facsimile Number: **(772) 283-1803**
Company Address: **2400 SE Federal Highway, 4th Floor**	Email Address (optional): **tpm@mccarthysummers.com**

3. The Undersigned, as the Property Owner, Lessee, Contract Purchaser, or Applicant (circle one), acknowledges responsibility for all City expenses associated with the referenced application (s) including time spent by the City's consultants and further acknowledges that payment of consultant fees will be made prior to the receipt of the consultant comments.

Name:	City/State/Zip Code: **Wellington, FL 33414**
Title:	Telephone Number: **(561) 307-2998**
Company: **924 SW Palm City Road, LLC**	Facsimile Number:
Company Address: **12917 Mizner Way**	Email Address (optional): **niccolasdanielcalle@gmail.com**

I hereby certify that all information contained herein is true and correct.

4. Signed this 12 day of May, 2021.

924 SW Palm City Road, LLC, a Florida limited liability company

Nicolas Calle

Nicolas Calle, Manager

Signature of Property Owner, Lessee, Contract Purchaser or Applicant (circle one)

(over)

As of January 01, 2020, Any and all notarial certificates prepared under Florida law must indicate whether the principal appeared by means of physical presence or by online notarization. Florida Statue 117.05

(a) For an oath or affirmation:

STATE OF Florida
COUNTY OF Miami-Dade

Sworn to (or affirmed) and subscribed before me by means of ___ physical presence or ✓ online notarization, this 12th day of May, 2021, by **Nicolas Calle, Manager of 924 Palm City, LLC, a Florida limited liability company, on behalf of the Company**.

SONYA WASHINGTON
Notary Public - State of Florida
Commission # GG182756
Expires on February 5, 2022

Sonya Washington Online Notary
(Signature of Notary Public - State of Florida) (Print, Type, or Stamp of Notary Public

Sonya Washington

Personally Known OR Produced Identification

Type of Identification Produced:
FL drivers license provided

Notarized online using audio-video communication

McCARTHY SUMMERS WOOD NORMAN MELBY & SCHULTZ P.A.
Attorneys at Law

RECEIVED
MAY 25 2021
DEVELOPMENT
Received By: _____

May 25, 3021

VIA HAND-DELIVERY
Tom Reetz
Development Department
City of Stuart
121 SW Flagler Avenue
Stuart, FL 34994

Terence P. McCarthy *
Robert P. Summers *
Steven J. Wood **
Kenneth A. Norman
Nicola J. Boone Melby ***
Owen Schultz
Margaret E. Wood

Donna R. McMillan
Jessica M. VanValkenburgh
Christen Spake
Kimberly A. Ryan
David A. Lewis

*Board Certified Real Estate Lawyer
**Board Certified Wills, Trusts & Estates Lawyer
***Board Certified Elder Law Lawyer

Re: ***Palmetto Cove***
Right of Way Abandonment Application

Dear Tom:

Enclosed please find the following:

1. Right of Way Abandonment Application, executed on behalf of 924 SW Palm City Road, LLC;
2. Signed and sealed Sketch & Description, prepared by Christian Fenex and Associates, LLC, and identified as Sketch No. 219051_Alley;
3. Our check, made payable to the City of Stuart, in the application amount of $787.00.

Please advise should you need anything further.

Very truly yours,

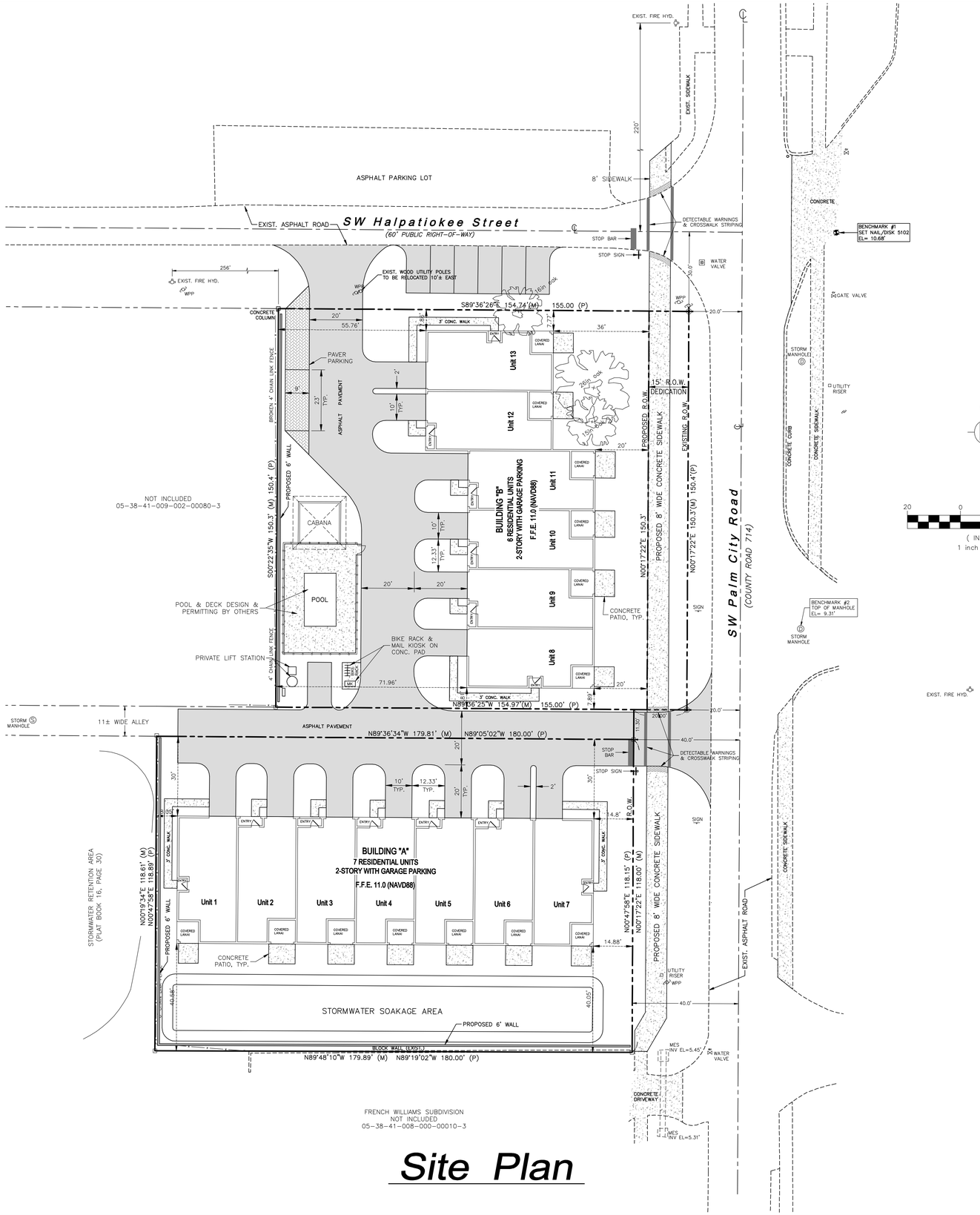
Donna

Donna A. Dempsey, FRP
Paralegal to: Terence P. McCarthy, Esquire
/s

Enclosures

cc: Client (Via E-Mail)

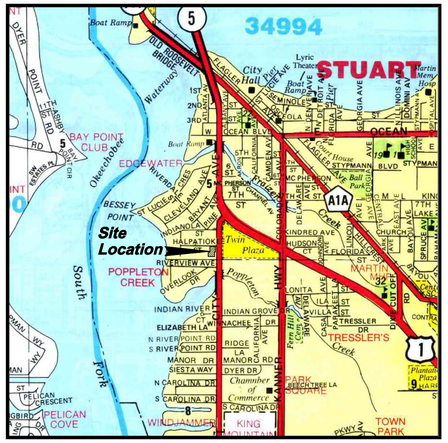
P:\DOCS\16491\16491.01\LTR\34U4983.DOCX 5/25/2021 11:06:36 AM



Site Plan

LEGEND:

FH – FIRE HYDRANT
WV – WATER VALVE
WM – WATER METER
WPP – WOOD POWER POLE
MH – MANHOLE (SANITARY SEWER)
D – MANHOLE (STORM)
CB – CATCH BASIN
WF – WOOD FENCE
CLF – CHAIN LINK FENCE
R.O.W. – RIGHT OF WAY



Vicinity Map

1"=1,600'

LEGAL DESCRIPTION

LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

SITE DATA

PROJECT NAME:	SOUTHERN LANDMARK HOMES
LOCATION:	502 HALPATIOKEE STREET, STUART, FLORIDA
	924 SW PALM CITY ROAD, STUART, FLORIDA
PARCEL I.D.	05-38-41-009-002-00010-8
	05-38-41-024-000-00020-0
EXISTING USE:	VACANT
ZONING:	R-3 Residential - Multi-Family / Duplex
PROPOSED ZONING:	RPUD
LAND USE:	OFFICE / RESIDENTIAL

GROSS SITE AREA:	44,552 s.f.	1.02 ac.	
R.O.W. DEDICATION:	2,255 s.f.	0.05 ac.	
TOTAL SITE AREA:	42,297 s.f.	0.97 ac.	100.0 %
BUILDING COVERAGE:	14,265 s.f.	0.33 ac.	33.7 %
VEHICULAR PAVEMENT:	8,475 s.f.	0.19 ac.	20.0 %
PEDESTRIAN WALKS / PATIOS:	1,750 s.f.	0.04 ac.	4.1 %
POOL & DECK:	1,115 s.f.	0.03 ac.	2.6 %
TOTAL IMPERVIOUS AREA:	25,605 s.f.	0.59 ac.	60.5 %
OPEN SPACE:	16,692 s.f.	0.38 ac.	39.5 %

DENSITY CALCULATION

GROSS SITE AREA:	0.97 Ac.
NUMBER OF UNITS:	13
PROPOSED DENSITY:	13 Units / 0.97 Ac. = 13.0 Units/Ac.

BUILDING DATA:

BUILDING COVERAGE (FOOTPRINT):	14,265 s.f.
TOTAL SQUARE FOOTAGE:	s.f.
GROSS SQUARE FOOTAGE:	s.f.
PROPOSED BUILDING HEIGHT:	32'-3" a.f.f.

PARKING CALCULATION

	REQUIRED	PROVIDED
RESIDENTIAL BUILDING		
13 RESIDENTIAL UNITS @ 1.5 SP. / UNIT =	19.5 Spaces	28 Spaces

© CALVERT MONTGOMERY & ASSOCIATES, INC.
Engineers–Surveyors (LB & C.A. 0000160)
P.O. BOX 92...959 S. FEDERAL HWY.....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE
2	MISC. PER C.O.S. COMMENTS	02.16.21
1	ADD ADDITIONAL PARKING	07.01.20
6	ADD PROPOSED ZONING RPUD	04.29.21
5	ADD WALL, MAIL KIOSK, BIKE RACK	04.16.21
4	ADD CROSSWALK/ADA	04.08.21
3	ADD F.H. ON INDIANOLA ST.	03.25.21

DESIGNED BY: DATE: 03.25.20
DRAWN BY: SCALE: 1"=20'

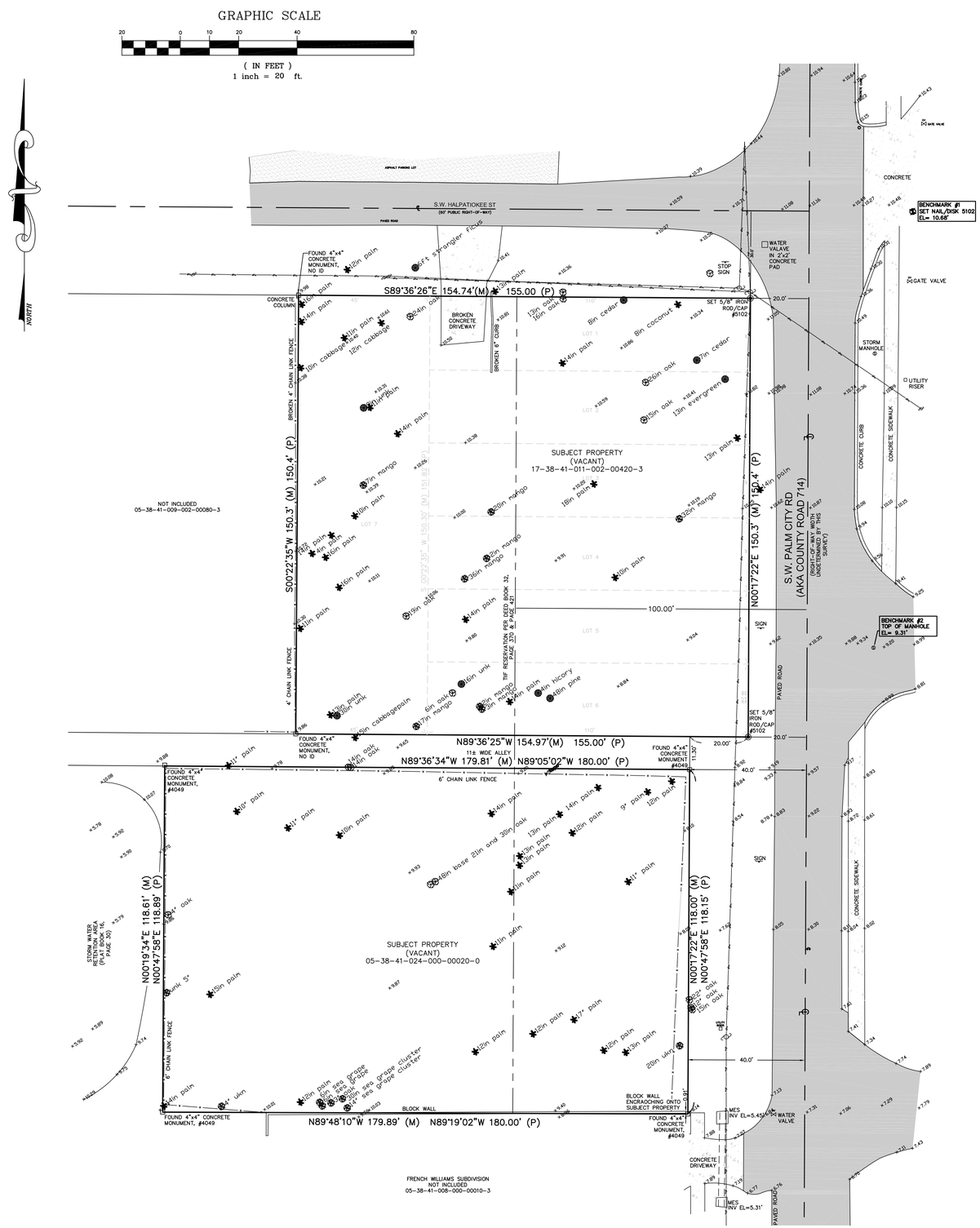
P.U.D. SITE PLAN

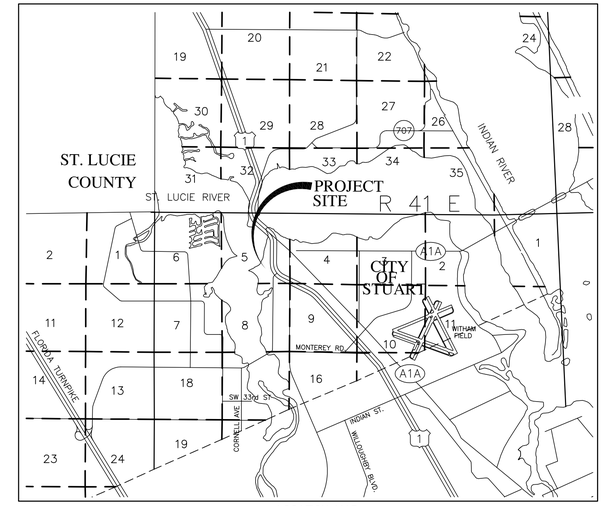
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

ENGINEER'S SEAL:
SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 43954

PROJECT NO.

SHEET 1 OF 1





LOCATION MAP
NOT TO SCALE

BOUNDARY SURVEY

NAVD88

PARCEL ID:
05-38-41-009-002-00010-8
AND
05-38-41-024-000-00020-0

PARCEL ADDRESS:
502 HALPATIOKEE ST, STUART
AND
924 SW PALM CITY ROAD, STUART

LEGAL DESCRIPTION:
LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

SURVEYOR'S NOTES:
1. BEARINGS REFER TO STATE PLANE, NAD83 FLORIDA EAST ZONE 901, VRS.
2. (D)=DEED CALL; (M)=FIELD MEASUREMENT; (C)=CALCULATED MEASUREMENT
3. PROPERTY LIES IN FLOOD ZONE X, FEMA MAP 12085C0134G, 3-16-15.
4. THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAYS, EASEMENTS, OR OTHER ENCUMBRANCES BY THIS FIRM. SURVEY PREPARED WITHOUT BENEFIT OF TITLE.
5. UNDERGROUND UTILITIES NOT LOCATED PER THIS SURVEY.
6. ℄ = CENTERLINE OF ROAD; PO = POWER POLE; UNK = UNKNOWN; IN = INCH.
7. ELEVATIONS REFER TO NAVD88 (NORTH AMERICAN VERTICAL DATUM 1988) MARTIN COUNTY BENCHMARK "POP-PC" EL=5.42'.

DRAWING DATE: 12/23/19
FIELD DATE: 12/18/19
F.B. D5 PAGE 56
SKETCH NO. 219051_lots1-7blk2_dyer.dwg

CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
ENVIRONMENTAL CONSULTING
3401 SW 72ND AVE., PALM CITY, FLORIDA
P.O. BOX 2533, PALM CITY, FL 34991
PH.(772)283-2977 EMAIL FENEXC@BELLSOUTH.NET
LICENSED BUSINESS # 6858

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CHRISTIAN FENEX CERTIFICATE NO. 5102 STATE OF FLORIDA PROFESSIONAL SURVEYOR AND MAPPER

FLORIDA REGISTRATION #5102
CHRISTIAN FENEX

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	WATER USAGE
CANOPY / ORNAMENTAL TREES							
11	CS*	CONOCARPUS ERECTUS VAR. SERICEUS	SILVER BUTTONWOOD	8' O.A./5' SPRD.	A.S.	FULL CANOPY	LOW
13	IE*	ILEX x ATTENUATA 'EAGLESTON HOLLY'	EAGLESTON HOLLY	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
5	MG*	MAGNOLIA GRANDIFLORA	LITTLE GEM MAGNOLIA	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
6	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
PALMS							
9	SP*	SABAL PALMETTO	SABAL PALM	SEE PLAN	A.S.	SLICK TRUNKS	LOW
SHRUBS / HEDGES							
45	CLU	CLUSIA GUTTIFERA	SMALL LEAF CLUSIA	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
355	CHI*	CHRYSOBALANUS ICACO	COCOPLUM	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
	SOD	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD			SEE SPECS	HIGH

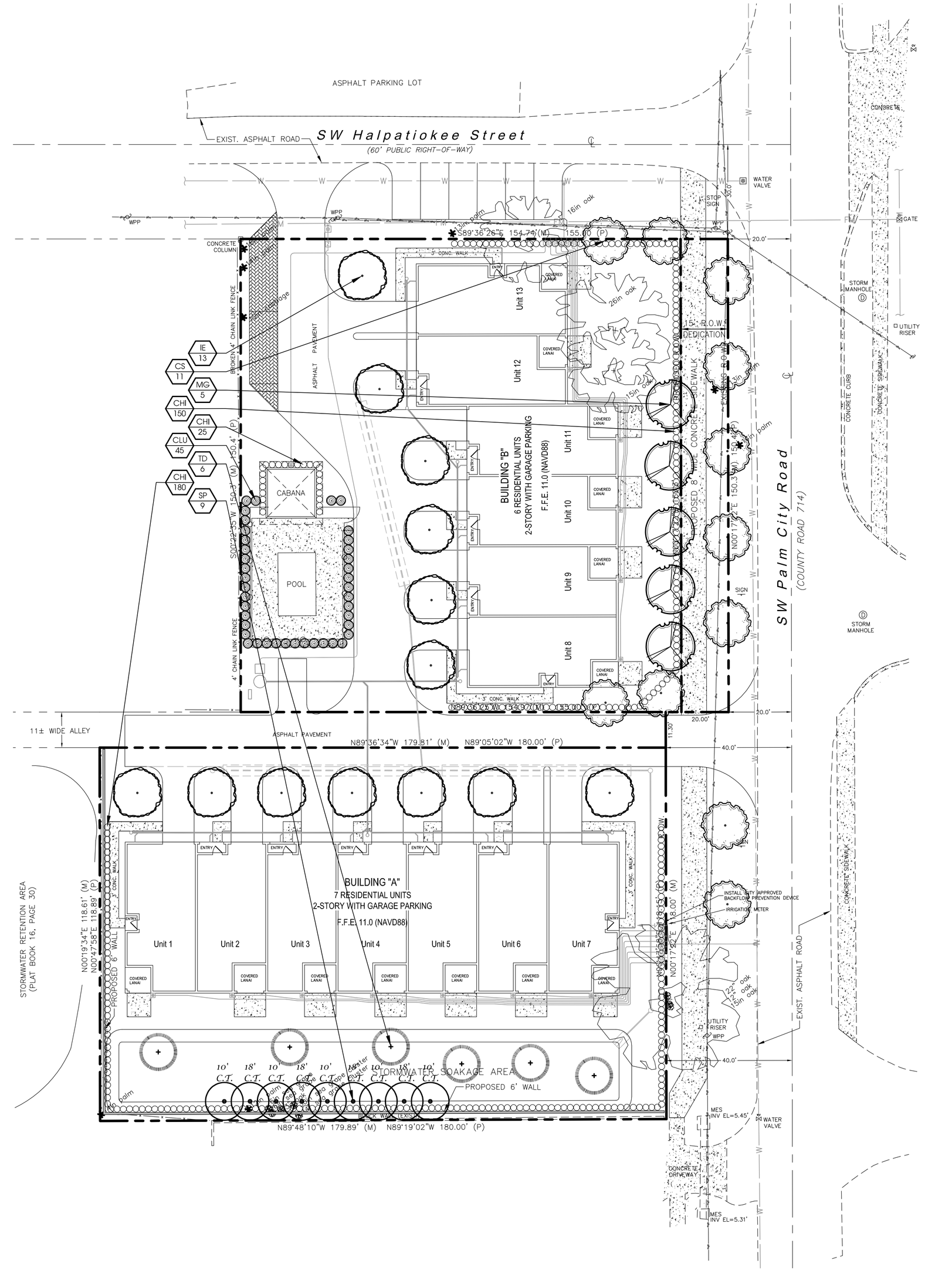
* = Florida Native

Landscape Data

Total Site Area:	42,297 s.f.	.97 Ac.	100%
Total Trees Required: (6.04.08)			
Required: 1 Tree / 1,500 s.f. = 42,297 / 1,500 = 28			28
Provided:			28
Total Shade Trees Required: (6.04.02.A.2) 50% of total required trees = 28 x 50% = 14			14
Total Shade Trees Provided:			18
Total Native Trees Required: (6.04.02.A.1) 50% of total required trees = 28 x 50% = 14			14
Native Trees Provided:			28 (100%)
Landscape Area: (6.04.03.B.1)			
Required: 20% of developed area = 42,297 x 20% = 8,459.4			8,459.4
Provided:			17,721

Xeriscape Points

Option	Points
Utilization of moisture sensing controller other than rain switch	5
Plan submitted with low, moderate and high water usage zones indicated on the Landscape Plan	5
51% or more of the required shrubs are made up of drought tolerant species from the list	10
51% or more of the required trees are made up of drought tolerant species from the list	10
50% more than the required shade trees planted in the vehicular use area	10
Utilization of mulch other than Cypress mulch	5
Utilization of compacted mulched planting beds at least three inches deep in all planted areas except Ground Cover	10
Points Required:	55
Points Provided:	50



Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Palmetto Cove

City of Stuart, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No.	19-1203
Drawn By	JWS
Submittal Dates	8-26-2020
	4-16-2021
	4-28-2021
Revision Dates	
S.W. Walls & add SP	4-16-2021
Add Street Trees	4-28-2021

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Sheet 1 of 2

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 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. Call 811 - Sunshine State One Call of Florida, Inc. - www.sunshine811.com
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Environmulch. 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. All plant material and sod shall be fertilized in accordance with Martin County's fertilizer ordinance. Soil tests are required from the site to be in compliance with the ordinance and shall be taken from the minimum required areas as stated in the ordinance. Fertilizer shall be a complete natural organic fertilizer and slow release.

Fertilized with a complete natural organic fertilizer with a ratio as allowed by the County.

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 (If allowed by County) 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

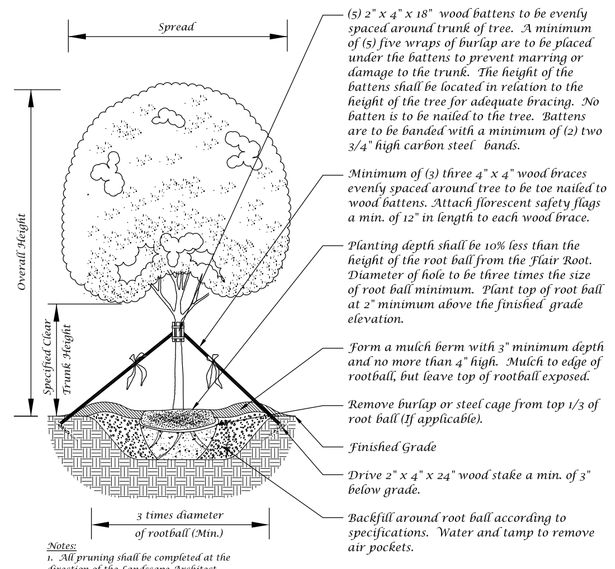
11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers 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.
    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 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.

NOTE:
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.

General Notes

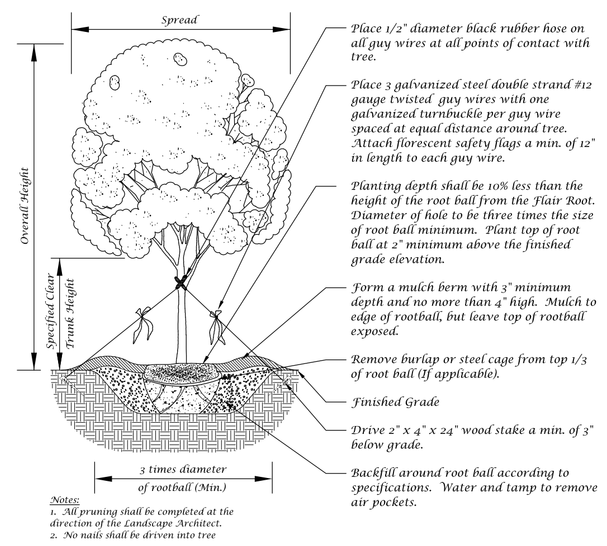
1. No plant substitutions can be made without City of Stuart approval.
2. All required landscape improvements must be inspected and approved by the City of Stuart prior to the issuance of a Certificate of Occupancy.
3. Any existing landscaping, sod, or irrigation damaged or destroyed during the construction shall be replaced prior to the final inspection.
4. All prohibited, exotic and invasive species shall be removed from the entire site prior to issuance of certificate of occupancy.
5. All planting areas and sod to be irrigated to provide 100% coverage and provide adequate irrigation of landscape areas for the first full growing season and continue thereafter only as necessary to maintain required vegetation in good and healthy condition. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
6. The Irrigation system shall be continuously maintained in working order.
7. An automatic Rain sensor shall be placed on-site as part of the required Irrigation system.
8. Planting adjacent to fire hydrants is to have a minimum clear radius of 7.5' as required by the NFPA Uniform Fire Code Florida Edition 18.3.4.1 Hydrants. All fire hydrants and fire check valves shall have a minimum of 7.5' from the front and sides with 4' from the rear to all landscape material per the Florida Fire Prevention Code.
9. Sod and irrigation will be installed in any adjacent right-of-way, between walks and curbs.
10. Root barriers shall be installed in accordance with manufacturer specifications adjacent to all trees planted within six feet of curbs or sidewalks in public right-of-way.

Landscape Details



Large Tree Planting Detail (5" Caliper or Greater)

Not to Scale



Tree Planting Detail

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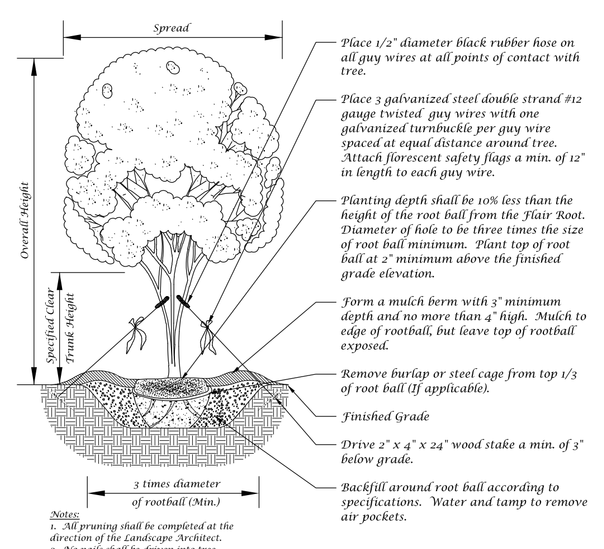
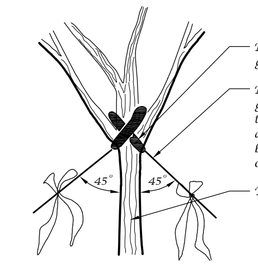


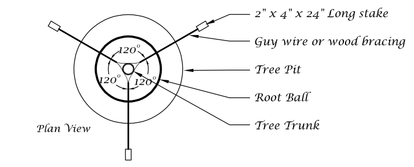
Multi-Trunk Tree Planting Detail

Not to Scale



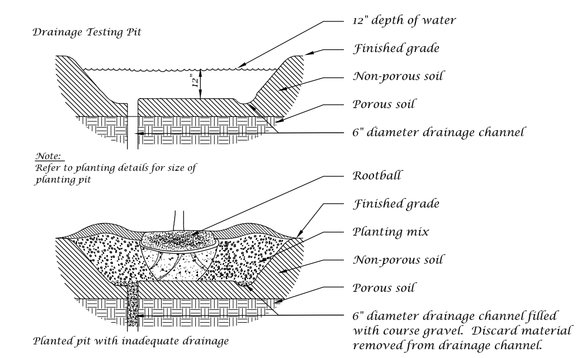
Guy Wire Attachment Detail

Not to Scale



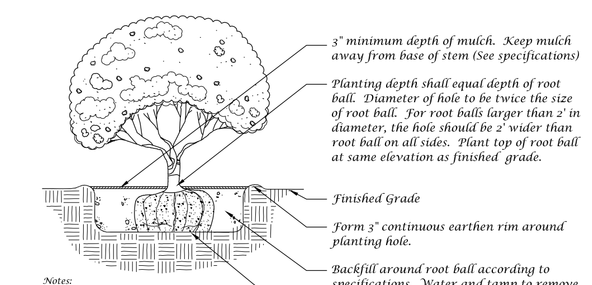
Staking Detail

Not to Scale



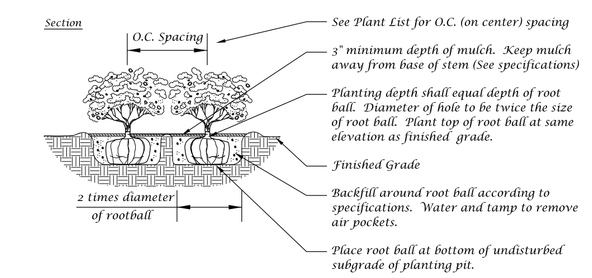
Drainage Testing Detail

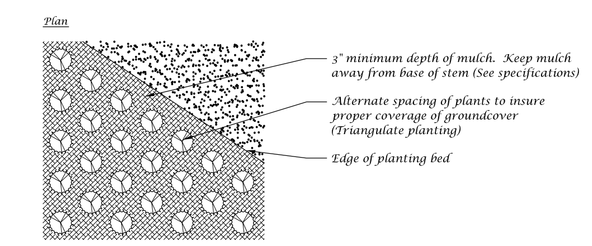
Not to Scale



Shrub Detail

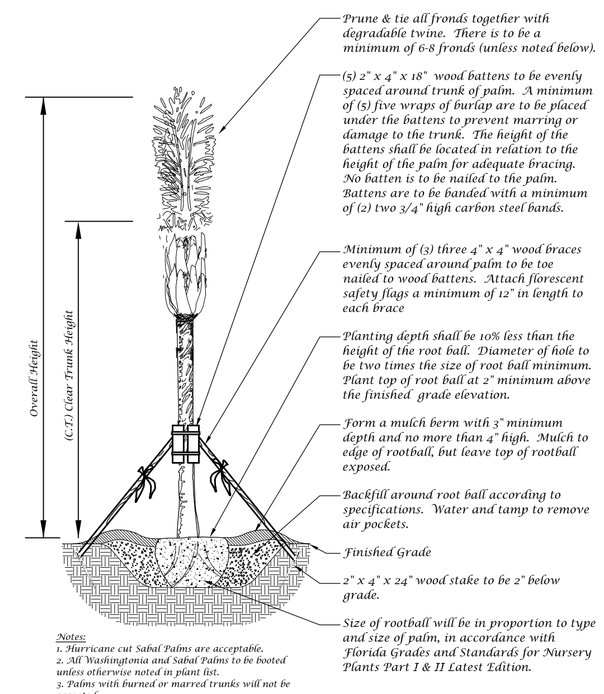
Not to Scale





Ground Cover Detail

Not to Scale



Palm Planting Detail

Not to Scale

Landscape Plan

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Palmetto Cove

City of Stuart, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No.	19-1203
Drawn By	JWS
Submittal Dates	8-26-2020
	4-16-2021
	4-28-2021
Revision Dates	
S.W. Walls & add SP	4-16-2021
Add Street Trees	4-28-2021

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	SOD	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD			SEE SPECS	HIGH

* = Florida Native

Landscape Data

Total Site Area:	42,297 s.f.	.97 Ac.	100%
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Xeriscape Points

Option	Points
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Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

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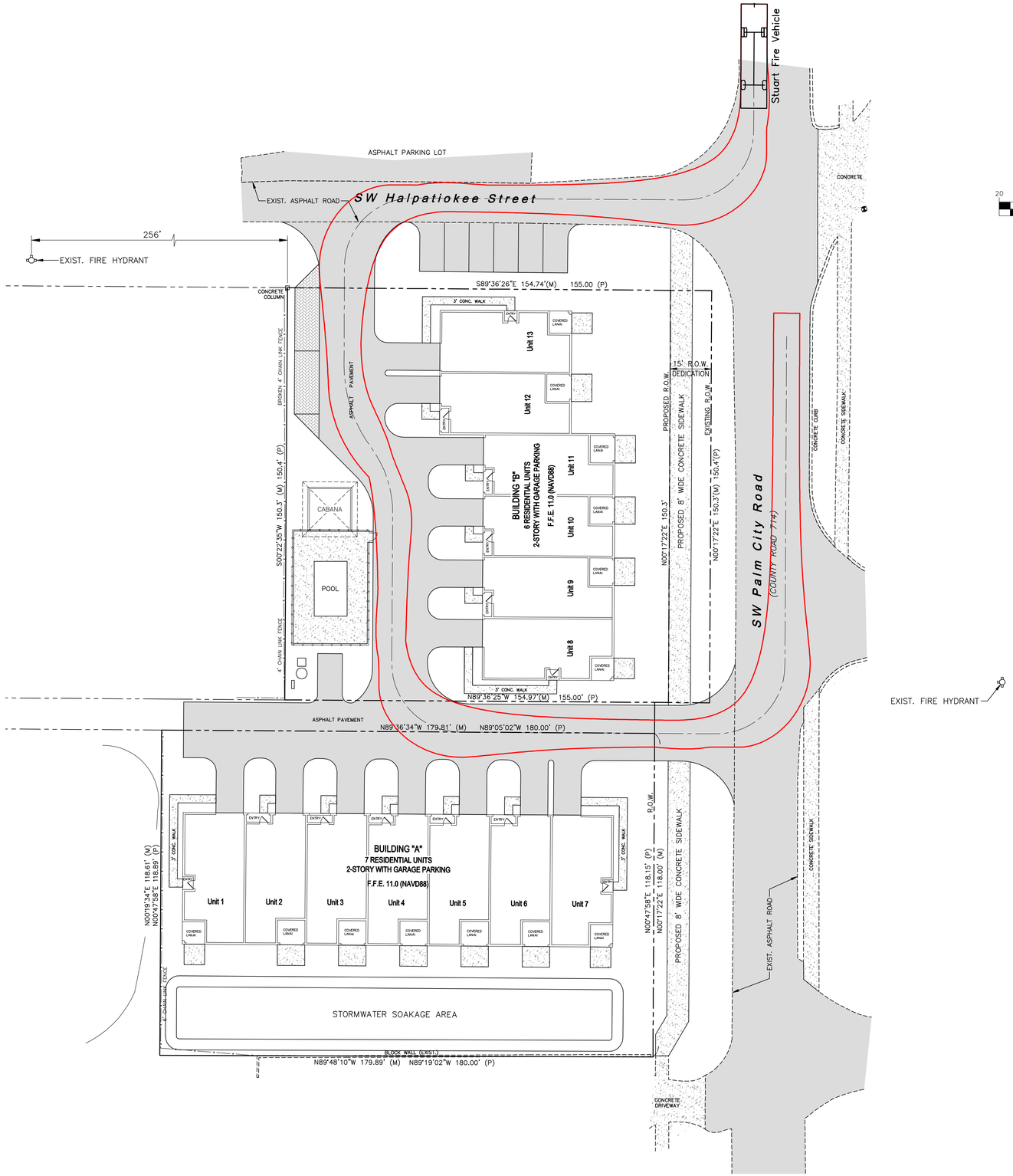
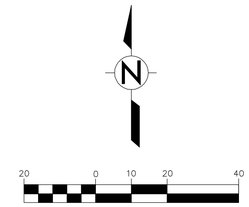
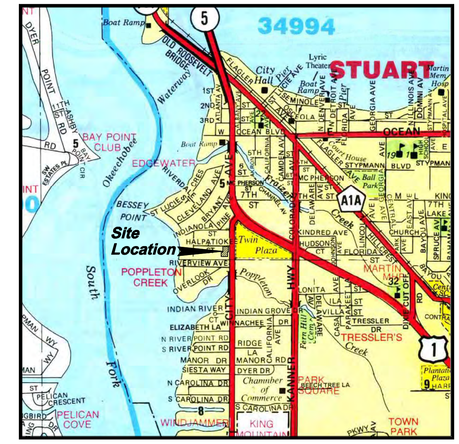


Fire Truck Maneuvering Exhibit





Vicinity Map

1"=1,600'

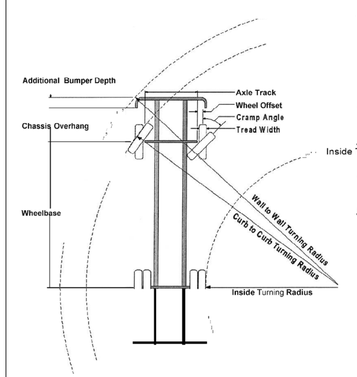
Turning Performance Analysis

02/20/2017

Bid Number: 18143TR

Department: Stuart, City of

Chassis: Quantum , Bright Finish, S Chassis, Aerials, 31K Single Axle,
Body: Aerial, HD Ladder, Quint, Alum Body



Parameters:

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.70 in.
Chassis Overhang:	82.44 in.
Additional Bumper Depth:	19.00 in.
Front Overhang:	101.44 in.
Wheelbase:	230.75 in.

Calculated Turning Radii:

Inside Turn:	18 ft. 1 in.
Curb to curb:	33 ft. 7 in.
Wall to wall:	38 ft. 10 in.

Comments:

Category:	Option:	Description:
Axle, Front, Custom	0018453	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, DLX/Enf/Qtm/AXT
Wheels, Front	0019611	Wheels, Frt, Alum, Alcoa, 22.50" x 12.25" (425/ & 385/)
Tires, Front	0001647	Tires, Michelin, 425/65R22.50 20 ply XTE2, Hiway Rib
Bumpers	0012245	Bumper, 19" extended - Sab/CC
Aerial Devices	0057609	Aerial Device, 750# Tip Load, 75' HAL, Single Axle

Notes:

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

Overall truck length is 38 feet

Overall truck width is 9.6 feet

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Engineers–Surveyors (LB & C.A. 0000160)
P.O. BOX 92...959 S. FEDERAL HWY....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

FIRE TRUCK MANEUVERING EXHIBIT

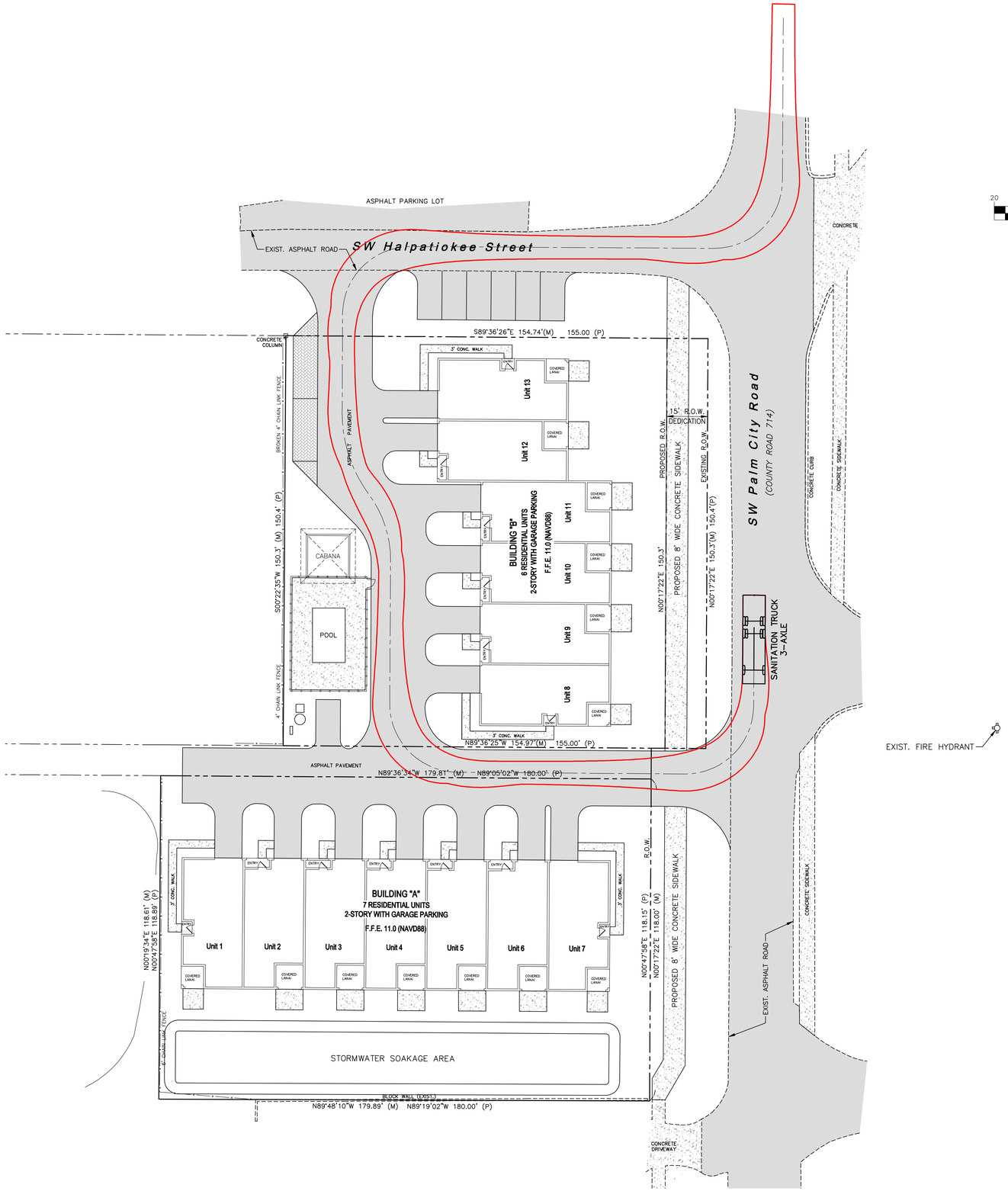
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

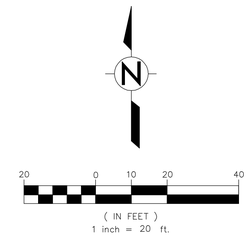
ENGINEER'S SEAL:

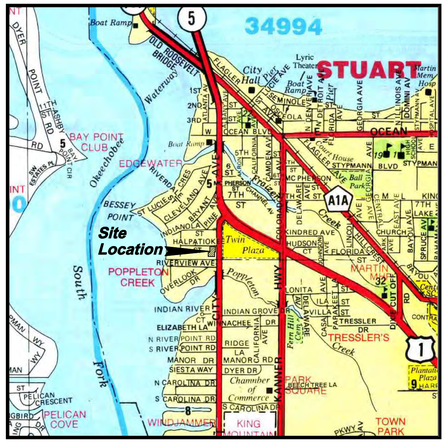
SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 1 OF 1







Vicinity Map

1"=1,600'

Sanitation Truck Maneuvering Exhibit 1

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NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

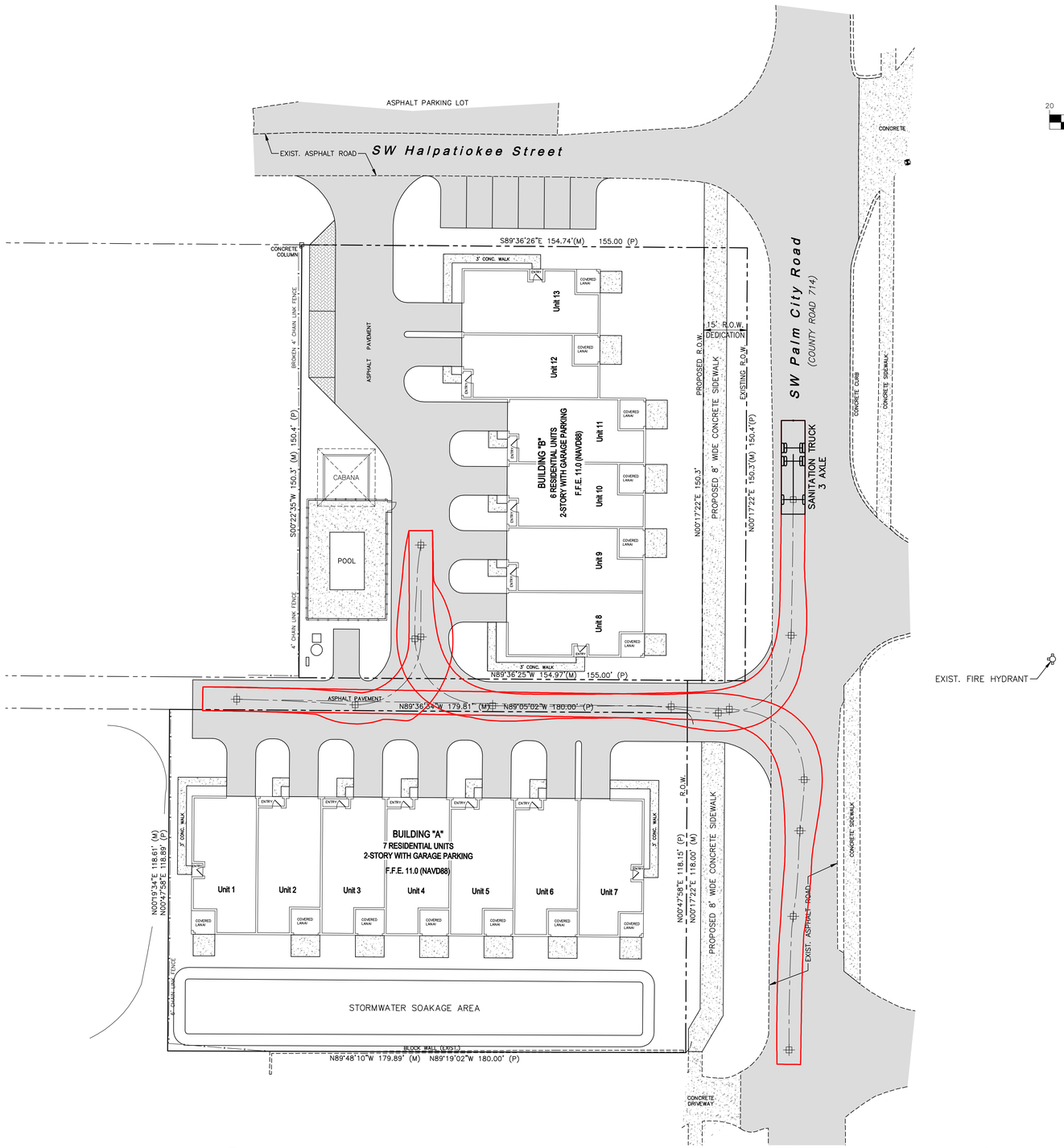
SANITATION TRUCK MANEUVERING EXHIBIT 1

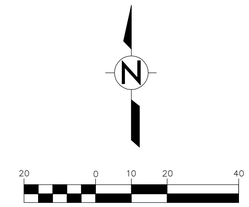
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

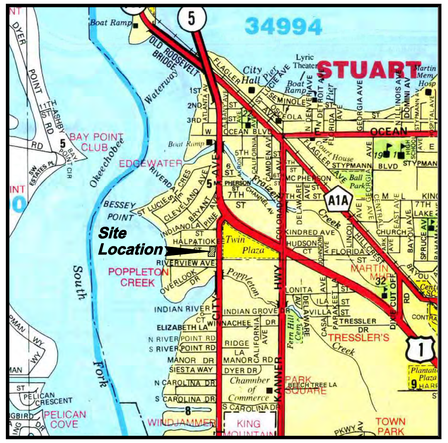
ENGINEER'S SEAL:
SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 1 OF 2







Vicinity Map

1"=1,600'

Sanitation Truck Maneuvering Exhibit 2

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Engineers–Surveyors (LB & C.A. 0000160)
P.O. BOX 92...959 S. FEDERAL HWY....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

SANITATION TRUCK MANEUVERING EXHIBIT 2

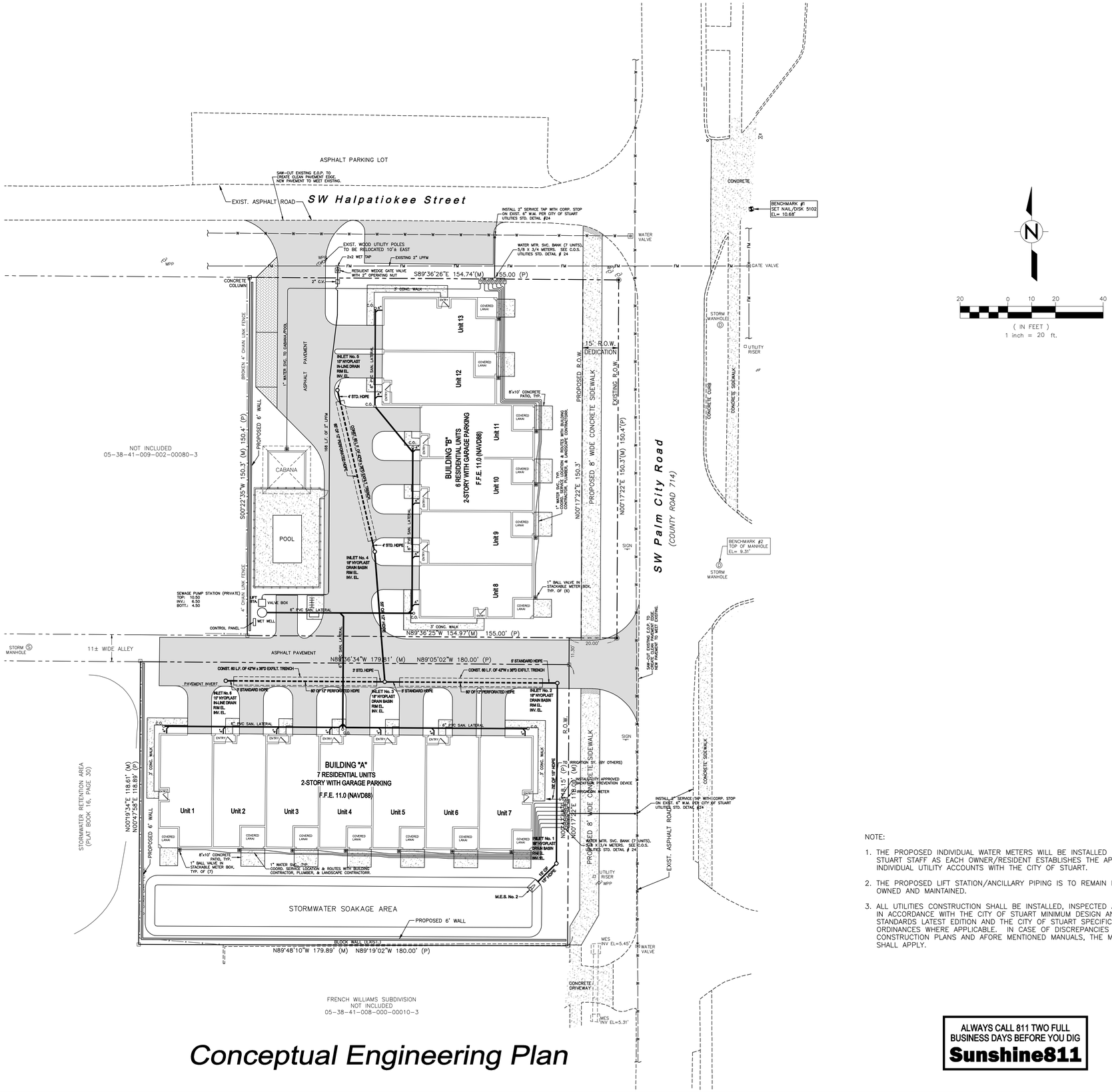
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

ENGINEER'S SEAL:

SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 2 OF 2



NOTE:

1. THE PROPOSED INDIVIDUAL WATER METERS WILL BE INSTALLED BY CITY OF STUART STAFF AS EACH OWNER/RESIDENT ESTABLISHES THE APPLICABLE INDIVIDUAL UTILITY ACCOUNTS WITH THE CITY OF STUART.
2. THE PROPOSED LIFT STATION/ANCILLARY PIPING IS TO REMAIN PRIVATELY OWNED AND MAINTAINED.
3. ALL UTILITIES CONSTRUCTION SHALL BE INSTALLED, INSPECTED AND TESTED IN ACCORDANCE WITH THE CITY OF STUART MINIMUM DESIGN AND CONSTRUCTION STANDARDS LATEST EDITION AND THE CITY OF STUART SPECIFICATIONS AND ORDINANCES WHERE APPLICABLE. IN CASE OF DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND AFORE MENTIONED MANUALS, THE MOST RESTRICTIVE SHALL APPLY.

Conceptual Engineering Plan

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Sunshine811

ENGINEER'S SEAL:

SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

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Engineers–Surveyors (LB & C.A. 0000160)
P.O. BOX 92...959 S. FEDERAL HWY.....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE
1	MISC. PER C.O.S. COMMENTS	[04.16.21]
1	MISC. PER C.O.S. COMMENTS	[02.16.21]

DESIGNED BY: DATE: 09.20.20
DRAWN BY: SCALE: 1"=20'

CONCEPTUAL ENGINEERING PLAN

SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

PROJECT NO.

SHEET 1 OF 1

BLDG A NORTH ELEVATION (PARKING)

SCALE: 3/16" = 1'-0"

BLDG A SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

JOB NUMBER:
19-178A

SHEET NO:

OF X.

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
417 S.E. COCONUT AVENUE
Tel : (772) 287-8258
Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34996 #AAC000032

BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

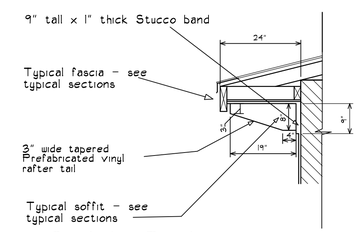
STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

BLDG A EAST ELEVATION (STREET)

SCALE: 3/16" = 1'-0"

BLDG A WEST ELEVATION

SCALE: 3/16" = 1'-0"



Out-looker Detail

Scale: nts

JOB NUMBER:
19-178A

SHEET NO:

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BUILDING A FOR:

PALMETTO CALLE

Address: stuart florida

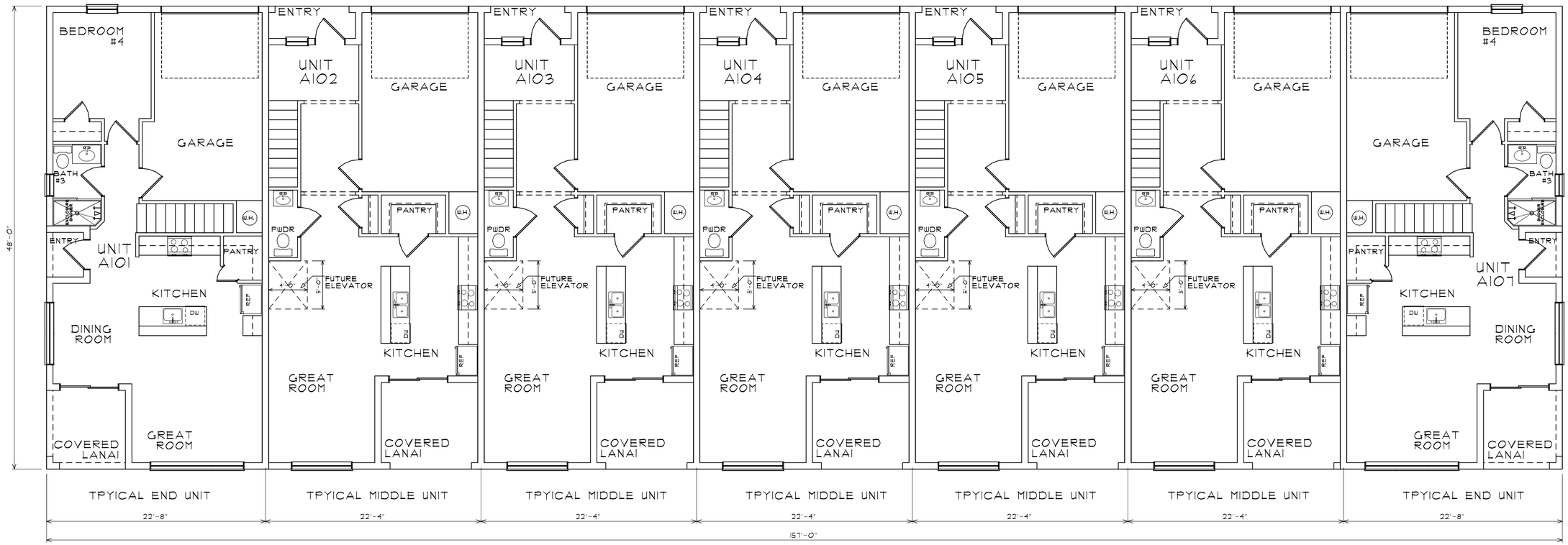
Date Drawn: 8-21-20

Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING A FLOOR PLAN

SCALE 3/16" = 1'-0"

Building A Square Footage TOTAL

First Floor Foot Print =	7,536 sq. ft.
Second Floor Foot Print =	7,409 sq. ft.
Total Footprint =	14,945 sq. ft.

JOB NUMBER: 19-178A

SHEET NO:

OF X.

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Stuart, FL 34996 #AAC000032

BUILDING A FOR:

PALMETTO CALLE

Address: stuart florida

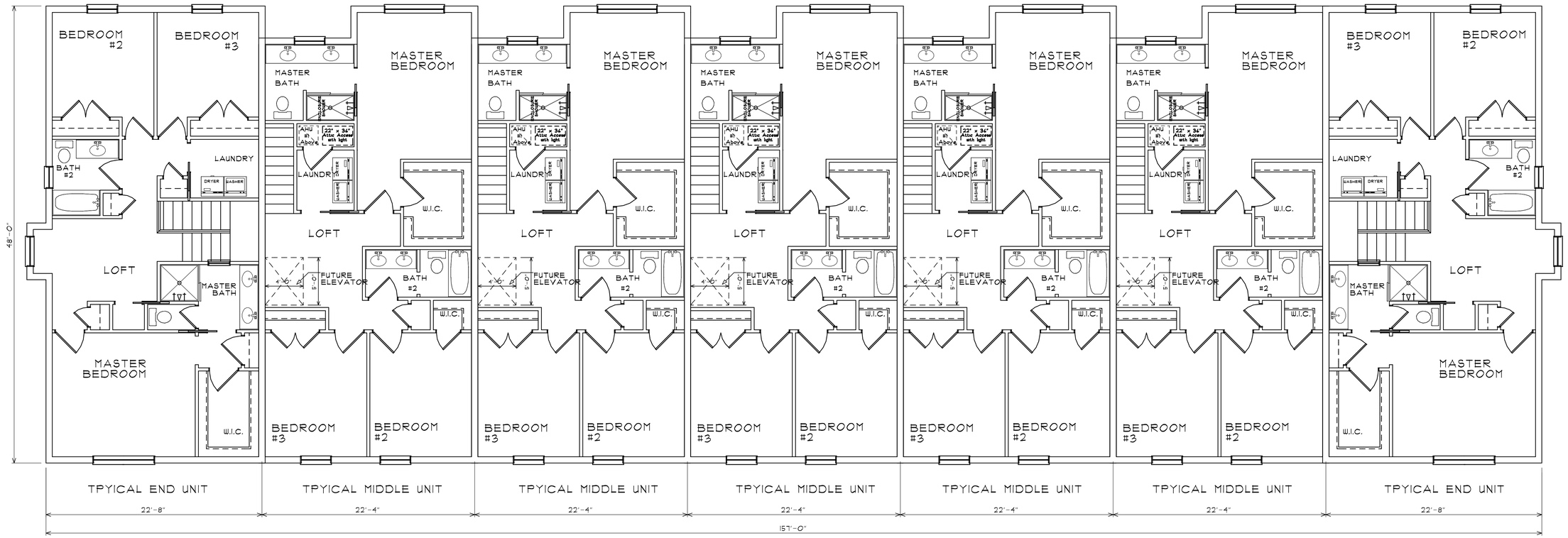
Date Drawn: 8-21-20

Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING A SECOND FLOOR PLAN

SCALE 3/16" = 1'-0"

JOB NUMBER:
19-178A

SHEET NO:

OF X.

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BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

BLDG B WEST ELEVATION (PARKING)

SCALE: 3/16" = 1'-0"

BLDG B EAST ELEVATION (STREET)

SCALE: 3/16" = 1'-0"

JOB NUMBER: 19-178B

SHEET NO:

OF X.

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Stuart, FL 34996 #AAC000032

BUILDING B FOR:

PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20

Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

BLDG B NORTH ELEVATION

SCALE: 3/16 = 1'-0"

BLDG B SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

JOB NUMBER:
19-178B

SHEET NO:

OF X.

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Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34996 #AAC000032

BUILDING B FOR:

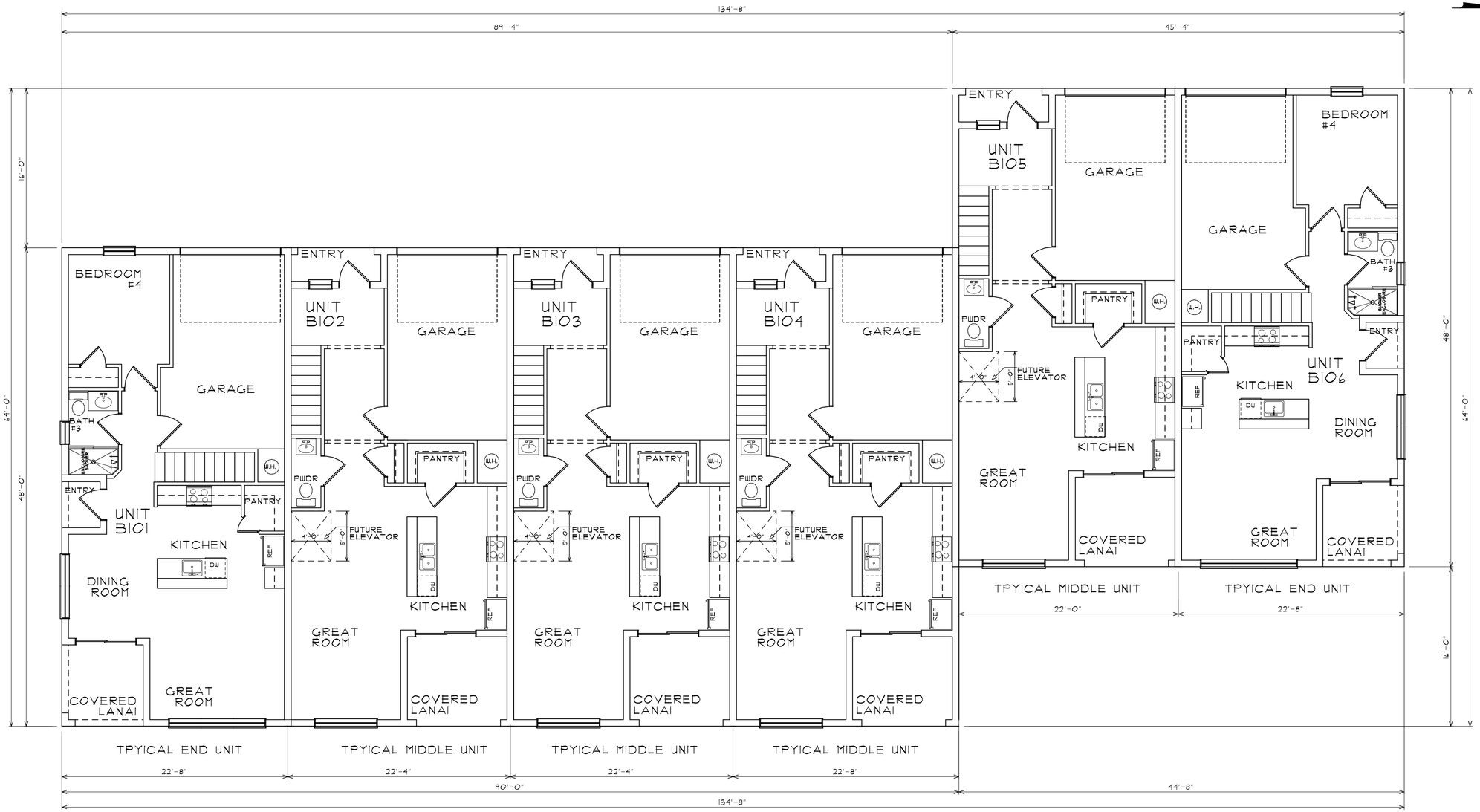
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING B FLOOR PLAN

SCALE 3/16" = 1'-0"

Building B Square Footage TOTAL

First Floor Foot Print =	6,475	sq. ft.
Second Floor Foot Print =	6,375	sq. ft.
Total Footprint =	12,850	sq. ft.

Revisions :

Date Drawn: 8-15-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

BUILDING B FOR:
PALMETTO CALLE

Address: stuart florida

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
417 S.E. COCONUT AVENUE
Tel : (772) 287-8258
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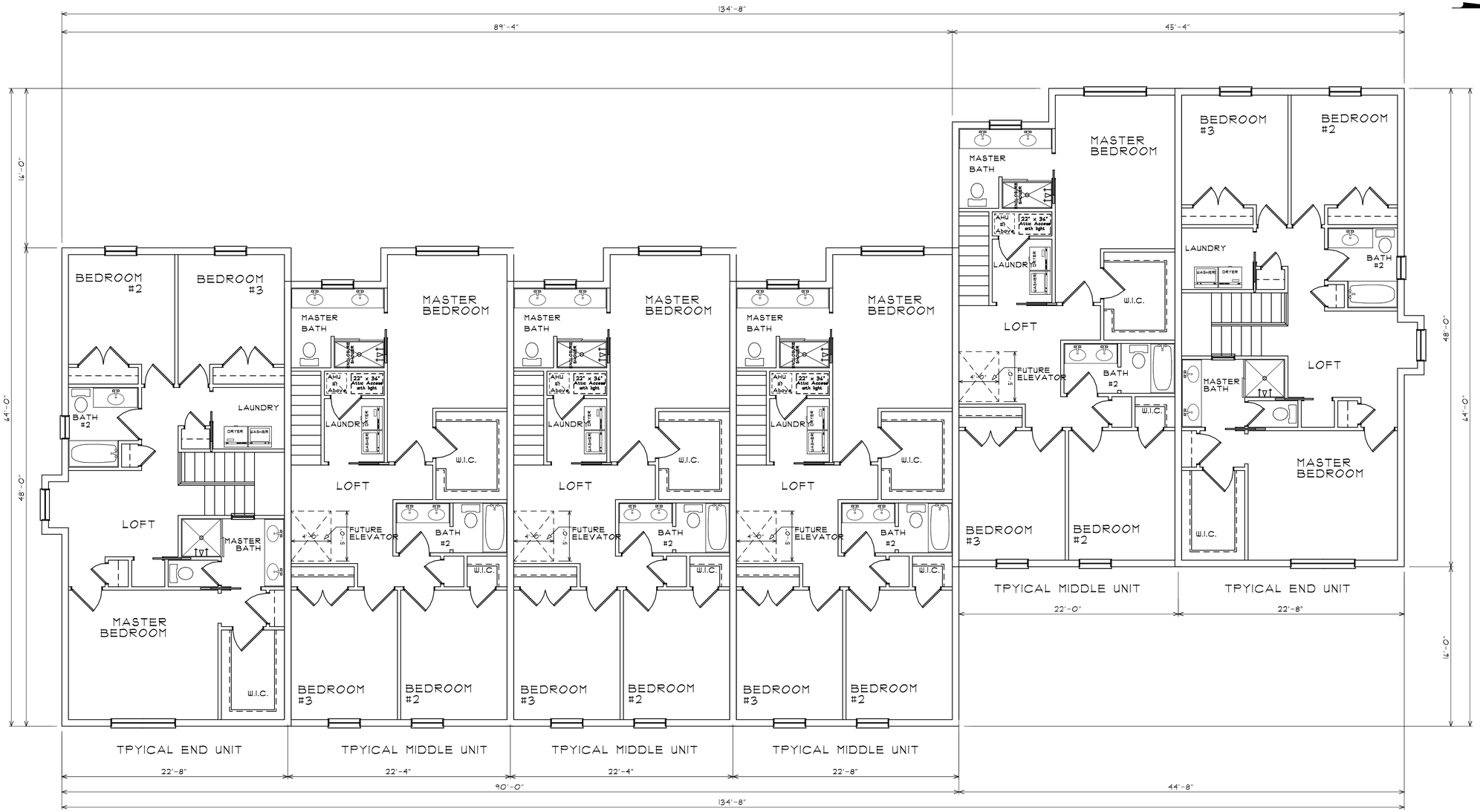
B

SHEET NO:

OF X.

JOB NUMBER:
19-178B

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING B SECOND FLOOR PLAN

SCALE 3/16" = 1'-0"

Building Square Footage

First Floor Foot Print =	7,536 sq. ft.
Second Floor Foot Print =	7,409 sq. ft.
First Floor Total =	14,945 sq. ft.

Revisions :

Date Drawn: 8-15-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

BUILDING B FOR:
PALMETTO CALLE

Address: stuart florida

Braden & Braden AIA, PA
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411 S.E. COCONUT AVENUE
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Fax : (772) 287-8283
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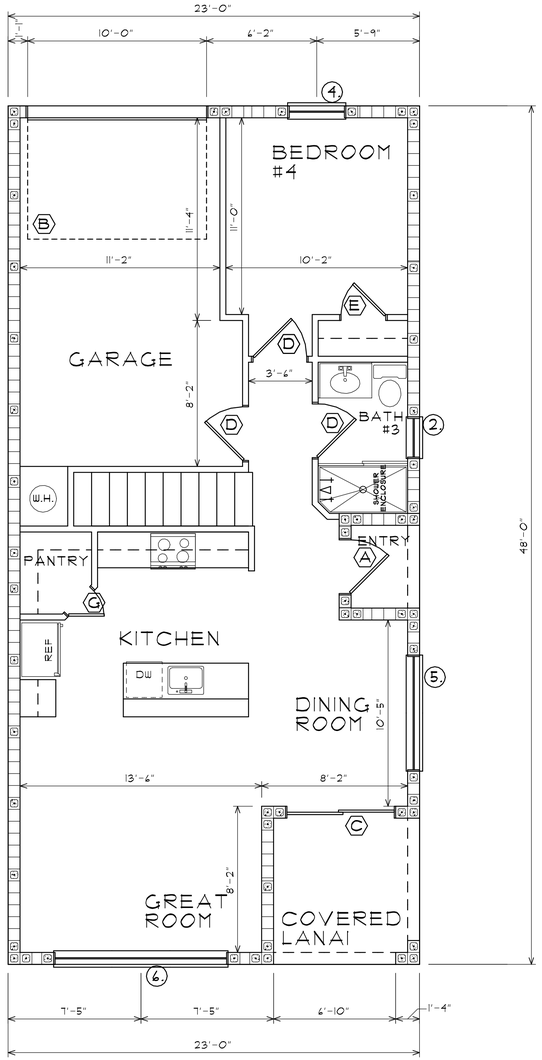
B

SHEET NO:

OF X.

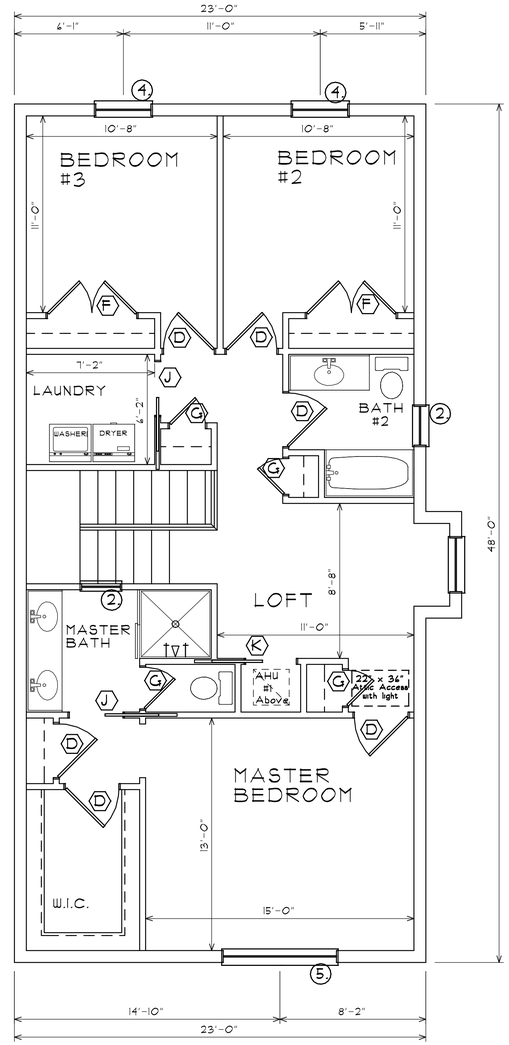
JOB NUMBER:
19-178B

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



Typical End Unit 1st Floor Plan

SCALE 1/4" = 1'-0"



Typical End Unit 2nd Floor Plan

SCALE 1/4" = 1'-0"

TYPICAL END UNIT PLANS

First Floor Square Footage

First Floor A/C =	760 sq. ft.
Covered Porch Total =	84 sq. ft.
Garage =	260 sq. ft.
First Floor Total =	1,104 sq. ft.

Second Floor Square Footage

Second Floor A/C =	1,054 sq. ft.

A/C Space Breakdown

First Floor A/C =	760 sq. ft.
Second Floor A/C =	1,054 sq. ft.
Total A/C space =	1,814 sq. ft.

Revisions :

Date Drawn: 9-25-19
Drawn by: N.T.C.
Checked by: D.R.B.

Residence For:
Southern Landmark

Address: stuart florida

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
417 S.E. COCONUT AVENUE
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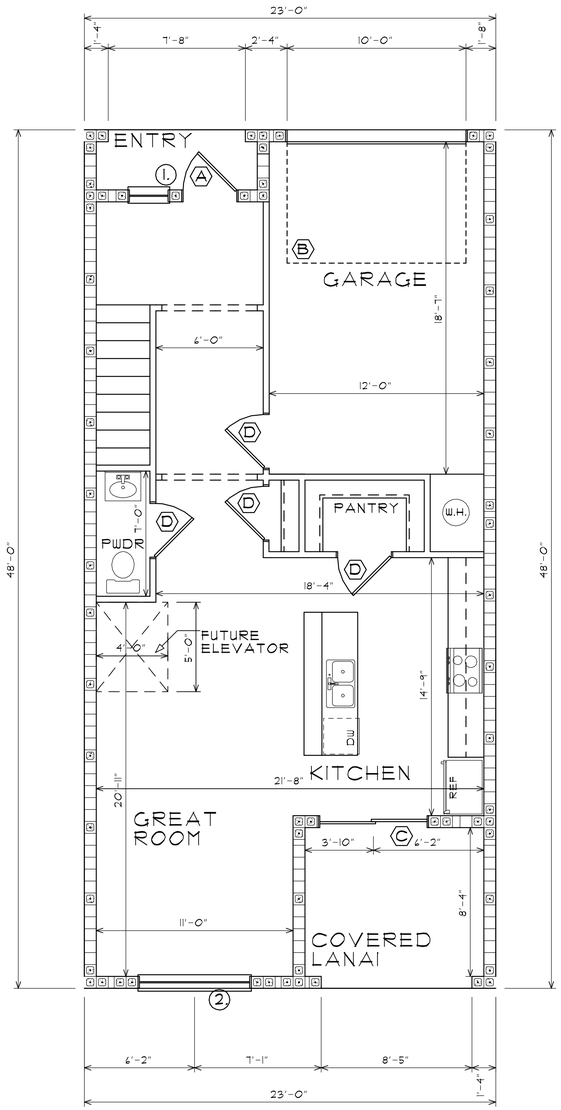
Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34994 #AAC000032

SHEET NO:

OF xx

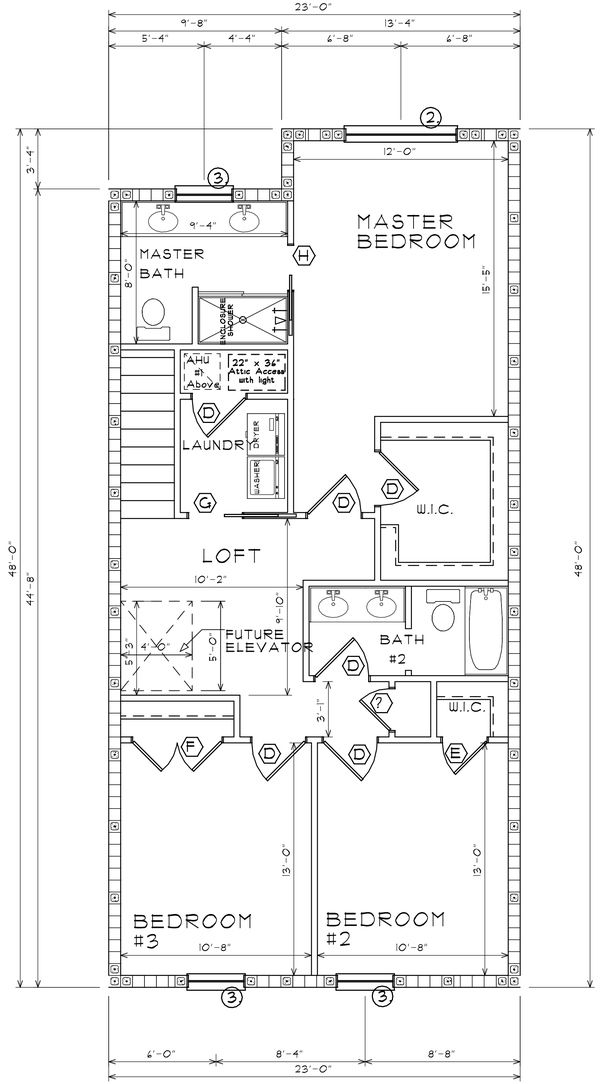
JOB NUMBER:
19-178

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



Typical Middle Unit 1st Floor Plan

SCALE 1/4" = 1'-0"



Typical Middle Unit 2nd Floor Plan

SCALE 1/4" = 1'-0"

TYPICAL MIDDLE UNIT PLANS

First Floor Square Footage

First Floor A/C =	684 sq. ft.
Covered Porch Total =	96 sq. ft.
Garage =	245 sq. ft.
First Floor Total =	1,055 sq. ft.

Second Floor Square Footage

Second Floor A/C =	982 sq. ft.

A/C Space Breakdown

First Floor A/C =	684 sq. ft.
Second Floor A/C =	982 sq. ft.
Total A/C space =	1,667 sq. ft.

Revisions :

Date Drawn: 8-21-20
Drawn by: D.R.B.
Checked by: D.R.B.

Residence For:
Southern Landmark

Address: stuart florida

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
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SHEET NO:

OF xx

JOB NUMBER:
18-

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

PALMETTO CALLE - STUART, FL

PALM CITY ROAD WEST FACING

PALM CITY ROAD SOUTHWEST FACING

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
417 S.E. COCONUT AVENUE
Tel : (772) 287-8258
Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34996 #AAC000032

BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

JOB NUMBER: 19-178A

SHEET NO:

OF X.

STATE OF FLORIDA DANIEL R. BRADEN AR 9770 REGISTERED ARCHITECT

Recorded in Martin County, FL 8/9/2021 10:05 AM
Carolyn Timmann, Clerk of the Circuit Court & Comptroller
Rec Fees: $299.00
CFN#2906962 BK 3247 PG 1338 PAGE 1 of 35

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2463-2021

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, REZONING TWO PARCELS ON EITHER SIDE OF A 11' PUBLIC RIGHT OF WAY (ALLEY) ALONG SW PALM CITY ROAD, ON THE SOUTHWEST INTERSECTION OF SW HALPATIOKEE STREET, TOTALING 0.97 ACRES FROM RESIDENTIAL MULTI-FAMILY/OFFICE (R-3) TO RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD); ESTABLISHING THE "PALMETTO COVE" RPUD CONSISTING OF THIRTEEN (13) MULTI-FAMILY UNITS WITHIN TWO (2) INDIVIDUAL TWO-STORY TOWNHOME BUILDINGS; WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT; DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

WHEREAS, the City Commission, has considered the Petitioner's request to rezone the property to Residential Planned Unit Development (RPUD), establishing the Palmetto Cove RPUD, and has also considered the recommendation of the City staff; and

WHEREAS, the Applicant has committed to the City that its development will comply with all development codes, plans, standards and conditions approved by the City Commission; and that it will bind its successors in title to any such commitments made upon approval of the RPUD; and

WHEREAS, at the hearing the applicant showed by substantial competent evidence that the application is consistent with the Stuart Comprehensive Plan, and the Land Development Code of the City, and with the procedural requirements of law; and

WHEREAS, the RPUD development will be in harmony with surrounding properties and their anticipated development.

WHEREAS, the foregoing recitals are true and adopted as findings of fact and conclusions of law.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA THAT:

SECTION 1: The foregoing recitals are true and adopted as findings of fact and conclusions of law.

SECTION 2: The legal description of the property is set forth in **Exhibit 'A'** attached hereto and made a part hereof by reference. A Map depicting the Property is attached hereto as **Exhibit 'B'** and made a part hereof by reference. The conditions of development attached hereto as **Exhibit 'C'** and made a part hereof by reference, and each shall constitute one of the development documents.

SECTION 3: The following documents are on file as public records of the City, at the office of the City Clerk in City Hall, and attached hereto as **Exhibit 'D'**, hereinafter the 'Development Documents', shall be deemed a part of the development conditions, and shall supplement any earlier approvals:

a. **The Site Plan, Sheet 1 of 1, prepared by C Calvert Montgomery and Associates, Inc., dated 05.21.2020 and last revised on 04.29.21**
b. **Boundary and Topographic Survey, Sheet 1 of 1, prepared by Christian Fenex and Associates, LLC, (Professional Surveyor and Mapper), dated 12.23.19**
c. **The Landscape Plan, Sheets 1 and 2 and Color Graphic Sheet 1 of 1, prepared Conceptual Design Group, dated 08.26.20 last revised 4.28.21**
d. **Garbage Truck Exhibit and Fire Truck Exhibit, Sheets 1 thru 3, prepared by C Calvert Montgomery and Associates, Inc., dated 02.15.21**
e. **Conceptual Engineering Plan, Sheet 1, prepared by C Calvert Montgomery and Associates, Inc., dated 02.16.21 and last revised on 4.16.21**
f. **Architectural Floor Plans and Elevations, by Braden and Braden A1A PA, dated 08.12.20**
g. **Architectural Rendering, by Braden and Braden A1A, PA, dated 08.21.20**

SECTION 4: Except as otherwise provided herein, no development permits, site permits or building permits shall be issued by the City except in compliance with the aforesaid Development Documents. The failure of the Developer to complete development, or to comply with the Development Documents, or with any term or condition of development set forth in this ordinance, shall be deemed a zoning violation and no further permits, or other development approvals or orders shall be issued by the City to the owner until the violation has been resolved, and the matter may become the subject of a code enforcement action brought by the City. This section shall not impair the due process or other legal rights of the Developer to seek administrative or judicial redress.

SECTION 5: Following the adoption and acceptance of this ordinance by the Owner, and in addition to any other action for failure to complete development or otherwise comply with the Development Documents, the City Development Director may obtain a hearing before the City Commission, and shall thereupon give at least five (5) days written notice of the time, date and

location of the hearing, along with specific notice of the alleged breach. At the hearing before the City Commission the developer may appear and may contest the allegation of breach or explain the reason or reasons for the breach. Upon a finding of a material breach of the Development Documents and therefore, the Ordinance(s) adopting the same, the City Commission may impose any or all the following:

a. Initiate the process to amend or repeal this or any other ordinance pertaining to the development.
b. Direct the City Development Director to initiate the process to rezone the PUD property or any portion of the PUD property.
c. Impose an administrative penalty of up to $1,000.00 for each violation, and up to $5,000.00 for each repeat violation that occurs, along with all reasonable costs, including attorney's fees incurred by the City.

Any breach of any provision or condition of this PUD ordinance by the developer shall be considered a zoning violation subject to any remedies provided herein, or as otherwise provided by law. In the event a violation found continues from day to day, each day the violation is found to continue shall be deemed a separate violation.

SECTION 6: All ordinances or parts of ordinances in conflict with this ordinance or any part thereof is hereby repealed to the extent of such conflict. If any provision of this ordinance conflicts with any contractual provision between the City and the developer of the site, this ordinance shall prevail.

SECTION 7: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end the provisions of

this ordinance are declared severable.

SECTION 8: The complete execution and recording of this Ordinance by the City Clerk shall occur no later than 90 days from the date of this approval, failing which this ordinance shall become void.

SECTION 9: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owner, the City Clerk is directed to record a Certified Copy of the same in the Public Records of Martin County, Florida.

Passed on first reading the 26th day of April, 2021.

Commissioner MATHESON offered the foregoing Ordinance and moved its adoption.

The motion was seconded by Commissioner MCDONALD and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
EULA R. CLARKE, MAYOR	Y			
MERRITT MATHESON, VICE MAYOR	Y			
BECKY BRUNER, COMMISSIONER	Y			
TROY MCDONALD, COMMISSIONER	Y			
MIKE MEIER, COMMISSIONER	Y			

ADOPTED on second and final reading this 10th day of May, 2021.

ATTEST:

MARY R. KINDEL
CITY CLERK

EULA R. CLARKE
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

MICHAEL J. MORTELL, ESQ.
CITY ATTORNEY

CITY OF STUART · FLORIDA · INCORPORATED 1914 · SAILFISH CAPITAL OF THE WORLD

Ordinance No. 2463-2021 Palmetto Cove – rezoning to the RPUD

CITY'S ACKNOWLEDGMENT

STATE OF FLORIDA,
COUNTY OF Martin

The above Ordinance, Acceptance and Agreement was acknowledged before me by means of ✓ physical presence or _____ online notarization, this 23rd day of June, 2021, by EULA R. CLARKE, Mayor, and Mary R. Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

Personally Known OR Produced Identification
Type of ID Produced _____

Signature of Notary Public: Ryanne N. Cavo
Commission Expires:

RYANNE N. CAVO
Commission # GG 314904
Expires June 22, 2023
Bonded Thru Troy Fain Insurance 800-385-7019

Notary Seal:

ACCEPTANCE AND AGREEMENT

BY SIGNING THIS ACCEPTANCE AND AGREEMENT, THE UNDERSIGNED HEREBY ACCEPTS AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN A RESIDENTIAL PLANNED UNIT DEVELOPMENT AND IN ALL EXHIBITS, ATTACHMENTS AND DEVELOPMENT DOCUMENTS, INTENDING TO BE BOUND THEREBY, AND THAT SUCH ACCEPTANCE AND AGREEMENT IS DONE FREELY, KNOWINGLY, AND WITHOUT ANY RESERVATION, AND FOR THE PURPOSES EXPRESSED WITHIN THE ABOVE ORDINANCE. IF IT IS LATER DISCOVERED THAT THE UNDERSIGNED, OR ITS SUCCESSORS OR ASSIGNS HAVE FAILED IN ANY MATERIAL WAY TO DEVELOP THIS RESIDENTIAL PLANNED UNIT DEVELOPMENT ACCORDING TO THIS ORDINANCE, ITS CONDITIONS, AND THE DEVELOPMENT PLANS AND DOCUMENTS, THE UNDERSIGNED UNDERSTANDS AND AGREES THAT THIS ORDINANCE MAY BE AMENDED OR REPEALED BY THE CITY COMMISSION, AND THAT OTHER ACTIONS MAY BE TAKEN AGAINST THE UNDERSIGNED BY THE CITY, INCLUDING BUT NOT LIMITED TO CODE ENFORCEMENT ACTIONS, PERMIT AND LICENSING REVOCATIONS, AND ALL APPLICABLE CIVIL AND CRIMINAL ACTIONS.

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

Valentina Rivera

Print Name: Valentina Rivera

David Leyde

Print Name: David Leyde

Owner: 924 SW Palm City Road, LLC,
a Florida limited liability company

By: Nicolas Calle

Nicolas Calle, Manager

Ordinance No. 2463-2021 Palmetto Cove – rezoning to the RPUD

OWNERS ACKNOWLEDGMENT

STATE OF Texas
COUNTY OF Bell

The above Ordinance, Acceptance and Agreement was acknowledged before me by means of _____ physical presence or ✓ online notarization, this 13th day of May, 2021, by Nicolas Calle, Manager of 924 SW Palm City Road, LLC, a Florida limited liability company, on behalf of the Company.

Signature of Notary Public: MSmith

Commission Expires: 11/02/2024

Notary Seal:

NOTARY PUBLIC STATE OF TEXAS

Mirackle Smith
ID NUMBER
132760163
COMMISSION EXPIRES
November 2, 2024

Personally, Known OR Produced Identification

Type of ID Produced DRIVER LICENSE

Notarized online using audio-video communication

EXHIBIT A – LEGAL DESCRIPTION

LEGAL DESCRIPTION:

LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

EXHIBIT B – LOCATION MAP

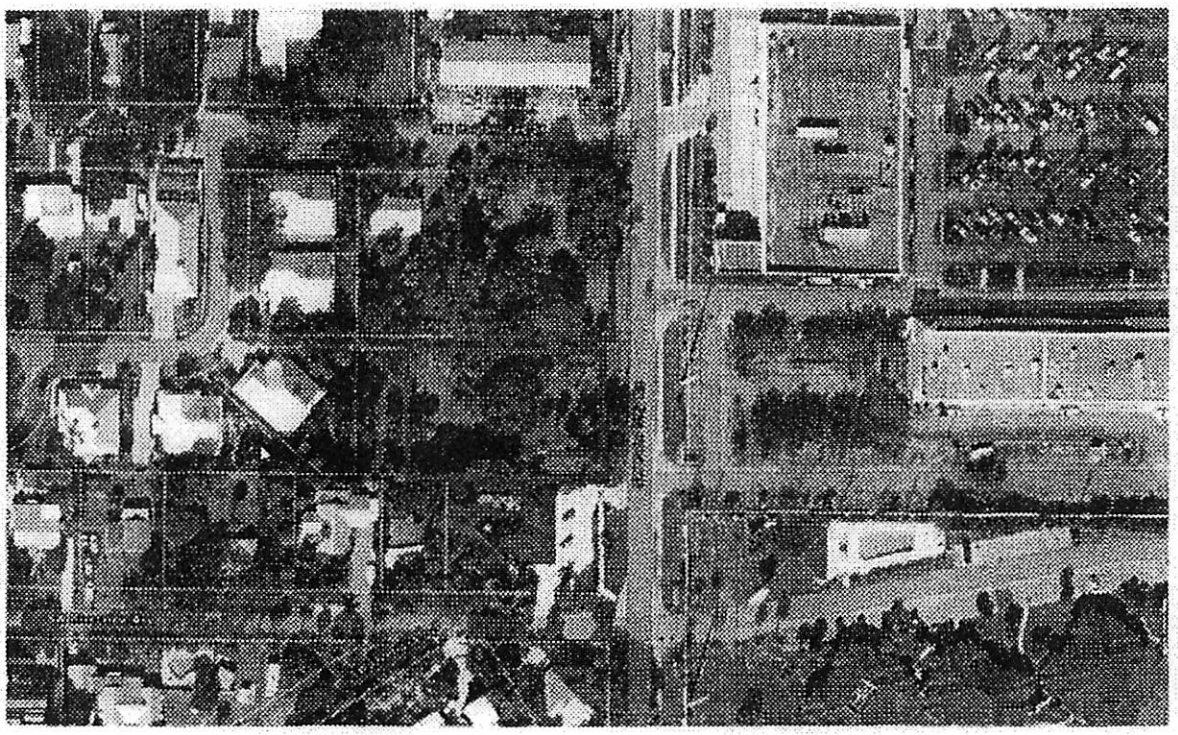


EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents

1. The RPUD project and use thereof shall comply with the following drawings:

h. The Site Plan, Sheet 1 of 1, prepared by C Calvert Montgomery and Associates, Inc., dated 05.21.2020 and last revised on 04.29.21

i. Boundary and Topographic Survey, Sheet 1 of 1, prepared by Christian Fenex and Associates, LLC, (Professional Surveyor and Mapper), dated 12.23.19

j. The Landscape Plan, Sheets 1 and 2 and Color Graphic Sheet 1 of 1, prepared Conceptual Design Group, dated 08.26.20 last revised 4.28.21

k. Garbage Truck Exhibit and Fire Truck Exhibit, Sheets 1 thru 3, prepared by C Calvert Montgomery and Associates, Inc., dated 02.15.21

l. Conceptual Engineering Plan, Sheet 1, prepared by C Calvert Montgomery and Associates, Inc., dated 02.16.21 and last revised on 4.16.21

m. Architectural Floor Plans and Elevations, by Braden and Braden A1A PA, dated 08.12.20

n. Architectural Rendering, by Braden and Braden A1A, PA, dated 08.21.20

1. Any modifications to the RPUD Site Plan that is less than 10% of the approved building footprint, building setbacks, gross square footage, building location, parking size, location and number of parking spaces, drainage areas, impervious areas and location of landscaping may be approved by the City's Development Director, provided however, the Development Director may refer the matter to the City Commission for approval via a public hearing.

2. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

Landscaping

3. The common areas including the projects pool and cabana area shall be provided with landscaping with an irrigation system of enough capacity to maintain the landscaping in a healthy growing condition.

4. A Landscape plan, executed in accordance with the Land Development Regulations, shall be submitted to the Development Department and approved prior to the issuance of a certificate of occupancy.

Required Open Space and Native Preserve Area

5. Open Space. Not less .38 acres or 39.5% of the RPUD shall be Open Space as depicted on the Site Plan as described in Exhibit C. Required open space may include contiguous buffer and retention areas, however, other required interior landscaping shall not count towards the open space requirement.

Tree Mitigation

6. The project shall comply with Section 5.05.02 of the "Tree replacement and protection requirements" of the City's Land Development Code. All required tree mitigation will be met on site.

Prior to Issuance of Site Permits

7. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of a site permit.

8. Civil Plans shall be reviewed and approved by all applicable City departments prior to the issuance of a site permit.

9. All regulatory agency permits, including but not limited to the South Florida Water Management District and Army Corp of Engineers, shall be obtained by the applicant and copies provided to the City prior to the commencement of any development activities.

10. All development activities shall comply with the City's Concurrency Management System prior to the issuance of building permits.

11. The developer shall provide a Final Site plan showing one (1) bike rack for multiple bikes at the cabana pool area common space.

12. The developer shall provide a designated EV charging outlet at each of the unit's garages.

13. The developer shall provide a centralized mailbox with a dedicated parking space.

14. The developer shall construct on-street parking on Halpatiokee Street as shown on the site plan and shall apply for a Revocable Permit to use City Right for said parking spaces prior to issuance of a site permit.

15. The developer shall apply to the City for the abandonment of the unimproved alley way or agree with the City's Public Works Department to improve and maintain the alley way in perpetuity prior to obtaining a site permit.

16. The developer shall dedicate (15) fifteen feet along Palm City Road to Martin County as shown on the Site Plan to Martin County prior to obtaining a site permit.

Development and Construction

17. In the event of any conflict in the provisions of Exhibit 'C' Development Conditions and attached exhibits, Exhibit 'C' shall prevail.

18. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

19. All utility improvements constructed by the developer within City's right-of-way, shall be constructed in a manner and form acceptable to City of Stuart Public Works. The

developer shall grant any such utility easements necessary for this site as may be required by the City of Stuart.

20. Any existing sidewalks damaged along Halpatiokee Street or Palm City Road during construction, or requiring full replacement given that the on-site grade is significantly altered, the developer shall be required to repair or replace the entire sidewalk prior to the issuance of a Certificate of Occupancy.

21. Temporary or freestanding storage units are prohibited on the property once construction is complete.

22. Site work including but not limited to land preparation, retention area excavation, clearing and grading, drainage and water, sewer and irrigation lines shall be reviewed and approved by the city's public works department and the city's engineering consultant prior to permitting.

23. Any proposed landscaping in the city's right of way shall be preserved and maintained by the developer and/or home-owner's association in perpetuity. Subject to mutually agreed upon maintenance easement agreement and indemnification between the developer and the City relative to ROW liability issues.

Signage

24. All signs throughout the PUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit Development. The development's monument sign shall adhere to sign criteria found in Chapter 6 of the City's Land Development Code.

Timetable for Development

25. Timetable for development shall be as follows:

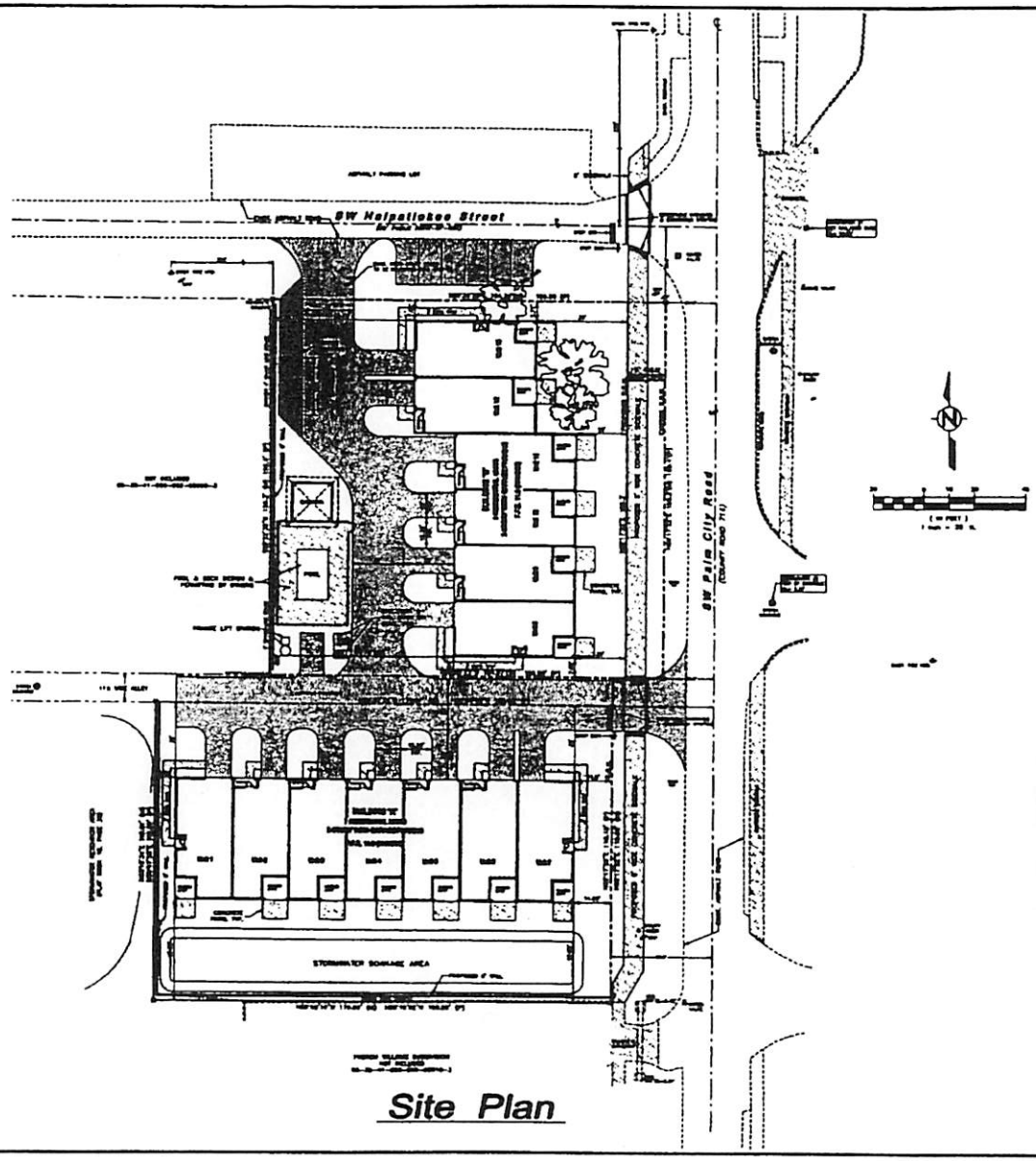
Site and building permit application deemed sufficient for permit review under city codes and standards.	**April 1, 2024**
Final Certificate of Occupancy for all site and building improvements.	**April 1, 2025**

Allowable Uses

26. The following uses shall be permitted:

a. Multi-Family Residential

b. Home Occupations in accordance with the City's Land Development Code.



Site Plan

LEGEND:

- FIRE HYDRANT
- WATER VALVE
- WATER METER
- WOOD POWER POLE
- MANHOLE (EMERGENCY SENSOR)
- MANHOLE (CLEANOUT)
- CATCH BASIN
- WOOD FENCE
- CHAIN LINK FENCE
- RIGHT OF WAY

Vicinity Map

1"=1,600'

LEGAL DESCRIPTION

LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 23 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 3, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 38, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

SITE DATA

PROJECT NAME:	SOUTHERN LANDMARK HOMES
LOCATION:	[illegible] HALPATIOKEE STREET, STUART, FLORIDA [illegible] SW PALM CITY ROAD, STUART, FLORIDA
PARCEL I.D.	[illegible]
EXISTING USE:	VACANT
ZONING:	R-3 Residential - Multi-Family / Duplex
PROPOSED ZONING:	RPUD
LAND USE:	OFFICE / RESIDENTIAL

GROSS SITE AREA:	[illegible] s.f.	[illegible] ac.	
R.O.W. DEDICATION:	[illegible] s.f.	[illegible] ac.	
TOTAL SITE AREA:	[illegible] s.f.	[illegible] ac.	100.0 %
BUILDING COVERAGE:	[illegible] s.f.	[illegible] ac.	[illegible] %
VEHICULAR PAVEMENT:	[illegible] s.f.	[illegible] ac.	[illegible] %
PEDESTRIAN WALKS / PATIOS:	[illegible] s.f.	[illegible] ac.	[illegible] %
POOL & DECK:	[illegible] s.f.	[illegible] ac.	[illegible] %
TOTAL IMPERVIOUS AREA:	[illegible] s.f.	[illegible] ac.	[illegible] %
OPEN SPACE:	[illegible] s.f.	[illegible] ac.	[illegible] %

DENSITY CALCULATION

GROSS SITE AREA:	[illegible] Ac.
NUMBER OF UNITS:	13
PROPOSED DENSITY:	13 Units / [illegible] Ac. = [illegible] Units/Ac.

BUILDING DATA:

BUILDING COVERAGE (FOOTPRINT):	[illegible] s.f.
TOTAL SQUARE FOOTAGE:	n.f.
GROSS SQUARE FOOTAGE:	n.f.
PROPOSED BUILDING HEIGHT:	[illegible] a.f.f.

PARKING CALCULATION

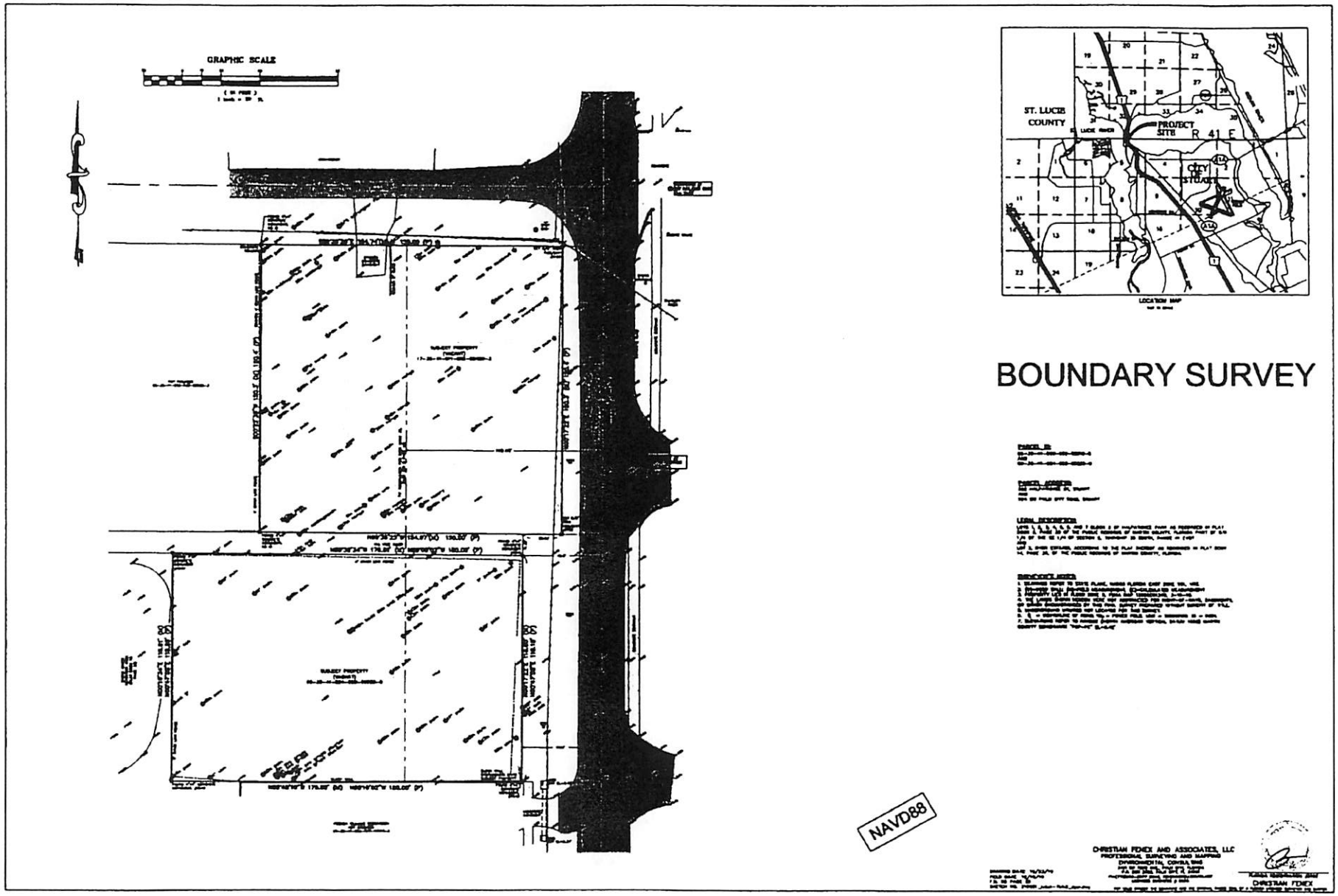
	REQUIRED	PROVIDED
RESIDENTIAL BUILDING 13 RESIDENTIAL UNITS @ 1.5 SP. / UNIT =	[illegible] Spaces	[illegible] Spaces

C. CALVERT HARTENSTEIN & ASSOCIATES, INC.

P.U.D. SITE PLAN

SITE DEVELOPMENT PLANS
PALMETTO COVE
[illegible] SW Palm City Road, Stuart, Florida

1


GRAPHIC SCALE
ST. LUCIE COUNTY
PROJECT SITE
R 41 E
CITY OF STUART
LOCATION MAP
BOUNDARY SURVEY
NAVD88
CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
CHRISTIAN FENEX

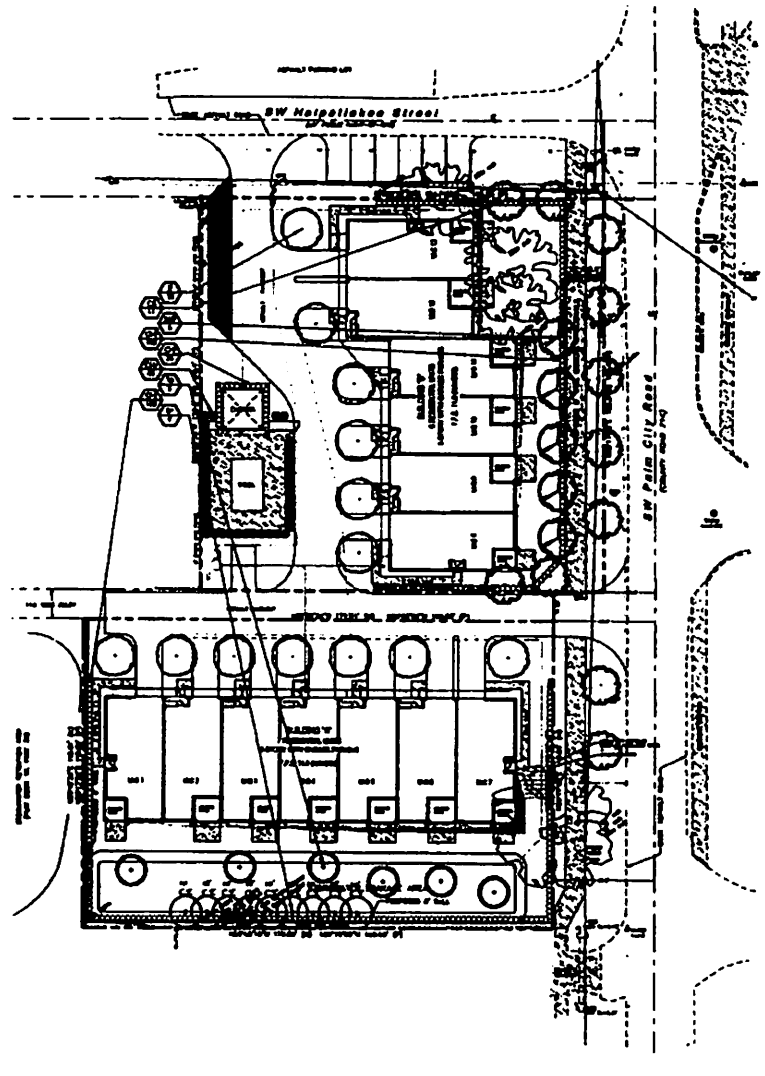
Plant List

Landscape Data

Total Site Area	43,297 s.f.	.97 Ac.	100%
Total Trees Required: (6.04.08)			
Required: 1 Tree / 1,500 s.f. = 43,297 / 1,500 = 28			28
Provided:			28
Total Shade Trees Required: (6.04.03 A.2) 50% of total required trees = 28 x 50% = 14			14
Total Shade Trees Provided:			18
Total Native Trees Required: (6.04.03 A.1) 50% of total required trees = 28 x 50% = 14			14
Native Trees Provided:			28 (100%)
Landscape Area: (6.04.03.B.1)			
Required: 30% of developed area = 43,297 x 30% = 6,459 s			6,459 s
Provided:			17,721

Xeriscape Points

Option	Points
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Points Required:	[illegible]
Points Provided:	[illegible]



Landscape Plan

Conceptual Design Group, Inc.

Palmetto Cove

City of Stuart, Florida

City Project Number

Jeffrey W. Smith, RLA
Florida Registered Landscape Architect
LA 0001821

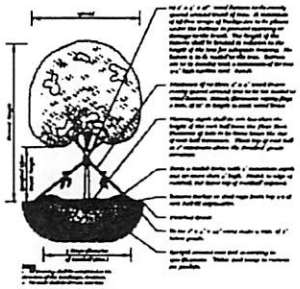
Job No. 10-123
Drawn By: JWS
Submittal Dates: 4-19-2011
4-19-2011
4-29-2011
Revision Dates:
SJL Trails & DRC P: 4-29-2011
Appl Revisions: 4-29-2011

Sheet 1 of 2

Landscape Specifications

General Notes

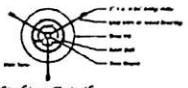
Landscape Details



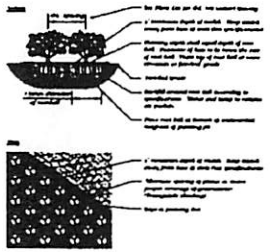
Large Tree Planting Detail

Guy Wire Attachment Detail

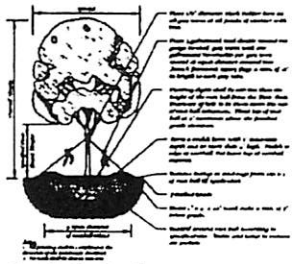
Shrub Detail



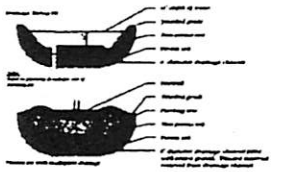
Staking Detail



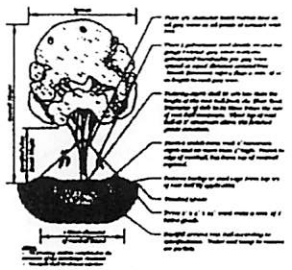
Ground Cover Detail



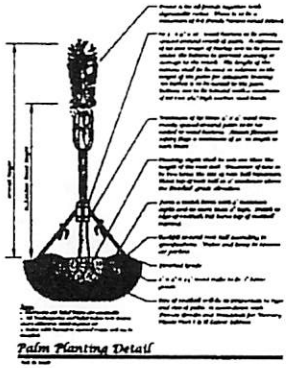
Tree Planting Detail



Drainage Testing Detail



Multi-Trunk Tree Planting Detail



Palm Planting Detail

Landscape Plan

Conceptual Design Group, Inc.

Landscape Architecture • Site Planning

Palmetto Cove

City of Stuart, Florida

City Project Number

Jeffrey W. Smith, RLA

Florida Registration Number

Job No. 19-1309

Drawn By JWS

Submittal Dates 6-26-2020

4-14-2021

4-26-2021

Revision Dates

DRC Mtg & DPM SP 4-14-2021

Add Street trees 4-26-2021

These drawings are the property of the Landscape Architect and are not to be used for other projects except by written permission from the Landscape Architect. Reproduction, plagiarism/misappropriation of the Landscape Architect's ideas and designs is prohibited.

Sheet 2 of 2

Plant List

QTY	SIZE	SPECIES	COMMON NAME	HGT	SPACING	REMARKS	NATIVE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Landscape Data

Total Site Area:	43,297 s.f.	.97 Ac.	100%

Total Trees Required: (6.04.08)

Required: 1 Tree / 1,500 s.f. = 43,297 / 1,500 = 28 — 28

Provided: — 28

Total Shade Trees Required: (6.04.02.A.2) 50% of total required trees = 28 x 50% = 14 — 14

Total Shade Trees Provided: — 18

Total Native Trees Required: (6.04.02.A.1) 50% of total required trees = 28 x 50% = 14 — 14

Native Trees Provided: — 28 (100%)

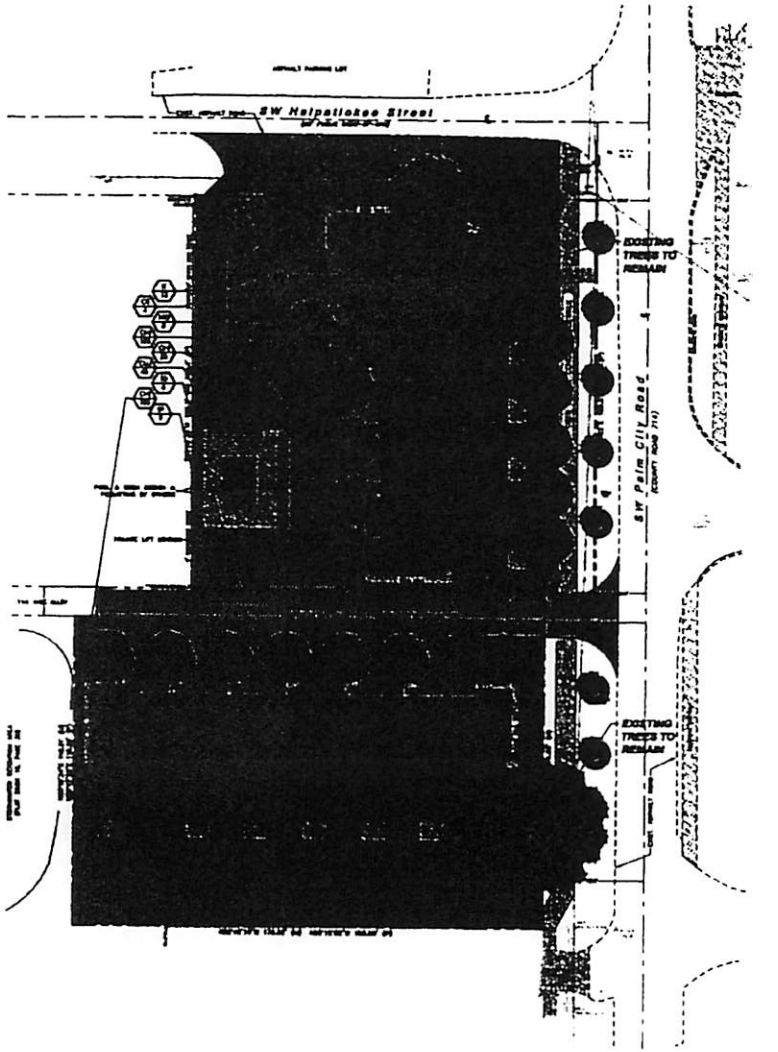
Landscape Area: (6.04.05.B.1)

Required: 20% of developed area = 43,297 x 20% = 8,459.4

Provided: — 17,721

Xeriscape Points

Criteria	Points
Utilization of [illegible] other than [illegible]	[illegible]
Plant [illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Utilization of [illegible] other than Cypress mulch	[illegible]
Utilization of [illegible]	[illegible]
Points Required:	75
Points Provided:	[illegible]



Landscape Plan

Conceptual Design Group, Inc.

Landscape Architecture • Site Planning

Palmetto Cove

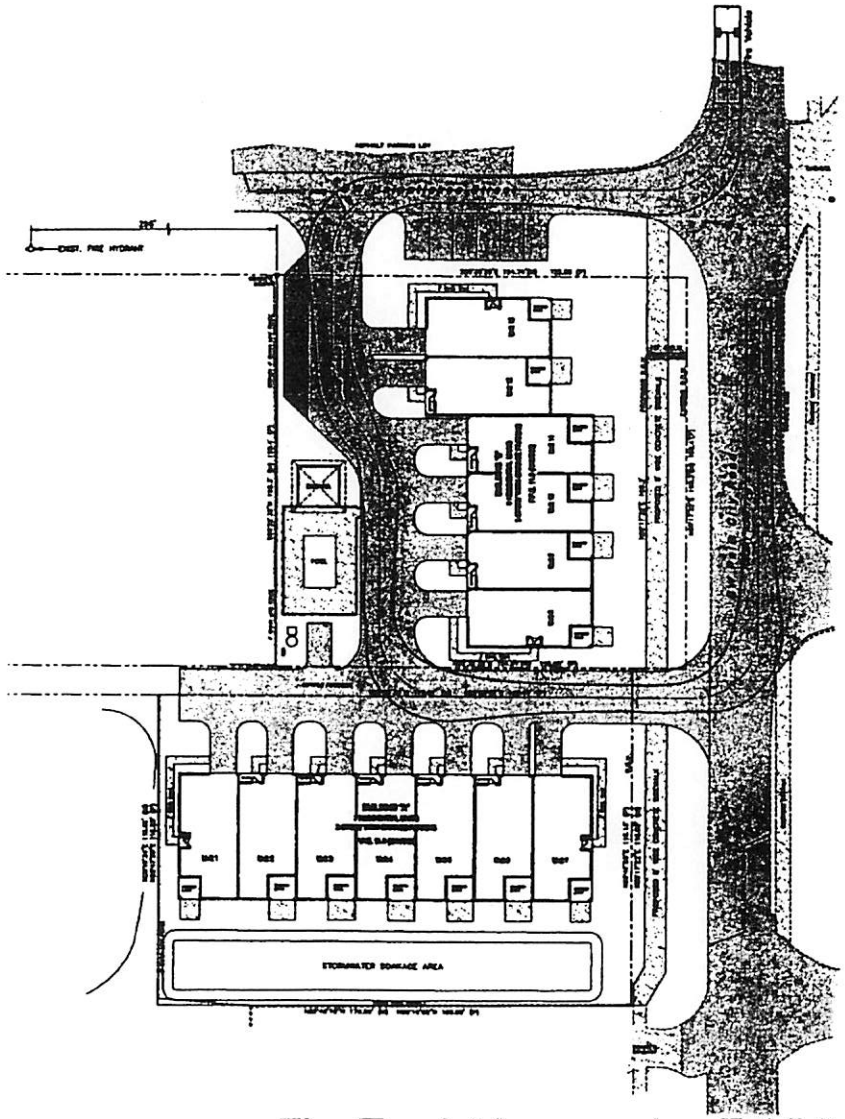
City of Stuart, Florida

City Project Number

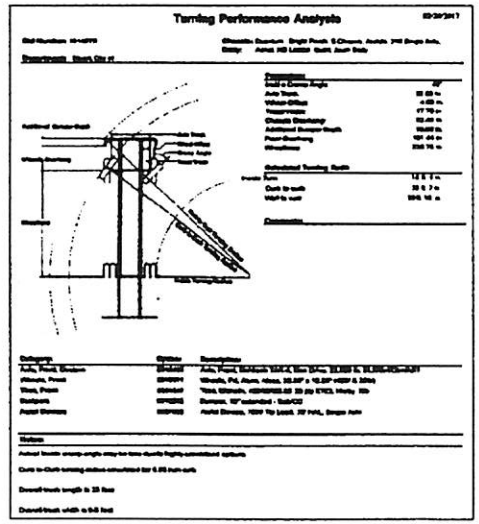
Jeffrey W. Smith, RLA
Florida Registration Number
LA0000445

Job No.	19-1308
Drawn By	JHS
Submittal Dates	3-26-2020
	4-14-2021
	4-29-2021
Revision Dates	
Add Shade Trees	4-29-2021

Sheet 1 of 1



Vicinity Map
1"=1,600'

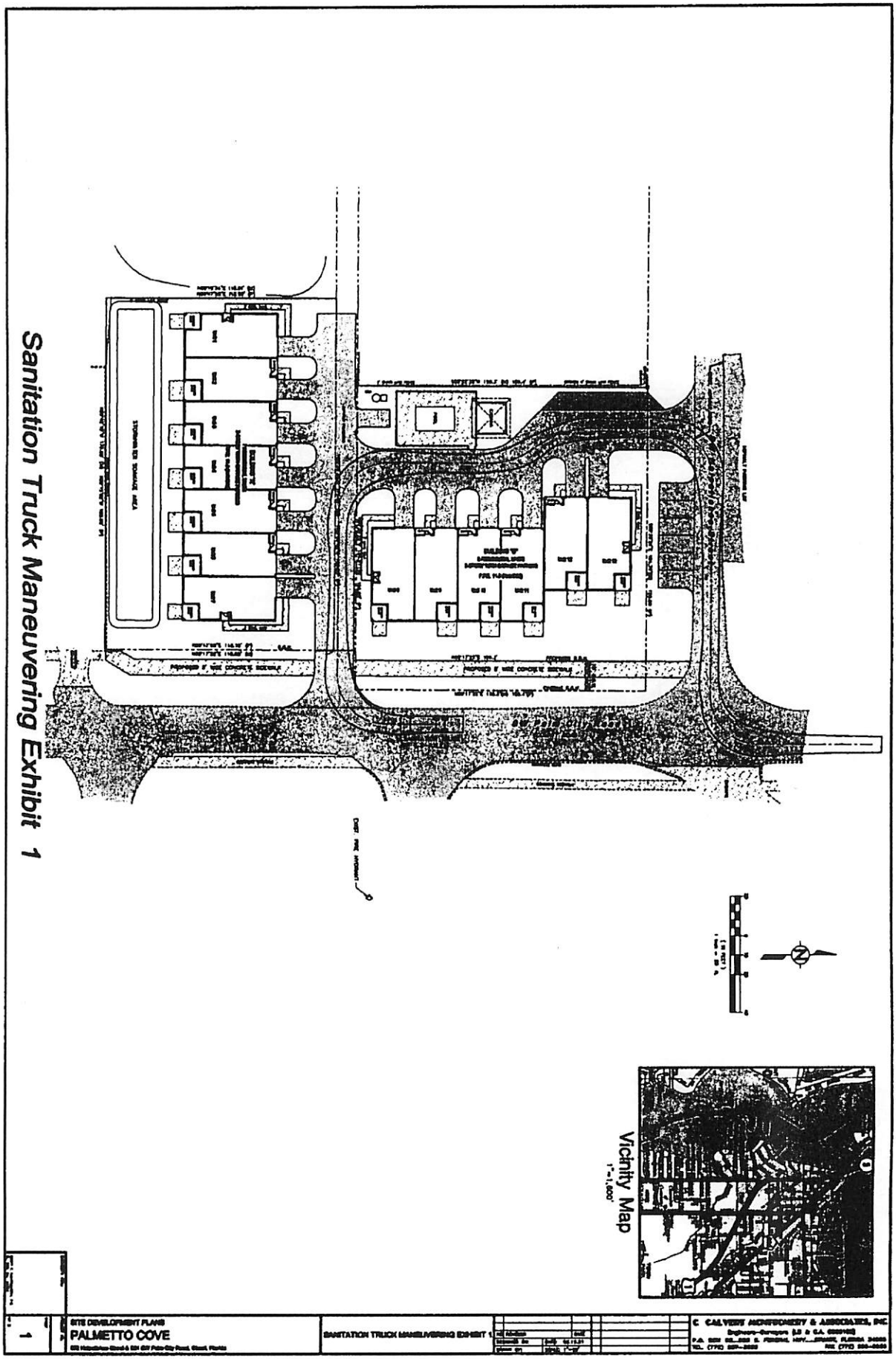


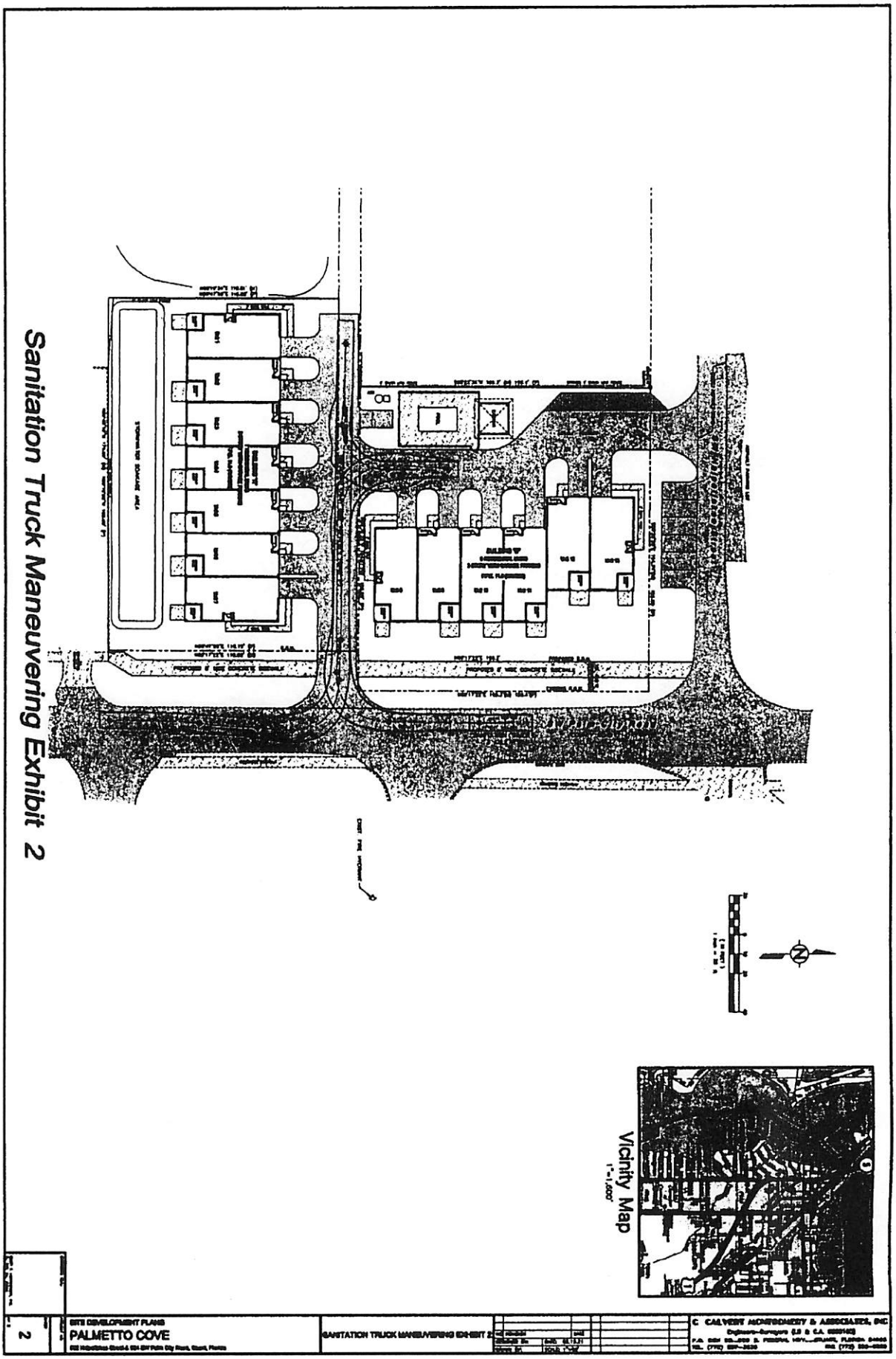
Fire Truck Maneuvering Exhibit

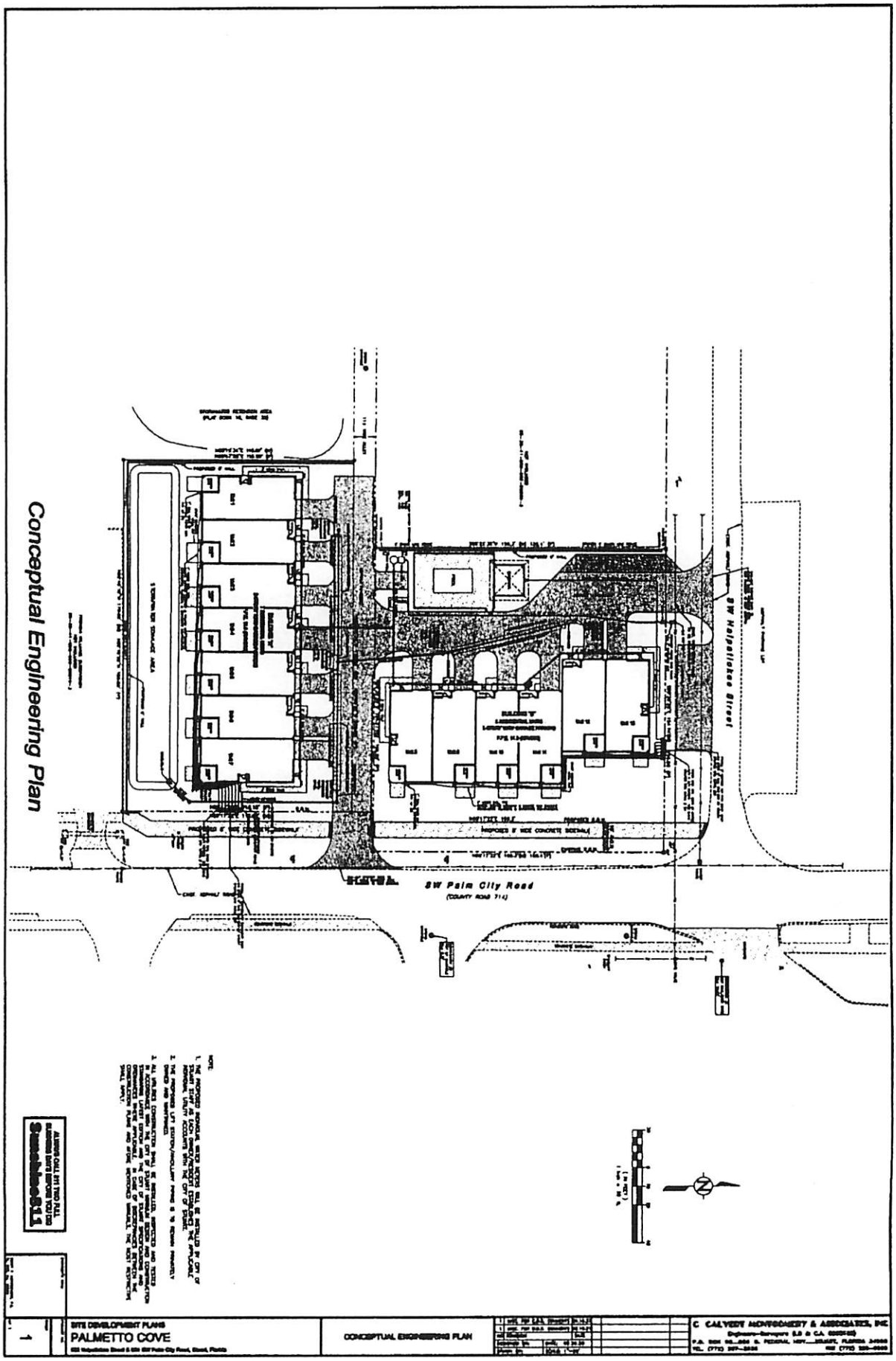
FIRE TRUCK MANEUVERING EXHIBIT

PALMETTO COVE

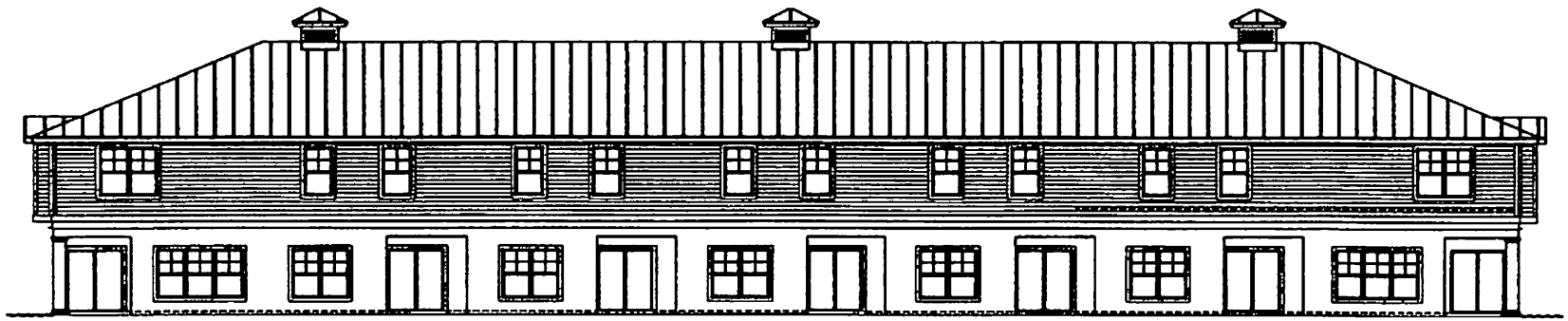
1


Sanitation Truck Maneuvering Exhibit 1
Vicinity Map
1"=1,000'
SITE DEVELOPMENT PLANS
PALMETTO COVE
SANITATION TRUCK MANEUVERING EXHIBIT 1
C. CALVERT MONTGOMERY & ASSOCIATES, INC.


Sanitation Truck Maneuvering Exhibit 2
Vicinity Map
1"=1,000'
SITE DEVELOPMENT PLANS
PALMETTO COVE
SANITATION TRUCK MANEUVERING EXHIBIT 2
C. CALVERT MONTGOMERY & ASSOCIATES, INC.
2


Conceptual Engineering Plan
SW Palm City Road
(COUNTY ROAD 714)
SW Halpatiokee Street
SITE DEVELOPMENT PLANS
PALMETTO COVE
CONCEPTUAL ENGINEERING PLAN
C. CALVERT MONTGOMERY & ASSOCIATES, INC.
1

BLDG A NORTH ELEVATION (PARKING)



BLDG A SOUTH ELEVATION

JOB NUMBER: 19-178A

SHEET NO:

OF X.

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
471 S.E. COCONUT AVENUE
Tel : (772) 287-2728
Fax : (772) 287-2729
Website: www.bradenandbraden.com
Stuart, FL 34994 #AAC000032

BUILDING A FOR:

PALMETTO CALLE

Address: stuart florida

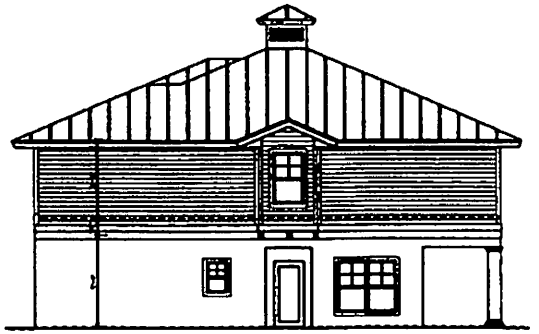
Date: Drawn 8-31-20

Drawn by: D.R.B. C.C.U.

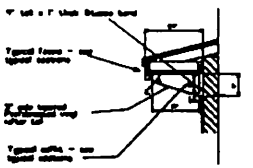
Checked by: D.R.B.

Revisions:

BLDG A EAST ELEVATION (STREET)



BLDG A WEST ELEVATION



Oil-Tanker Detail

JOB NUMBER:
19-178A
SHEET NO:
OF X.

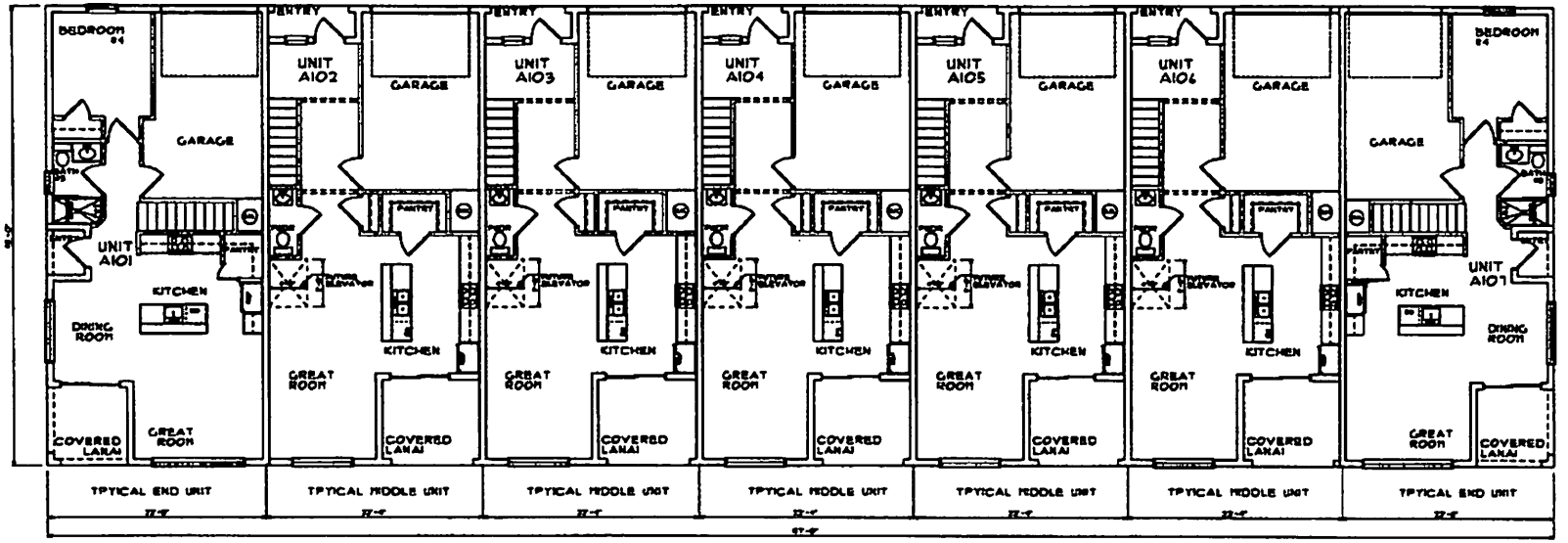
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
41 S.E. COCONUT AVENUE
Tel : (772) 287-8366
Fax : (772) 287-8369
Stuart, FL 34994 AAC000033

BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn 8-21-20
Drawn by D.R.B. C.C.V.
Checked by D.R.B.

Revisions :



BUILDING A FLOOR PLAN

SCALE 3/16" = 1'-0"

Building A Square Footage TOTAL
First Floor Foot Print = 7,536 sq. ft.
Second Floor Foot Print = 7,409 sq. ft.
Total Footprint = 14,945 sq. ft.

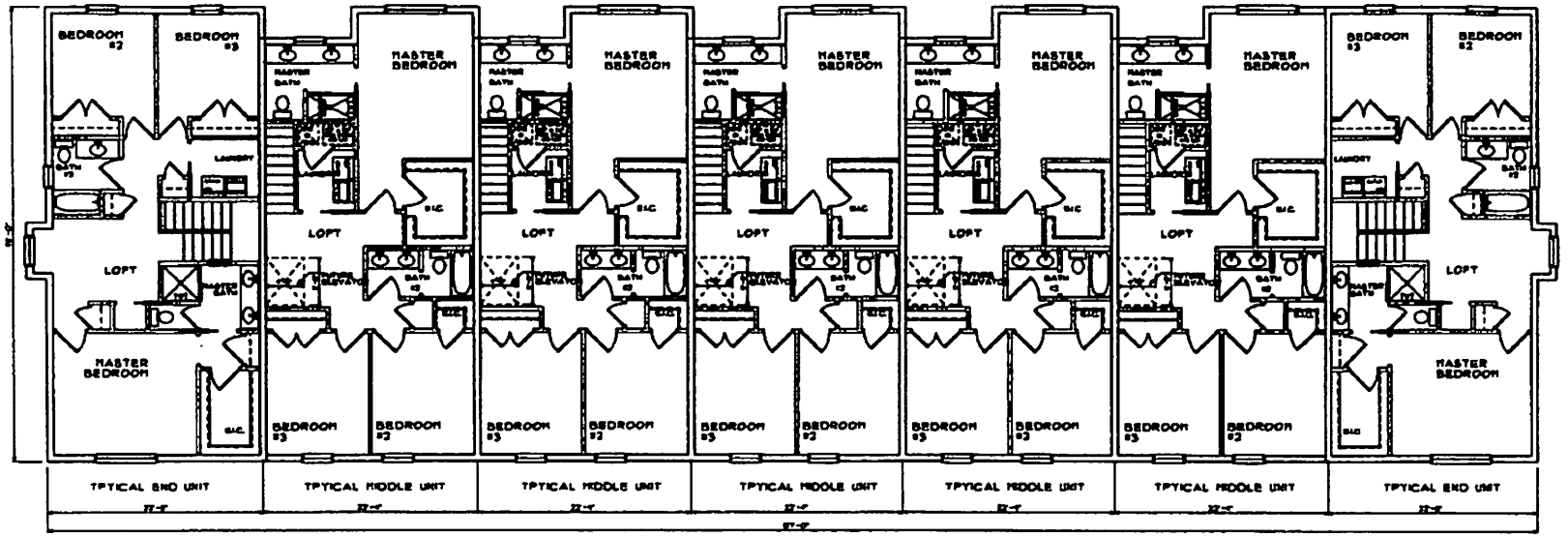
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
411 S.E. COCONUT AVENUE
Tel: (772) 287-8268
Fax: (772) 287-8283
Stuart, FL 34996 AAC000033

BUILDING A FOR:
PALMETTO CALLE
Address: stuart florida

Date Drawn 8-31-20
Drawn by D.R.B. C.C.U.
Checked by D.R.B.

Revisions:

JOB NUMBER: 19-178A
SHEET NO:
OF X.



BUILDING A SECOND FLOOR PLAN

SCALE 3/16" = 1'-0"

JOB NUMBER: 19-178A

SHEET NO.

OF X.

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
471 S.E. COCONUT AVENUE
Tel: (772) 221-0264
Fax: (772) 221-0265
Stuart, FL 34994 AAC000052

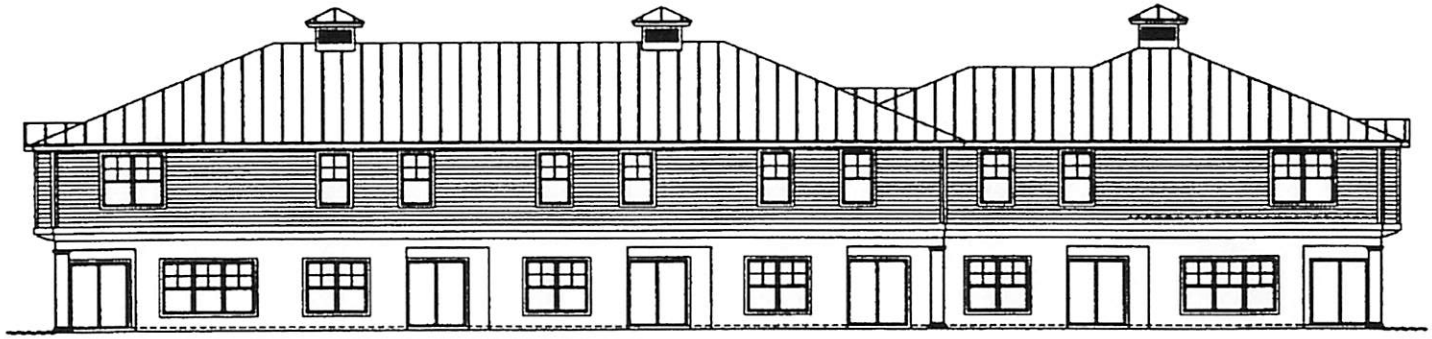
BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn 8-21-20
Drawn by D.R.B. C.C.U.
Checked by D.R.B.

Revisions:

BLDG B WEST ELEVATION (PARKING)



BLDG B EAST ELEVATION (STREET)

JOB NUMBER:
19-178B
SHEET NO.
OF X.

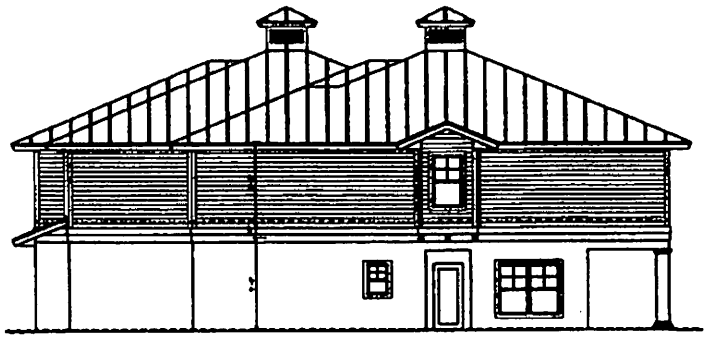
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
471 S.E. COCONUT AVENUE
Tel : (772) 287-8296
Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34994 #AAC000093

BUILDING B FOR:
PALMETTO CALLE

Address: Stuart Florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :



BLDG B NORTH ELEVATION

BLDG B SOUTH ELEVATION

JOB NUMBER: 19-178B

SHEET NO.

OF X.

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
491 S.E. COCONUT AVENUE
Tel : (772) 287-0256
Fax : (772) 287-0259
Stuart, FL 34994 #AA0000032

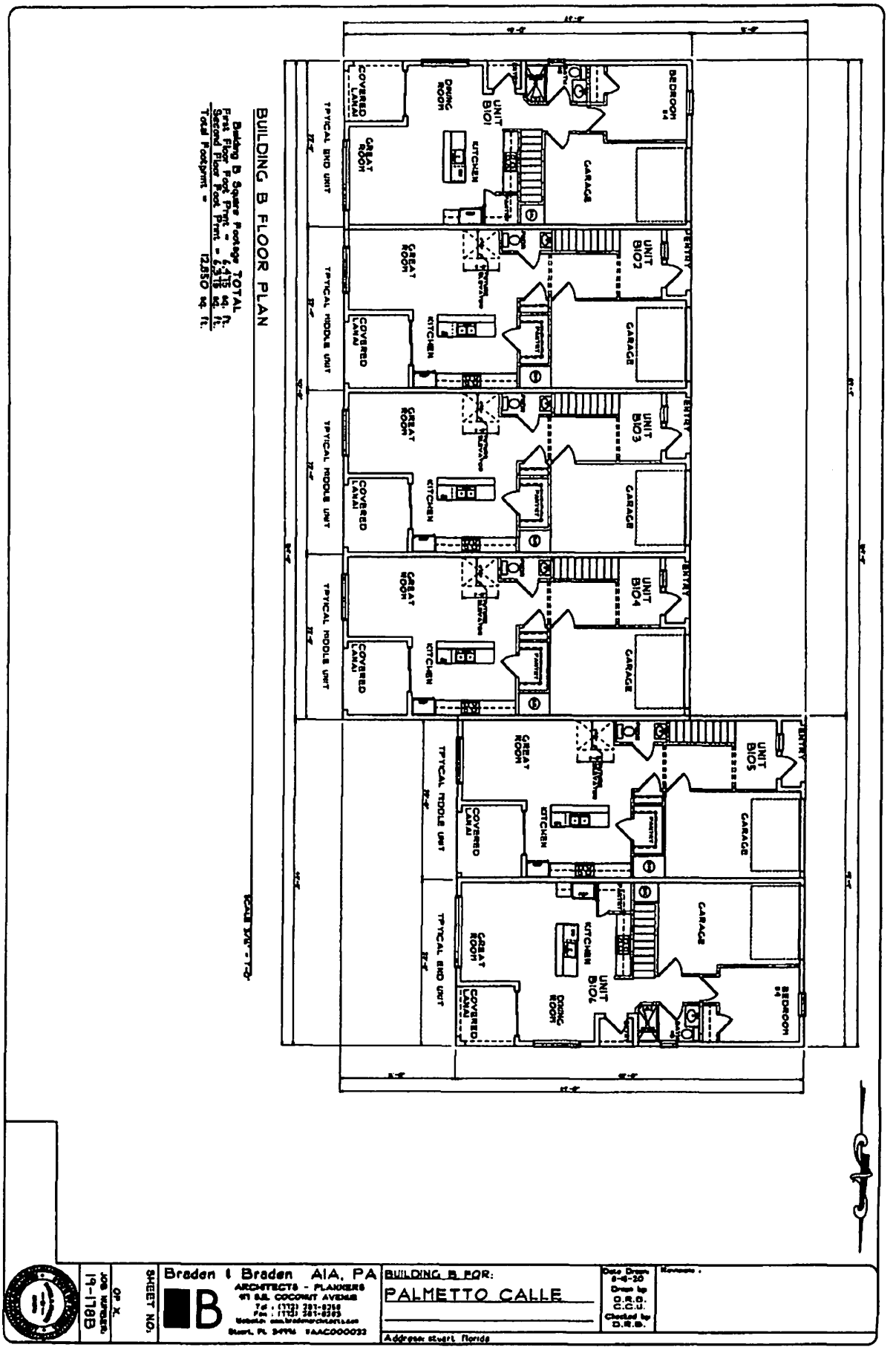
BUILDING B FOR:

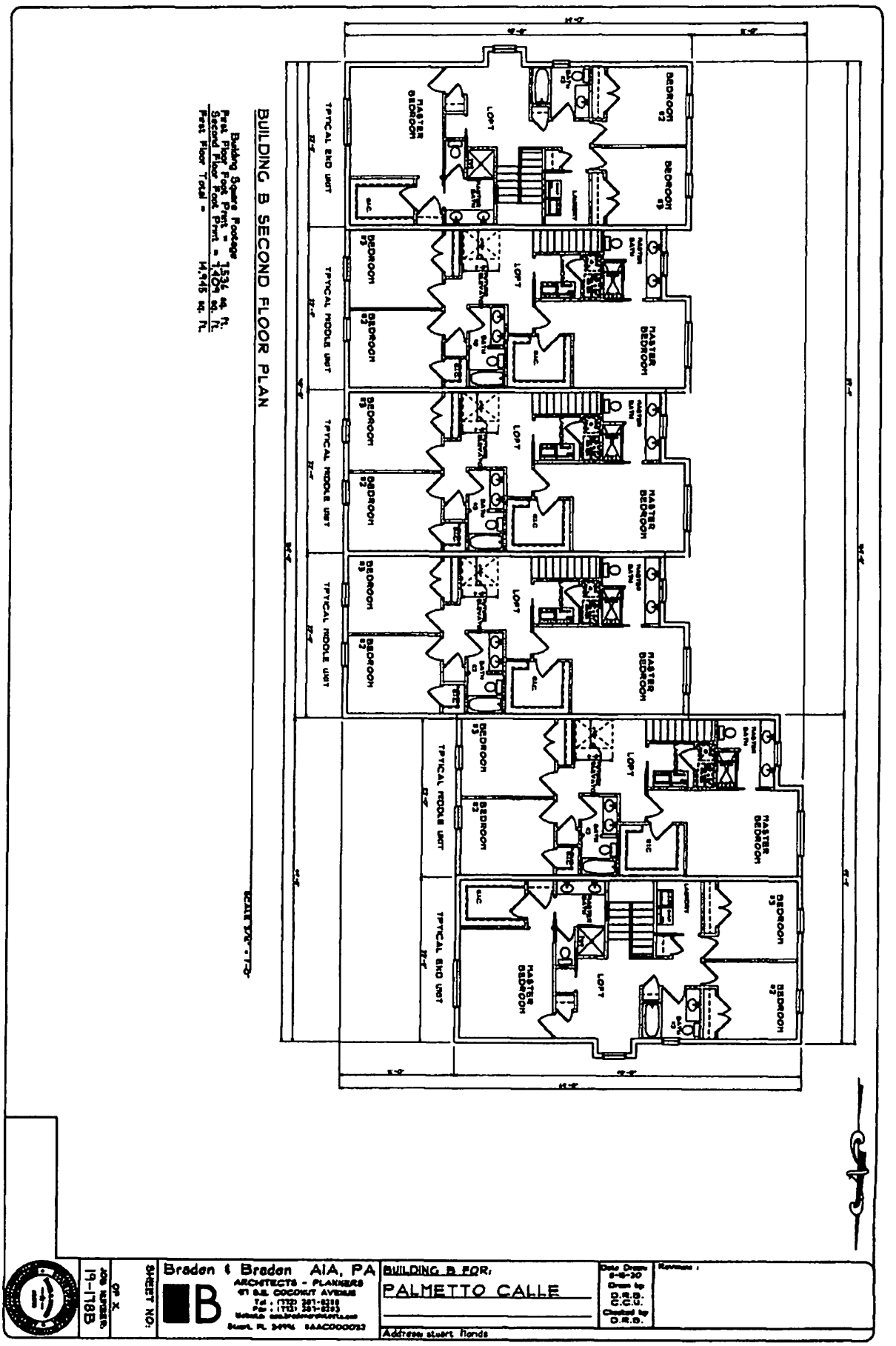
PALMETTO CALLE

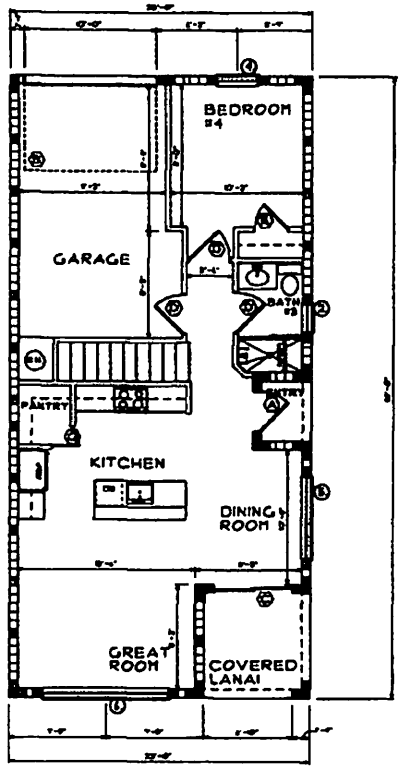
Address: stuart florida

Date Drawn 9-27-20
Drawn by D.R.B. C.C.U.
Checked by D.R.B.

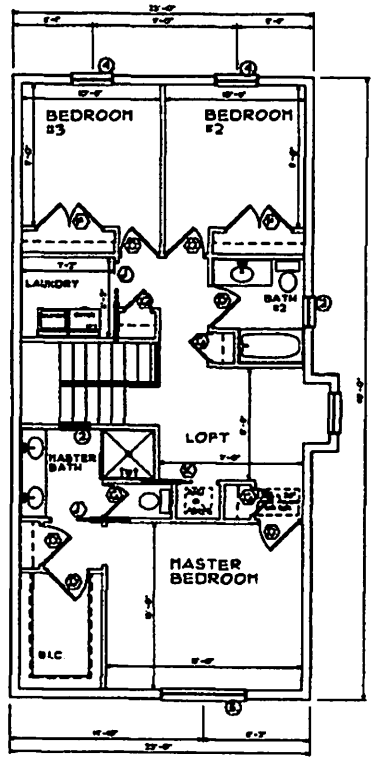
Revisions :


BUILDING B FLOOR PLAN
Building B Square Footage TOTAL
First Floor Foot Print - 6,415 sq. ft.
Second Floor Foot Print - 6,315 sq. ft.
Total Footprint - 12,850 sq. ft.
SCALE 3/16" = 1'-0"
UNIT B101
UNIT B102
UNIT B103
UNIT B104
UNIT B105
UNIT B106
GARAGE
ENTRY
KITCHEN
GREAT ROOM
DINING ROOM
COVERED LANAI
BEDROOM #4
TYPICAL END UNIT
TYPICAL MIDDLE UNIT
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
BUILDING B FOR:
PALMETTO CALLE
Address: Stuart, Florida
SHEET NO.
JOB NUMBER: 19-1188


BUILDING B SECOND FLOOR PLAN
Building Square Footage
First Floor Footprint - 1536 sq. ft.
Second Floor Footprint - 1409 sq. ft.
First Floor Total - 14,145 sq. ft.
TYPICAL END UNIT
TYPICAL MIDDLE UNIT
MASTER BEDROOM
LOFT
BEDROOM #2
BEDROOM #3
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
BUILDING B FOR:
PALMETTO CALLE
Address: stuart florida
Date Drawn
Drawn by
Checked by
Revisions :
SHEET NO:
JOB NUMBER:
19-178B



Typical End Unit 1st Floor Plan
SCALE 1/4" = 1'-0"



Typical End Unit 2nd Floor Plan
SCALE 1/4" = 1'-0"

TYPICAL END UNIT PLANS

First Floor Square Footage

First Floor A/C =	960 sq. ft.
Covered Porch Total =	84 sq. ft.
Garage =	260 sq. ft.
First Floor Total =	1104 sq. ft.

Second Floor Square Footage

Second Floor A/C =	1054 sq. ft.

A/C Space Breakdown

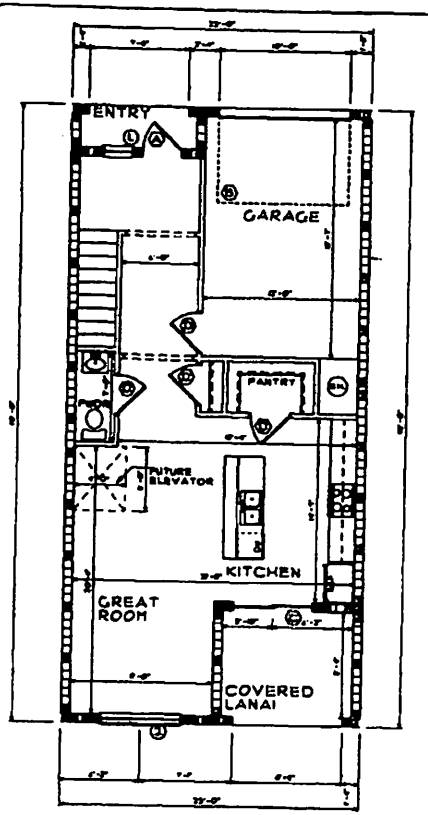
First Floor A/C =	960 sq. ft.
Second Floor A/C =	1054 sq. ft.
Total A/C space =	2014 sq. ft.

Date Drawn 4-23-19
Drawn by N.T.C.
Checked by D.R.B.
Revisions :

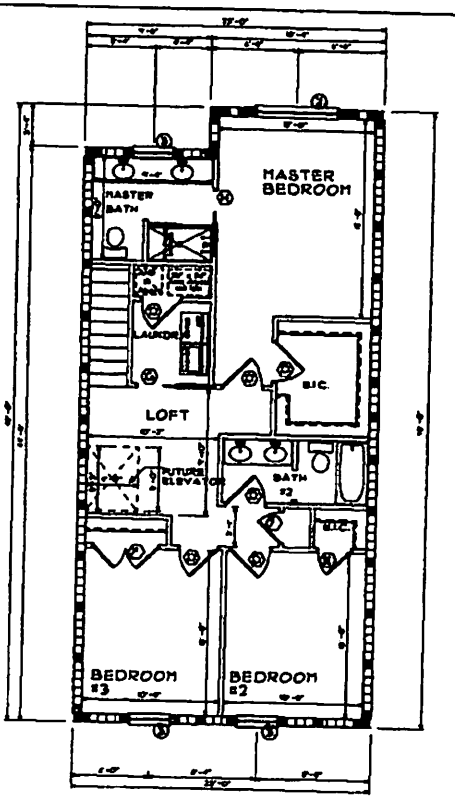
Residence For:
Southern Landmark
Address: Stuart, Florida

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
411 S.E. COCONUT AVENUE
Tel : (772) 287-2331
Fax : (772) 287-2331
Stuart, FL 34994 FA#C000005

SHEET NO:
OF ---
JOB NUMBER:
19-178



Typical Middle Unit 1st Floor Plan
SCALE 1/4" = 1'-0"



Typical Middle Unit 2nd Floor Plan
SCALE 1/4" = 1'-0"

TYPICAL MIDDLE UNIT PLANS

First Floor Square Footage

First Floor A/C =	484 sq. ft.
Covered Porch Total =	92 sq. ft.
Garage =	248 sq. ft.
First Floor Total =	1,065 sq. ft.

Second Floor Square Footage

Second Floor A/C =	982 sq. ft.

A/C Space Breakdown

First Floor A/C =	484 sq. ft.
Second Floor A/C =	982 sq. ft.
Total A/C space =	1,441 sq. ft.

Breden & Bradden AIA, PA
ARCHITECTS - PLANNERS
411 S.E. COCONUT AVENUE
Tel.: (772) 287-2115
Fax: (772) 287-2116
Stuart, FL 34994 AA0000053

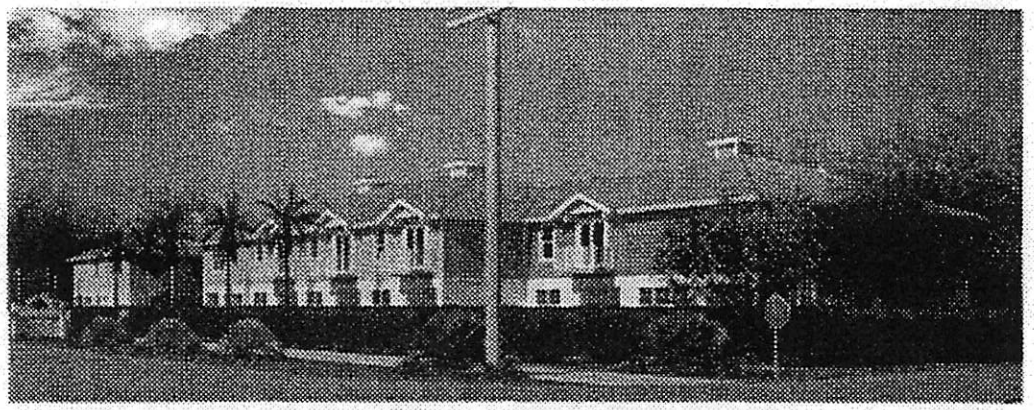
Residence For:
Southern Landmark
Address: Stuart, Florida

Date: Dec. 2000
Drawn by: D.R.B.
Checked by: D.R.B.
Revisions:

SHEET NO:
OF XX
JOB NUMBER:
18-

PALMETTO CALLE - STUART, FL

PALM CITY ROAD WEST FACING



PALM CITY ROAD SOUTHWEST FACING

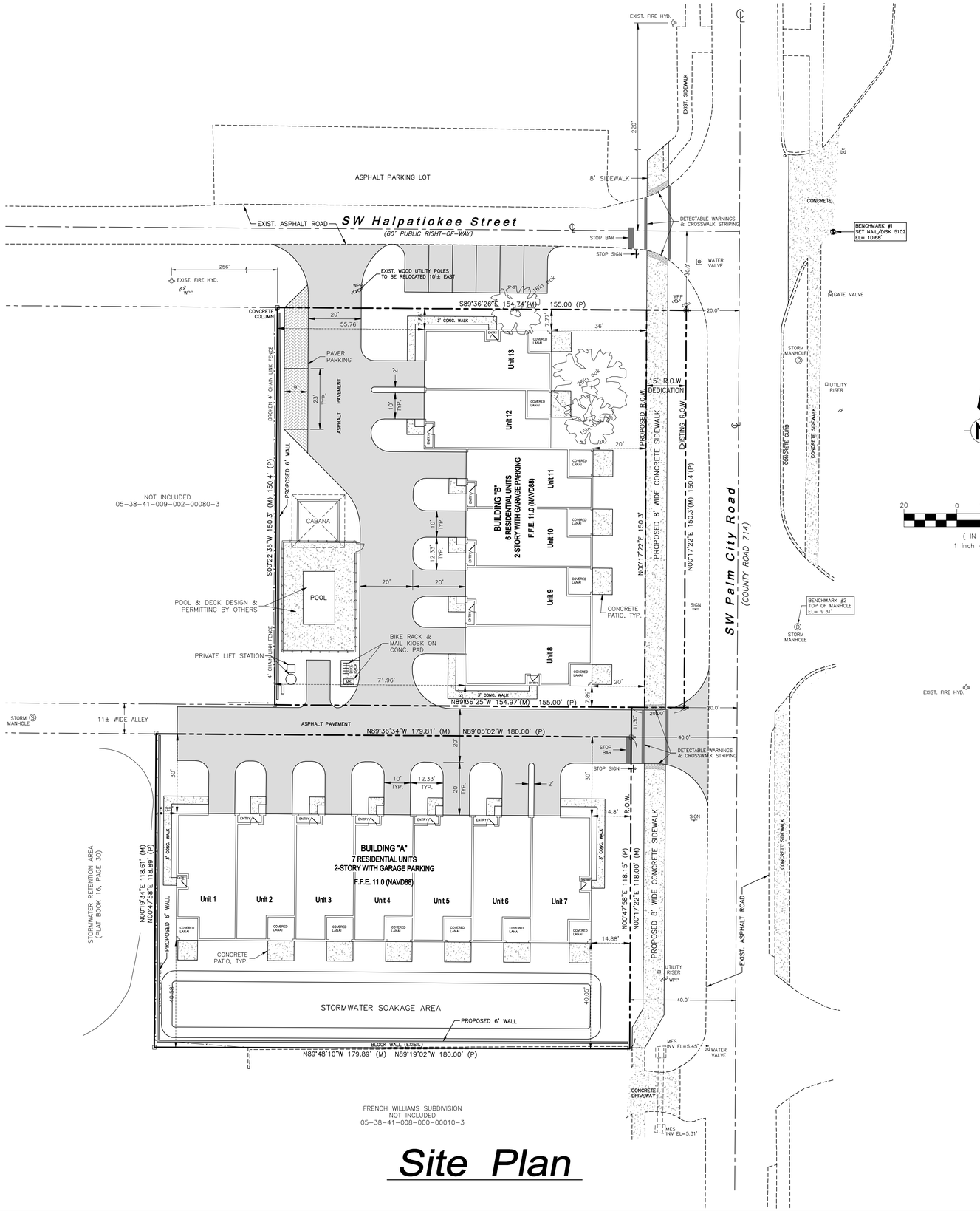
Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
41 S.E. COCONUT AVENUE
Tel: (772) 287-4264
Fax: (772) 287-9283
Stuart, FL 34994 AAC0000093

BUILDING A FOR:
PALMETTO CALLE
Address: Stuart, Florida

Date Drawn: 6-3-20
Drawn by: DB
Checked by: DB

Revisions:

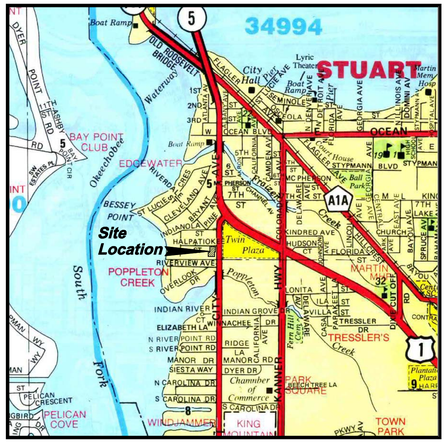
JOB NUMBER: 19-178A
SHEET NO:
OF X



Site Plan

LEGEND:

FH	– FIRE HYDRANT
WV	– WATER VALVE
WM	– WATER METER
WPP	– WOOD POWER POLE
MH	– MANHOLE (SANITARY SEWER)
D	– MANHOLE (STORM)
CB	– CATCH BASIN
WF	– WOOD FENCE
CLF	– CHAIN LINK FENCE
R.O.W.	– RIGHT OF WAY



Vicinity Map

1"=1,600'

LEGAL DESCRIPTION

LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

N

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

SITE DATA

PROJECT NAME:	SOUTHERN LANDMARK HOMES
LOCATION:	502 HALPATIOKEE STREET, STUART, FLORIDA
	924 SW PALM CITY ROAD, STUART, FLORIDA
PARCEL I.D.	05-38-41-009-002-00010-8
	05-38-41-024-000-00020-0
EXISTING USE:	VACANT
ZONING:	R-3 Residential - Multi-Family / Duplex
PROPOSED ZONING:	RPUD
LAND USE:	OFFICE / RESIDENTIAL

GROSS SITE AREA:	44,552 s.f.	1.02 ac.	
R.O.W. DEDICATION:	2,255 s.f.	0.05 ac.	
TOTAL SITE AREA:	42,297 s.f.	0.97 ac.	100.0 %
BUILDING COVERAGE:	14,265 s.f.	0.33 ac.	33.7 %
VEHICULAR PAVEMENT:	8,475 s.f.	0.19 ac.	20.0 %
PEDESTRIAN WALKS / PATIOS:	1,750 s.f.	0.04 ac.	4.1 %
POOL & DECK:	1,115 s.f.	0.03 ac.	2.6 %
TOTAL IMPERVIOUS AREA:	25,605 s.f.	0.59 ac.	60.5 %
OPEN SPACE:	16,692 s.f.	0.38 ac.	39.5 %

DENSITY CALCULATION

GROSS SITE AREA:	0.97 Ac.
NUMBER OF UNITS:	13
PROPOSED DENSITY:	13 Units / 0.97 Ac. = 13.0 Units/Ac.

BUILDING DATA:

BUILDING COVERAGE (FOOTPRINT):	14,265 s.f.
TOTAL SQUARE FOOTAGE:	s.f.
GROSS SQUARE FOOTAGE:	s.f.
PROPOSED BUILDING HEIGHT:	32'-3" a.f.f.

PARKING CALCULATION

	REQUIRED	PROVIDED
RESIDENTIAL BUILDING 13 RESIDENTIAL UNITS @ 1.5 SP. / UNIT =	19.5 Spaces	28 Spaces

© CALVERT MONTGOMERY & ASSOCIATES, INC.
Engineers–Surveyors (LB & C.A. 0000160)
P.O. BOX 92...959 S. FEDERAL HWY.....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE
2	MISC. PER C.O.S. COMMENTS	02.16.21
1	ADD ADDITIONAL PARKING	07.01.20
6	ADD PROPOSED ZONING RPUD	04.29.21
5	ADD WALL, MAIL KIOSK, BIKE RACK	04.16.21
4	ADD CROSSWALK/ADA	04.08.21
3	ADD F.H. ON INDIANOLA ST.	03.25.21

DESIGNED BY: DATE: 03.25.20
DRAWN BY: SCALE: 1"=20'

P.U.D. SITE PLAN

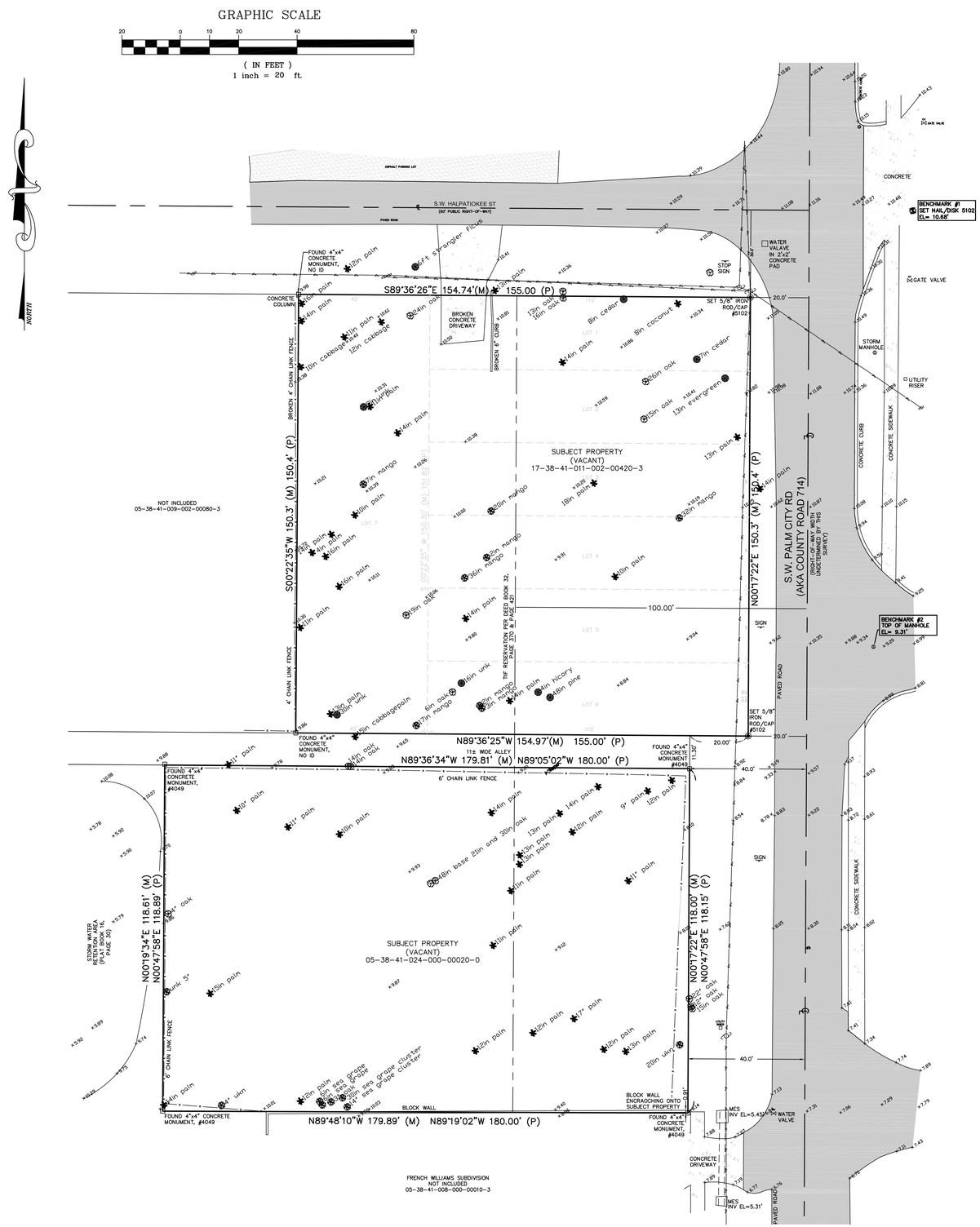
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

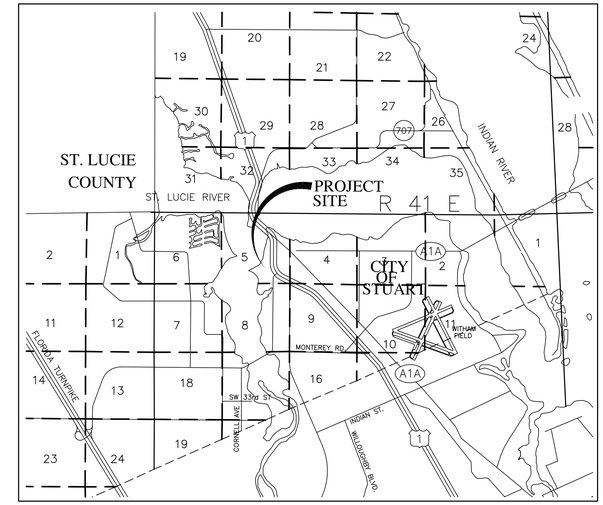
ENGINEER'S SEAL:

SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 43954

PROJECT NO.

SHEET 1 OF 1





LOCATION MAP
NOT TO SCALE

BOUNDARY SURVEY

PARCEL ID:
05-38-41-009-002-00010-8
AND
05-38-41-024-000-00020-0

PARCEL ADDRESS:
502 HALPATIOKEE ST, STUART
AND
924 SW PALM CITY ROAD, STUART

LEGAL DESCRIPTION:
LOTS 1, 2, 3, 4, 5, 6, AND 7 BLOCK 2 OF HALPATIOKEE PARK AS RECORDED IN PLAT BOOK 8, PAGE 25 OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA PART OF S.W. 1/4 OF THE SE 1/4 OF SECTION 5, TOWNSHIP 38 SOUTH, RANGE 41 EAST
AND
LOT 2, DYER ESTATES, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 14, PAGE 36, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

SURVEYOR'S NOTES:
1. BEARINGS REFER TO STATE PLANE, NAD83 FLORIDA EAST ZONE 901, VRS.
2. (D)=DEED CALL; (M)=FIELD MEASUREMENT; (C)=CALCULATED MEASUREMENT
3. PROPERTY LIES IN FLOOD ZONE X, FEMA MAP 12085C0134G, 3-16-15.
4. THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAYS, EASEMENTS, OR OTHER ENCUMBRANCES BY THIS FIRM. SURVEY PREPARED WITHOUT BENEFIT OF TITLE.
5. UNDERGROUND UTILITIES NOT LOCATED PER THIS SURVEY.
6. ℄ = CENTERLINE OF ROAD; PP = POWER POLE; UNK = UNKNOWN; IN = INCH.
7. ELEVATIONS REFER TO NAVD88 (NORTH AMERICAN VERTICAL DATUM 1988) MARTIN COUNTY BENCHMARK "POP-PC" EL=5.42'.

NAVD88

DRAWING DATE: 12/23/19
FIELD DATE: 12/18/19
F.B. D5 PAGE 56
SKETCH NO. 219051_lots1-7blk2_dyer.dwg

CHRISTIAN FENEX AND ASSOCIATES, LLC
PROFESSIONAL SURVEYING AND MAPPING
ENVIRONMENTAL CONSULTING
3401 SW 72ND AVE., PALM CITY, FLORIDA
P.O. BOX 2533, PALM CITY, FL 34991
PH.(772)283-2977 EMAIL FENEXC@BELLSOUTH.NET
LICENSED BUSINESS # 6858

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CHRISTIAN FENEX CERTIFICATE NO. 5102 STATE OF FLORIDA PROFESSIONAL SURVEYOR AND MAPPER

FLORIDA REGISTRATION #5102
CHRISTIAN FENEX

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	WATER USAGE
CANOPY / ORNAMENTAL TREES							
11	CS*	CONOCARPUS ERECTUS VAR. SERICEUS	SILVER BUTTONWOOD	8' O.A./5' SPRD.	A.S.	FULL CANOPY	LOW
13	IE*	ILEX x ATTENUATA 'EAGLESTON HOLLY'	EAGLESTON HOLLY	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
5	MG*	MAGNOLIA GRANDIFLORA	LITTLE GEM MAGNOLIA	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
6	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
PALMS							
9	SP*	SABAL PALMETTO	SABAL PALM	SEE PLAN	A.S.	SLICK TRUNKS	LOW
SHRUBS / HEDGES							
45	CLU	CLUSIA GUTTIFERA	SMALL LEAF CLUSIA	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
355	CHI*	CHRYSOBALANUS ICACO	COCOPLUM	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
	SOD	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD			SEE SPECS	HIGH

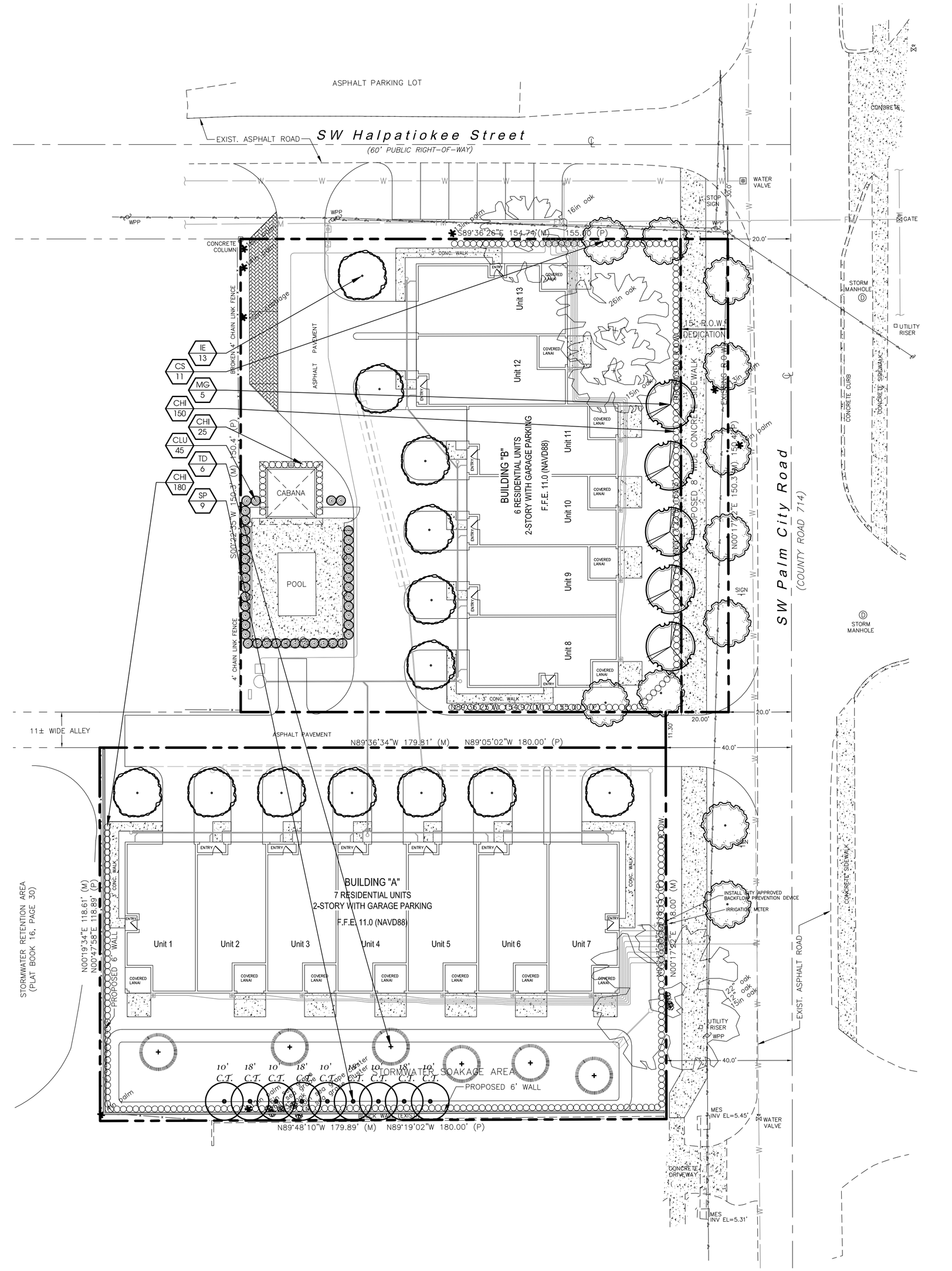
* = Florida Native

Landscape Data

Total Site Area:	42,297 s.f.	.97 Ac.	100%
Total Trees Required: (6.04.08)			
Required: 1 Tree / 1,500 s.f. = 42,297 / 1,500 = 28			28
Provided:			28
Total Shade Trees Required: (6.04.02.A.2) 50% of total required trees = 28 x 50% = 14			14
Total Shade Trees Provided:			18
Total Native Trees Required: (6.04.02.A.1) 50% of total required trees = 28 x 50% = 14			14
Native Trees Provided:			28 (100%)
Landscape Area: (6.04.03.B.1)			
Required: 20% of developed area = 42,297 x 20% = 8,459.4			8,459.4
Provided:			17,721

Xeriscape Points

Option	Points
Utilization of moisture sensing controller other than rain switch	5
Plan submitted with low, moderate and high water usage zones indicated on the Landscape Plan	5
51% or more of the required shrubs are made up of drought tolerant species from the list	10
51% or more of the required trees are made up of drought tolerant species from the list	10
50% more than the required shade trees planted in the vehicular use area	10
Utilization of mulch other than Cypress mulch	5
Utilization of compacted mulched planting beds at least three inches deep in all planted areas except Ground Cover	10
Points Required:	55
Points Provided:	50



Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
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Palmetto Cove

City of Stuart, Florida

City Project Number:

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Job No.	19-1203
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Revision Dates	
S.W. Walls & add SP	4-16-2021
Add Street Trees	4-28-2021

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Sheet 1 of 2

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 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. Call 811 - Sunshine State One Call of Florida, Inc. - www.sunshine811.com
6. Mulch planting areas with 3" layer of Melaleuca, Eucalyptus, or Environmulch. 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. All plant material and sod shall be fertilized in accordance with Martin County's fertilizer ordinance. Soil tests are required from the site to be in compliance with the ordinance and shall be taken from the minimum required areas as stated in the ordinance. Fertilizer shall be a complete natural organic fertilizer and slow release.

Fertilized with a complete natural organic fertilizer with a ratio as allowed by the County.

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 (If allowed by County) 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

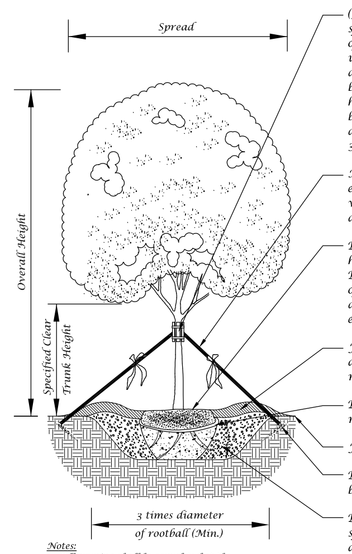
11. All planting areas and sod to be irrigated to provide 100% coverage. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
12. Maintain trees, shrubs, and other plants by watering, cultivating, and weeding as required for healthy growth. Restore planting saucers 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.
    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 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.

NOTE:
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.

General Notes

1. No plant substitutions can be made without City of Stuart approval.
2. All required landscape improvements must be inspected and approved by the City of Stuart prior to the issuance of a Certificate of Occupancy.
3. Any existing landscaping, sod, or irrigation damaged or destroyed during the construction shall be replaced prior to the final inspection.
4. All prohibited, exotic and invasive species shall be removed from the entire site prior to issuance of certificate of occupancy.
5. All planting areas and sod to be irrigated to provide 100% coverage and provide adequate irrigation of landscape areas for the first full growing season and continue thereafter only as necessary to maintain required vegetation in good and healthy condition. Shop drawings to be submitted by the irrigation contractor for approval prior to installation.
6. The Irrigation system shall be continuously maintained in working order.
7. An automatic Rain sensor shall be placed on-site as part of the required Irrigation system.
8. Planting adjacent to fire hydrants is to have a minimum clear radius of 7.5' as required by the NFPA Uniform Fire Code Florida Edition 18.3.4.1 Hydrants. All fire hydrants and fire check valves shall have a minimum of 7.5' from the front and sides with 4' from the rear to all landscape material per the Florida Fire Prevention Code.
9. Sod and irrigation will be installed in any adjacent right-of-way, between walks and curbs.
10. Root barriers shall be installed in accordance with manufacturer specifications adjacent to all trees planted within six feet of curbs or sidewalks in public right-of-way.

Landscape Details



(5) 2" x 4" x 18" wood battens to be evenly spaced around trunk of tree. A minimum of (5) five wraps of burlap are to be placed under the battens to prevent marring or damage to the trunk. The height of the battens shall be located in relation to the height of the tree for adequate bracing. No batten is to be nailed to the tree. Battens are to be banded with a minimum of (2) two 3/4" high carbon steel bands.

Minimum of (3) three 4" x 4" wood braces evenly spaced around tree to be toe nailed to wood battens. Attach florescent safety flags a min. of 12" in length to each wood brace.

Planting depth shall be 10% less than the height of the root ball from the Flair Root. Diameter of hole to be three times the size of root ball minimum. Plant top of root ball at 2" minimum above the finished grade elevation.

Form a mulch berm with 3" minimum depth and no more than 4" high. Mulch to edge of rootball, but leave top of rootball exposed.

Remove burlap or steel cage from top 1/3 of root ball (If applicable).

Finished Grade

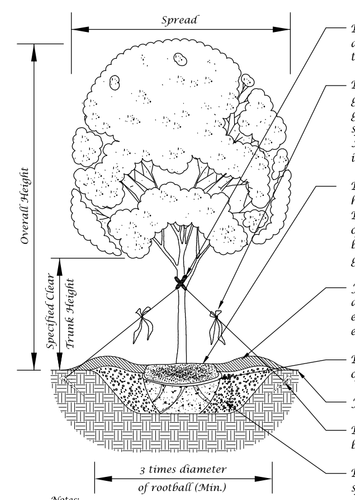
Drive 2" x 4" x 24" wood stake a min. of 3" below grade.

Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

Large Tree Planting Detail (5" Caliper or Greater)

Not to Scale



Place 1/2" diameter black rubber hose on all guy wires at all points of contact with tree.

Place 3 galvanized steel double strand #12 gauge twisted guy wires with one galvanized turnbuckle per guy wire spaced at equal distance around tree. Attach florescent safety flags a min. of 12" in length to each guy wire.

Planting depth shall be 10% less than the height of the root ball from the Flair Root. Diameter of hole to be three times the size of root ball minimum. Plant top of root ball at 2" minimum above the finished grade elevation.

Form a mulch berm with 3" minimum depth and no more than 4" high. Mulch to edge of rootball, but leave top of rootball exposed.

Remove burlap or steel cage from top 1/3 of root ball (If applicable).

Finished Grade

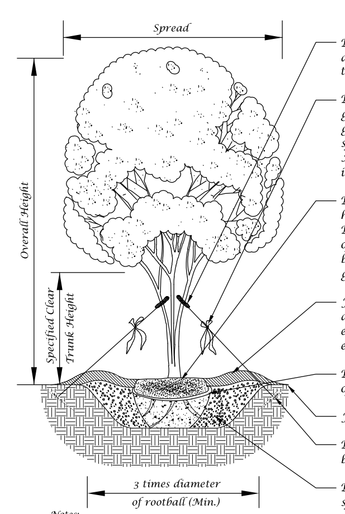
Drive 2" x 4" x 24" wood stake a min. of 3" below grade.

Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

Tree Planting Detail

Not to Scale



Place 1/2" diameter black rubber hose on all guy wires at all points of contact with tree.

Place 3 galvanized steel double strand #12 gauge twisted guy wires with one galvanized turnbuckle per guy wire spaced at equal distance around tree. Attach florescent safety flags a min. of 12" in length to each guy wire.

Planting depth shall be 10% less than the height of the root ball from the Flair Root. Diameter of hole to be three times the size of root ball minimum. Plant top of root ball at 2" minimum above the finished grade elevation.

Form a mulch berm with 3" minimum depth and no more than 4" high. Mulch to edge of rootball, but leave top of rootball exposed.

Remove burlap or steel cage from top 1/3 of root ball (If applicable).

Finished Grade

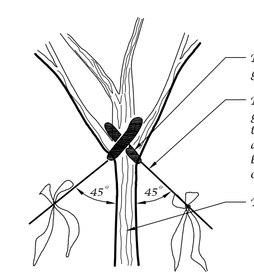
Drive 2" x 4" x 24" wood stake a min. of 3" below grade.

Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. No nails shall be driven into tree

Multi-Trunk Tree Planting Detail

Not to Scale



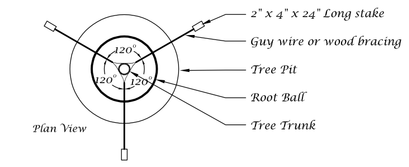
Place 1/2" diameter black rubber hose on all guy wires at all points of contact with tree.

Place 3 galvanized steel double strand #12 gauge twisted guy wires with one galvanized turnbuckle per guy wire spaced at equal distance around tree above the first lateral branch. Attach florescent safety flags a min. of 12" in length to each guy wire.

Tree Trunk

Guy Wire Attachment Detail

Not to Scale



2" x 4" x 24" Long stake

Guy wire or wood bracing

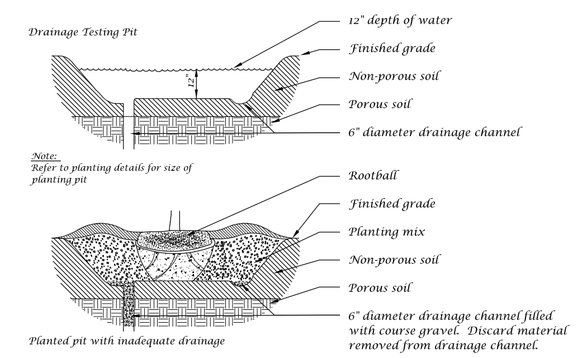
Tree Pit

Root Ball

Tree Trunk

Staking Detail

Not to Scale



12" depth of water

Finished grade

Non-porous soil

Porous soil

6" diameter drainage channel

Note:
Refer to planting details for size of planting pit

Rootball

Finished grade

Planting mix

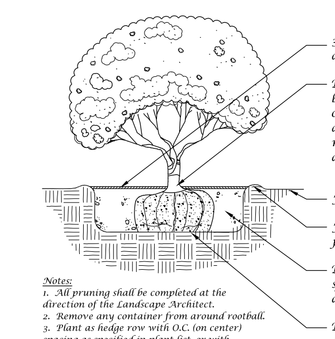
Non-porous soil

Porous soil

6" diameter drainage channel filled with course gravel. Discard material removed from drainage channel.

Drainage Testing Detail

Not to Scale



3" minimum depth of mulch. Keep mulch away from base of stem (See specifications)

Planting depth shall equal depth of root ball. Diameter of hole to be twice the size of root ball. For root balls larger than 2' in diameter, the hole should be 2' wider than root ball on all sides. Plant top of root ball at same elevation as finished grade.

Finished Grade

Form 3" continuous earthen rim around planting hole.

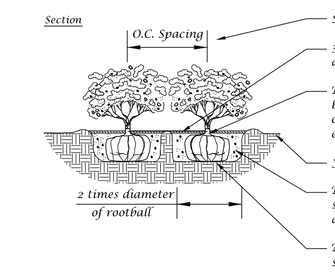
Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Place root ball at bottom of undisturbed subgrade of planting pit.

Notes:
1. All pruning shall be completed at the direction of the Landscape Architect.
2. Remove any container from around rootball.
3. Plant as hedge row with O.C. (on center) spacing as specified in plant list, or with triangular spacing as a mass.

Shrub Detail

Not to Scale



See Plant List for O.C. (on center) spacing

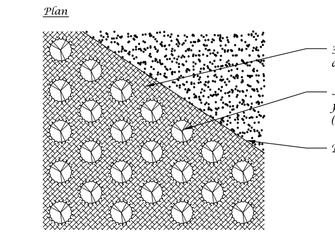
3" minimum depth of mulch. Keep mulch away from base of stem (See specifications)

Planting depth shall equal depth of root ball. Diameter of hole to be twice the size of root ball. Plant top of root ball at same elevation as finished grade.

Finished Grade

Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Place root ball at bottom of undisturbed subgrade of planting pit.



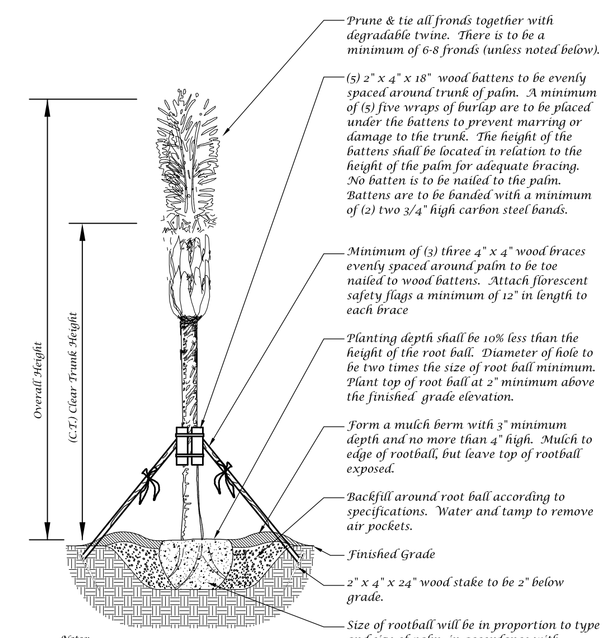
3" minimum depth of mulch. Keep mulch away from base of stem (See specifications)

Alternate spacing of plants to insure proper coverage of groundcover (Triangulate planting)

Edge of planting bed

Ground Cover Detail

Not to Scale



Prune & tie all fronds together with degradable twine. There is to be a minimum of 6-8 fronds (unless noted below).

(5) 2" x 4" x 18" wood battens to be evenly spaced around trunk of palm. A minimum of (5) five wraps of burlap are to be placed under the battens to prevent marring or damage to the trunk. The height of the battens shall be located in relation to the height of the palm for adequate bracing. No batten is to be nailed to the palm. Battens are to be banded with a minimum of (2) two 3/4" high carbon steel bands.

Minimum of (3) three 4" x 4" wood braces evenly spaced around palm to be toe nailed to wood battens. Attach florescent safety flags a minimum of 12" in length to each brace

Planting depth shall be 10% less than the height of the root ball. Diameter of hole to be two times the size of root ball minimum. Plant top of root ball at 2" minimum above the finished grade elevation.

Form a mulch berm with 3" minimum depth and no more than 4" high. Mulch to edge of rootball, but leave top of rootball exposed.

Backfill around root ball according to specifications. Water and tamp to remove air pockets.

Finished Grade

2" x 4" x 24" wood stake to be 2" below grade.

Size of rootball will be in proportion to type and size of palm, in accordance with Florida Grades and Standards for Nursery Plants Part I & II Latest Edition.

Notes:
1. Hurricane cut Sabal Palms are acceptable.
2. All Washingtonia and Sabal Palms to be footed unless otherwise noted in plant list.
3. Palms with burned or marred trunks will not be accepted.

Palm Planting Detail

Not to Scale

Landscape Plan

Conceptual Design Group, Inc.
Landscape Architecture - Site Planning
900 East Ocean Boulevard, Suite 130d
Stuart, Florida 34994
(772) 344-2340
LC: 26000198

Palmetto Cove

City of Stuart, Florida

City Project Number:

Jeffrey W. Smith, RLA
Florida Registration Number:
LA 0001635

Job No.	19-1203
Drawn By	JWS
Submittal Dates	8-26-2020
	4-16-2021
	4-28-2021
Revision Dates	
S.W. Walls & add SP	4-16-2021
Add Street Trees	4-28-2021

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Sheet 2 of 2

Plant List

QTY	SYM	SPECIES	COMMON NAME/DESCRIPTION	SIZE	SPACING	REMARKS	WATER USAGE
CANOPY / ORNAMENTAL TREES							
4	CS*	CONOCARPUS ERECTUS VAR. SERICEUS	SILVER BUTTONWOOD	8' O.A./5' SPRD.	A.S.	FULL CANOPY	LOW
13	IE*	ILEX x ATTENUATA 'EAGLESTON HOLLY'	EAGLESTON HOLLY	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
5	MG*	MAGNOLIA GRANDIFLORA	LITTLE GEM MAGNOLIA	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
6	TD*	TAXODIUM DISTICHUM	BALD CYPRESS	12' x 6', 2.5" CAL.	A.S.	FULL CANOPY	LOW
PALMS							
9	SP*	SABAL PALMETTO	SABAL PALM	SEE PLAN	A.S.	SLICK TRUNKS	LOW
SHRUBS / HEDGES							
45	CLU	CLUSIA GUTTIFERA	SMALL LEAF CLUSIA	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
355	CHI*	CHRYSOBALANUS ICACO	COCOPLUM	#3, 2' x 2'	2' O.C.	FULL & THICK	LOW
	SOD	STENOTAPHRUM SECUNDATUS	ST. AUGUSTINE SOD			SEE SPECS	HIGH

* = Florida Native

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Total Site Area:	42,297 s.f.	.97 Ac.	100%
Total Trees Required: (6.04.08)			
Required: 1 Tree / 1,500 s.f. = 42,297 / 1,500 = 28			28
Provided:			28
Total Shade Trees Required: (6.04.02.A.2) 50% of total required trees = 28 x 50% = 14			14
Total Shade Trees Provided:			18
Total Native Trees Required: (6.04.02.A.1) 50% of total required trees = 28 x 50% = 14			14
Native Trees Provided:			28 (100%)
Landscape Area: (6.04.03.B.1)			
Required: 20% of developed area = 42,297 x 20% = 8,459.4			8,459.4
Provided:			17,721

Xeriscape Points

Option	Points
Utilization of moisture sensing controller other than rain switch	5
Plan submitted with low, moderate and high water usage zones indicated on the Landscape Plan	5
51% or more of the required shrubs are made up of drought tolerant species from the list	10
51% or more of the required trees are made up of drought tolerant species from the list	10
50% more than the required shade trees planted in the vehicular use area	10
Utilization of mulch other than Cypress mulch	5
Utilization of compacted mulched planting beds at least three inches deep in all planted areas except Ground Cover	10
Points Required:	55
Points Provided:	50

Landscape Plan

North
Scale: 1" = 20'
0 10' 20' 40'

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Landscape Architecture - Site Planning
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Stuart, Florida 34994
(772) 344-2340
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Palmetto Cove

City of Stuart, Florida

City Project Number:

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Job No.	19-1203
Drawn By	JWS
Submittal Dates	8-26-2020
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	4-28-2021
Revision Dates	
S.W. Walls & add SP	4-16-2021
Add Street Trees	4-28-2021

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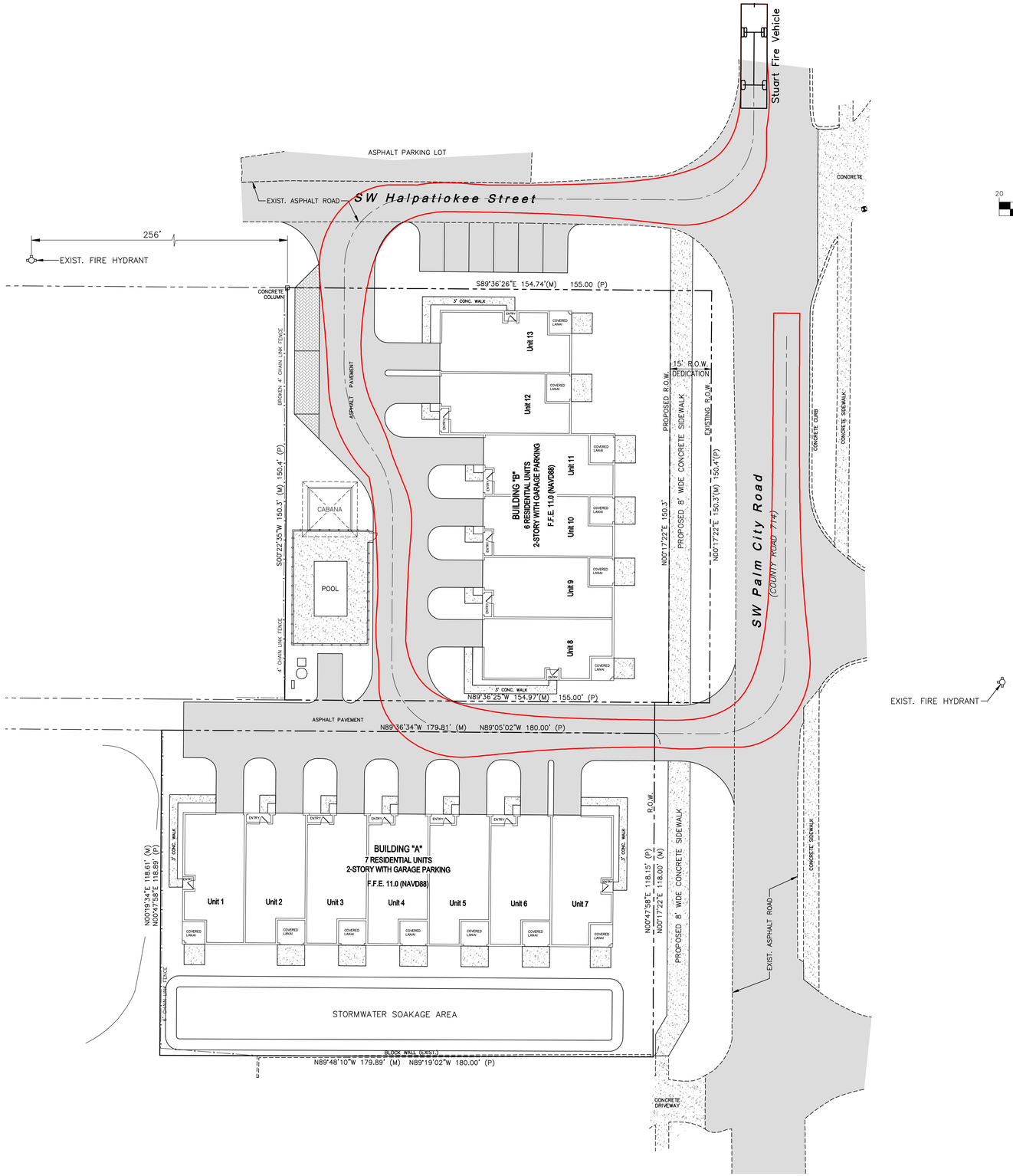
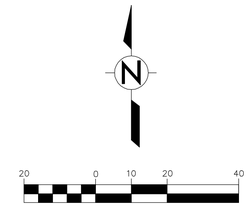
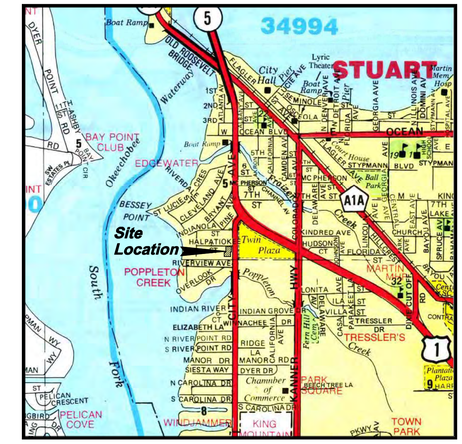
Sheet 1 of 1



Fire Truck Maneuvering Exhibit





Vicinity Map

1"=1,600'

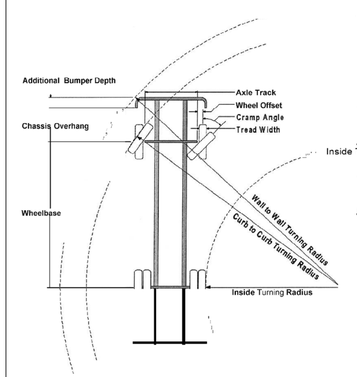
Turning Performance Analysis

02/20/2017

Bid Number: 18143TR

Department: Stuart, City of

Chassis: Quantum , Bright Finish, S Chassis, Aerials, 31K Single Axle,
Body: Aerial, HD Ladder, Quint, Alum Body



Parameters:

Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.70 in.
Chassis Overhang:	82.44 in.
Additional Bumper Depth:	19.00 in.
Front Overhang:	101.44 in.
Wheelbase:	230.75 in.

Calculated Turning Radii:

Inside Turn:	18 ft. 1 in.
Curb to curb:	33 ft. 7 in.
Wall to wall:	38 ft. 10 in.

Comments:

Category:	Option:	Description:
Axle, Front, Custom	0018453	Axle, Front, Oshkosh TAK-4, Non Drive, 22,800 lb, DLX/Enf/Qtm/AXT
Wheels, Front	0019611	Wheels, Frt, Alum, Alcoa, 22.50" x 12.25" (425/ & 385/)
Tires, Front	0001647	Tires, Michelin, 425/65R22.50 20 ply XTE2, Hiway Rib
Bumpers	0012245	Bumper, 19" extended - Sab/CC
Aerial Devices	0057609	Aerial Device, 750# Tip Load, 75' HAL, Single Axle

Notes:

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

Overall truck length is 38 feet

Overall truck width is 9.6 feet

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P.O. BOX 92...959 S. FEDERAL HWY....STUART, FLORIDA 34995
TEL. (772) 287–3636 FAX (772) 220–0580

NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

FIRE TRUCK MANEUVERING EXHIBIT

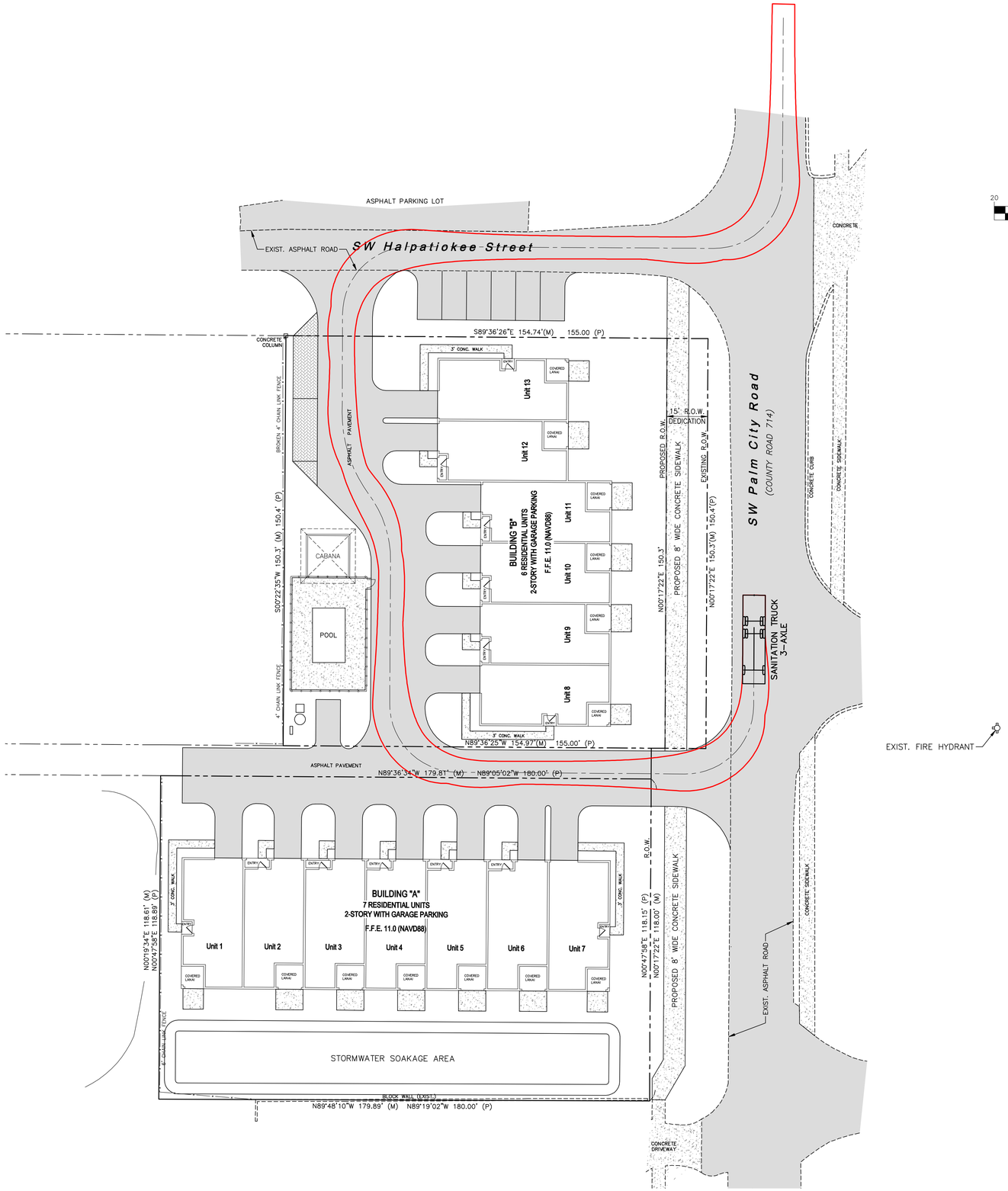
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

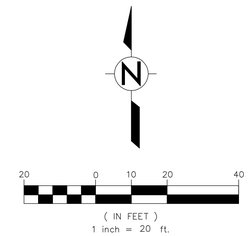
ENGINEER'S SEAL:

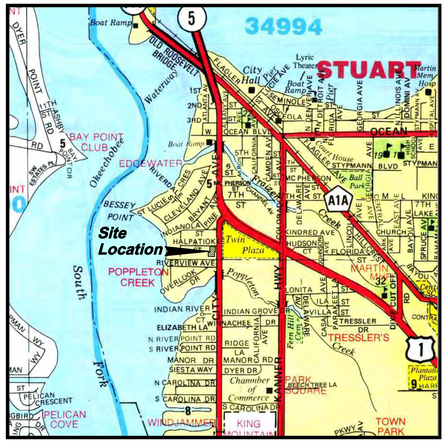
SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 1 OF 1







Vicinity Map

1"=1,600'

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NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

SANITATION TRUCK MANEUVERING EXHIBIT 1

SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

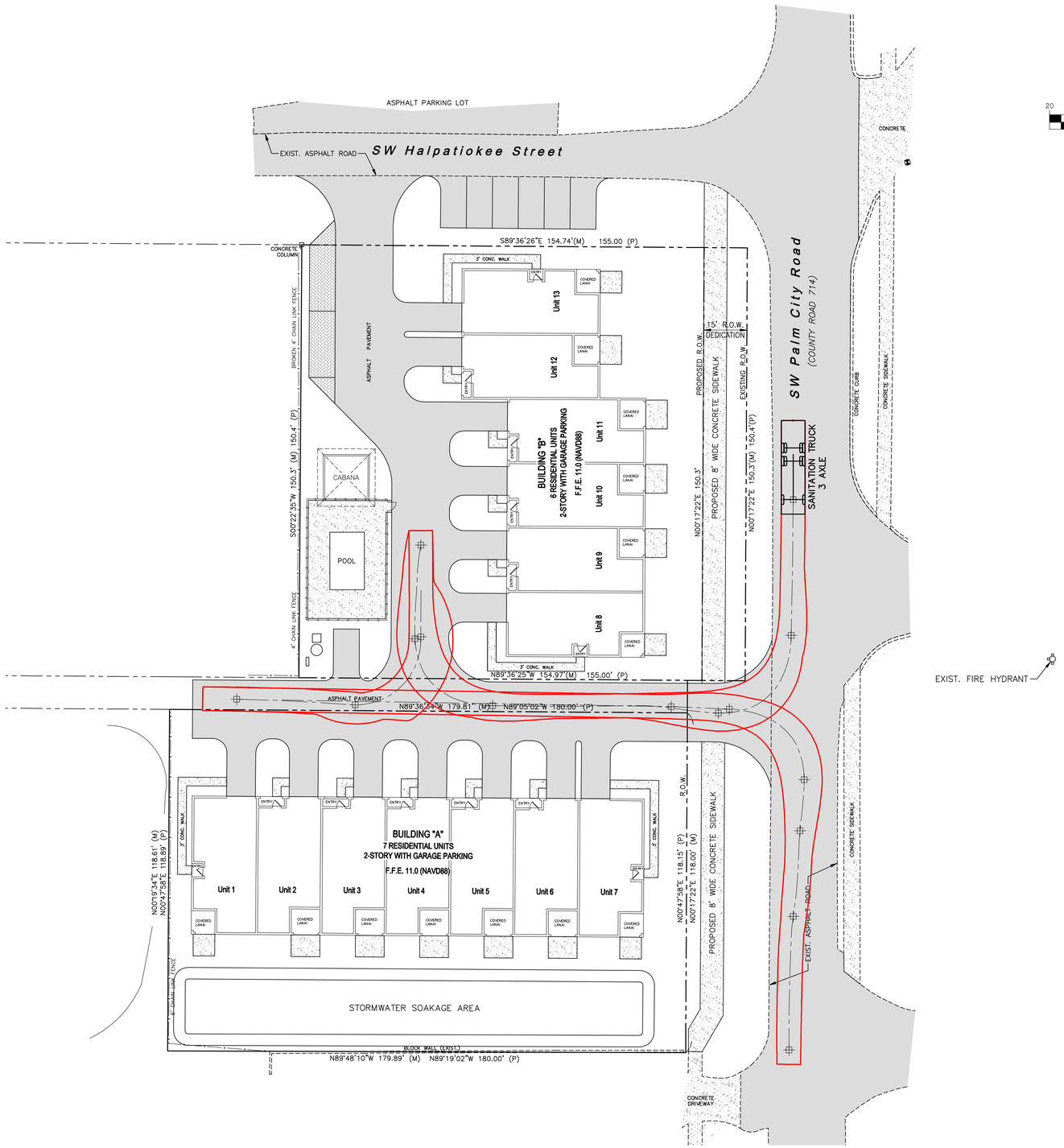
ENGINEER'S SEAL:

SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

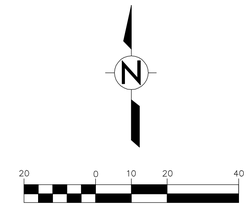
PROJECT NO.

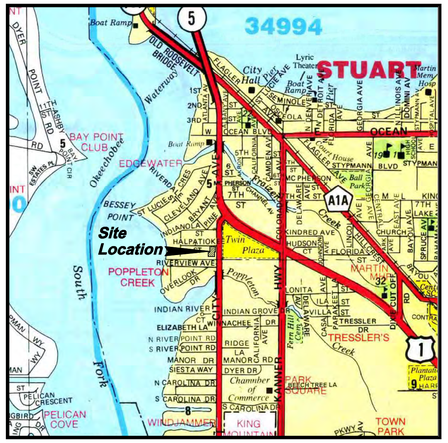
SHEET 1 OF 2

Sanitation Truck Maneuvering Exhibit 1



Sanitation Truck Maneuvering Exhibit 2





Vicinity Map

1"=1,600'

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NO	REVISION	DATE

DESIGNED BY: DATE: 02.15.21
DRAWN BY: SCALE: 1"=20'

SANITATION TRUCK MANEUVERING EXHIBIT 2

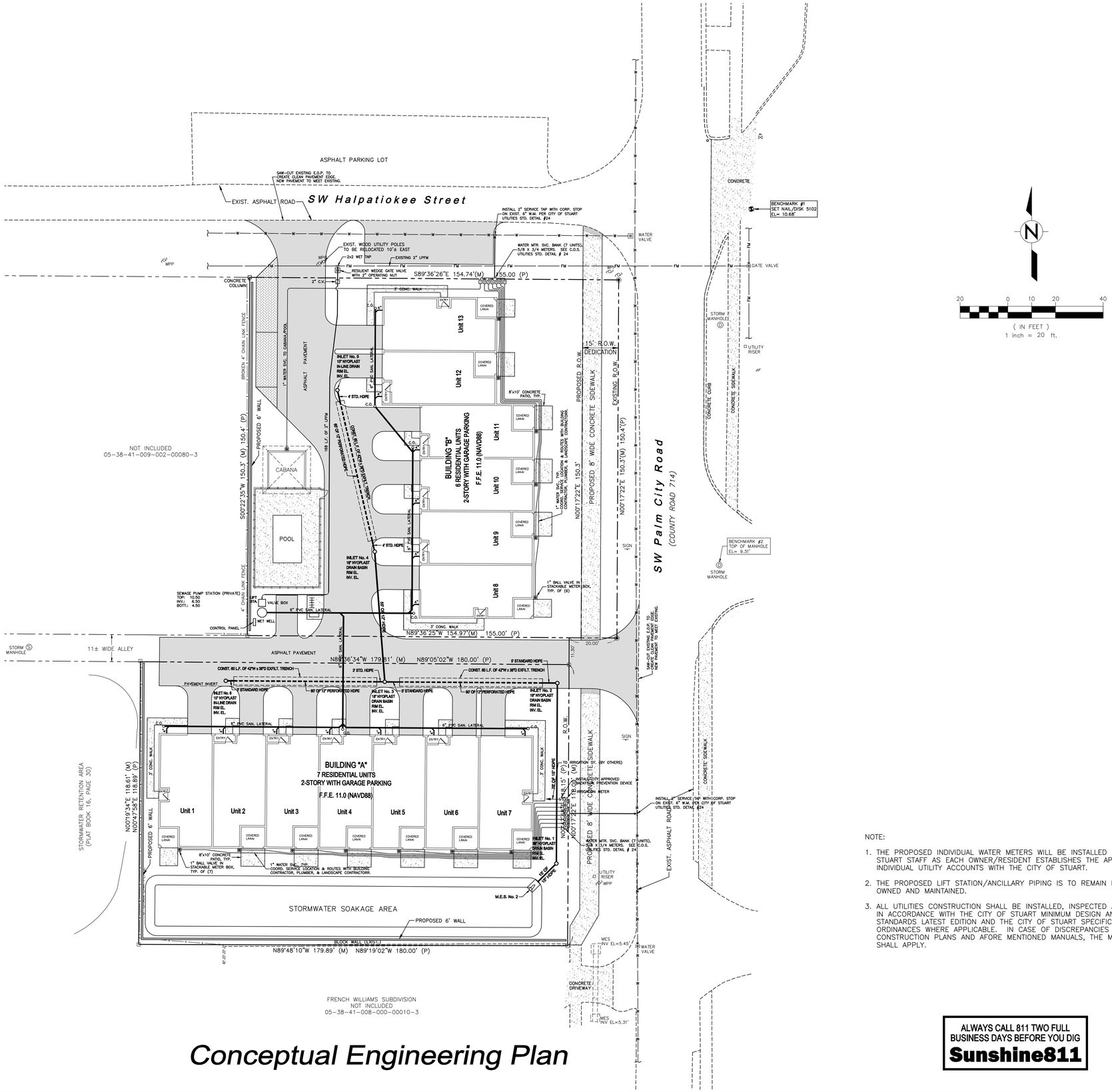
SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

ENGINEER'S SEAL:

SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 2 OF 2



Conceptual Engineering Plan

NOTE:

1. THE PROPOSED INDIVIDUAL WATER METERS WILL BE INSTALLED BY CITY OF STUART STAFF AS EACH OWNER/RESIDENT ESTABLISHES THE APPLICABLE INDIVIDUAL UTILITY ACCOUNTS WITH THE CITY OF STUART.
2. THE PROPOSED LIFT STATION/ANCILLARY PIPING IS TO REMAIN PRIVATELY OWNED AND MAINTAINED.
3. ALL UTILITIES CONSTRUCTION SHALL BE INSTALLED, INSPECTED AND TESTED IN ACCORDANCE WITH THE CITY OF STUART MINIMUM DESIGN AND CONSTRUCTION STANDARDS LATEST EDITION AND THE CITY OF STUART SPECIFICATIONS AND ORDINANCES WHERE APPLICABLE. IN CASE OF DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND AFORE MENTIONED MANUALS, THE MOST RESTRICTIVE SHALL APPLY.

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG
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NO	REVISION	DATE
1	MISC. PER C.O.S. COMMENTS	[04.16.21]
1	MISC. PER C.O.S. COMMENTS	[02.16.21]

DESIGNED BY: DATE: 09.20.20
DRAWN BY: SCALE: 1"=20'

CONCEPTUAL ENGINEERING PLAN

SITE DEVELOPMENT PLANS
PALMETTO COVE
502 Halpatiokee Street & 924 SW Palm City Road, Stuart, Florida

ENGINEER'S SEAL:
SCOTT T. MONTGOMERY, P.E.
FL. REG. No. 45954

PROJECT NO.

SHEET 1 OF 1

BLDG A NORTH ELEVATION (PARKING)

SCALE: 3/16" = 1'-0"

BLDG A SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

JOB NUMBER:
19-178A

SHEET NO:

OF X.

Braden & Braden AIA, PA
ARCHITECTS - PLANNERS
417 S.E. COCONUT AVENUE
Tel : (772) 287-8258
Fax : (772) 287-8283
Website: www.bradenarchitects.com
Stuart, FL 34996 #AAC000032

BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

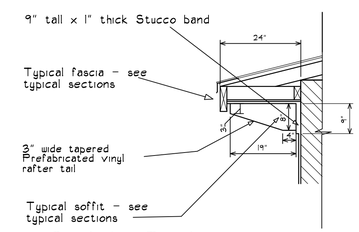
STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

BLDG A EAST ELEVATION (STREET)

SCALE: 3/16" = 1'-0"

BLDG A WEST ELEVATION

SCALE: 3/16" = 1'-0"



Out-looker Detail

Scale: nts

JOB NUMBER: 19-178A

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BUILDING A FOR:

PALMETTO CALLE

Date Drawn: 8-21-20

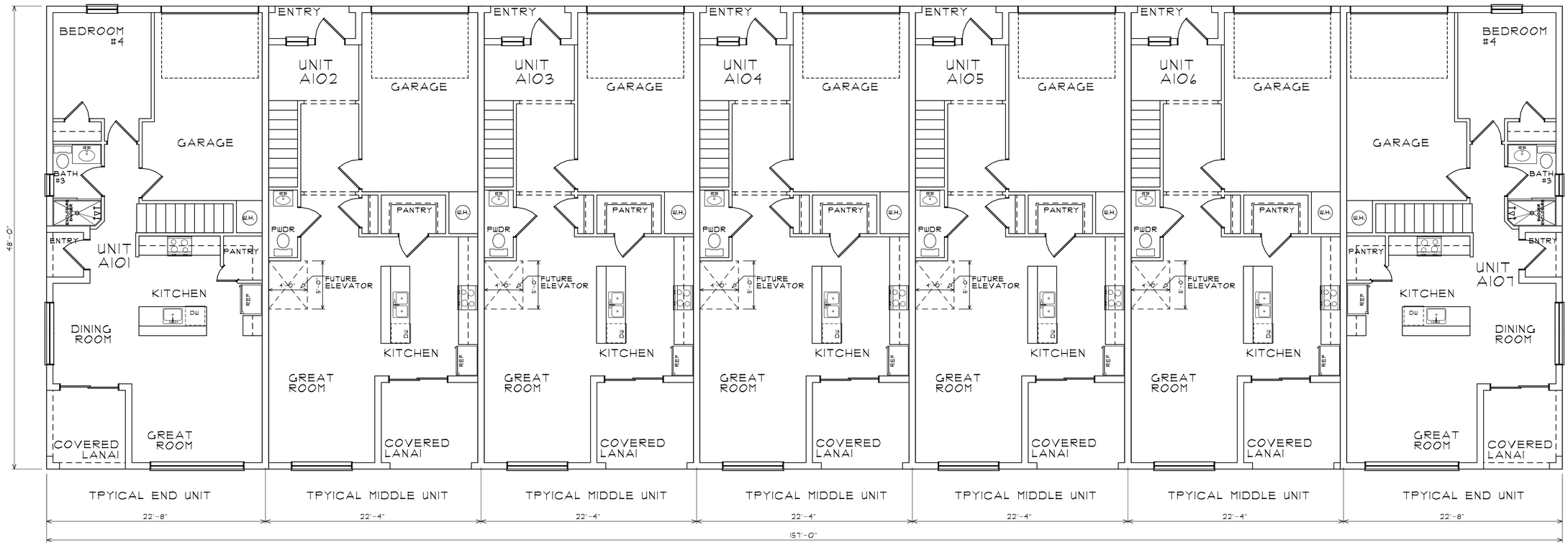
Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

Address: stuart florida

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING A FLOOR PLAN

SCALE 3/16" = 1'-0"

Building A Square Footage TOTAL

First Floor Foot Print =	7,536 sq. ft.
Second Floor Foot Print =	7,409 sq. ft.
Total Footprint =	14,945 sq. ft.

JOB NUMBER: 19-178A

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BUILDING A FOR:

PALMETTO CALLE

Address: stuart florida

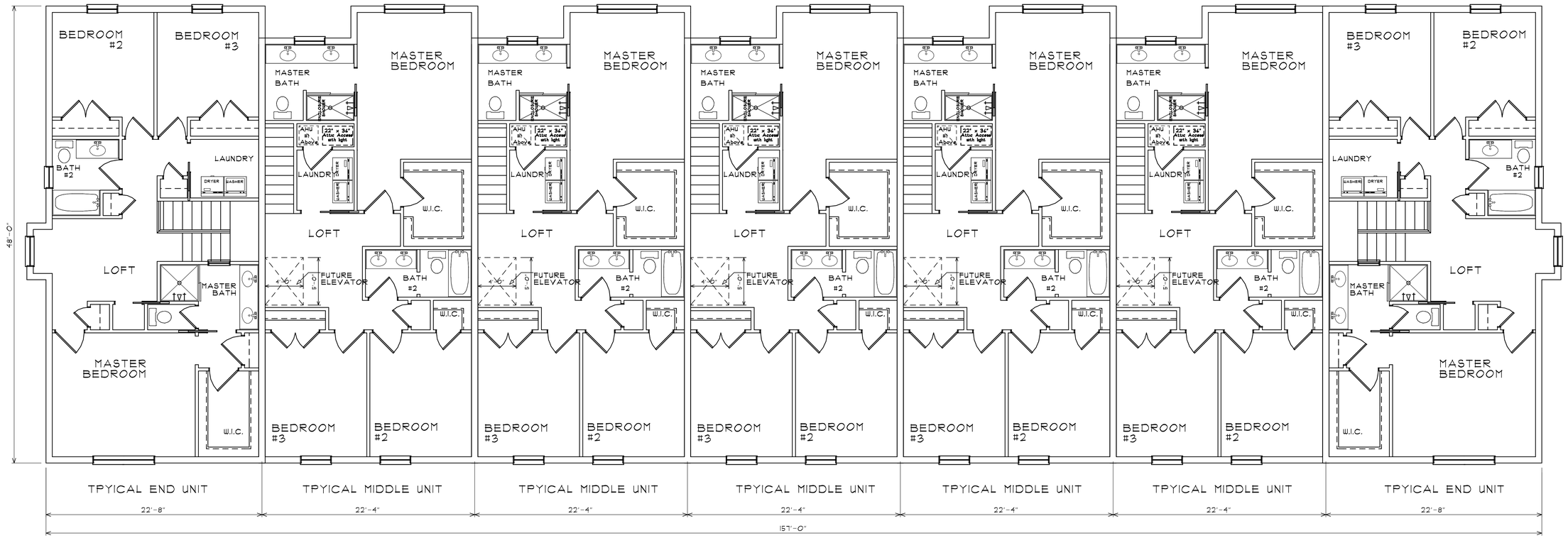
Date Drawn: 8-21-20

Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

STATE OF FLORIDA DANIEL R. BRADEN AR 9770 LICENSED ARCHITECT



BUILDING A SECOND FLOOR PLAN

SCALE 3/16" = 1'-0"

JOB NUMBER:
19-178A

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BUILDING A FOR:

PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
LICENSED ARCHITECT

BLDG B WEST ELEVATION (PARKING)

SCALE: 3/16" = 1'-0"

BLDG B EAST ELEVATION (STREET)

SCALE: 3/16" = 1'-0"

JOB NUMBER: 19-178B

SHEET NO:

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BUILDING B FOR:

PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20

Drawn by: D.R.B. C.C.U.

Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

BLDG B NORTH ELEVATION

SCALE: 3/16 = 1'-0"

BLDG B SOUTH ELEVATION

SCALE: 3/16" = 1'-0"

JOB NUMBER:
19-178B

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BUILDING B FOR:

PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

STATE OF FLORIDA
DANIEL R. BRADEN
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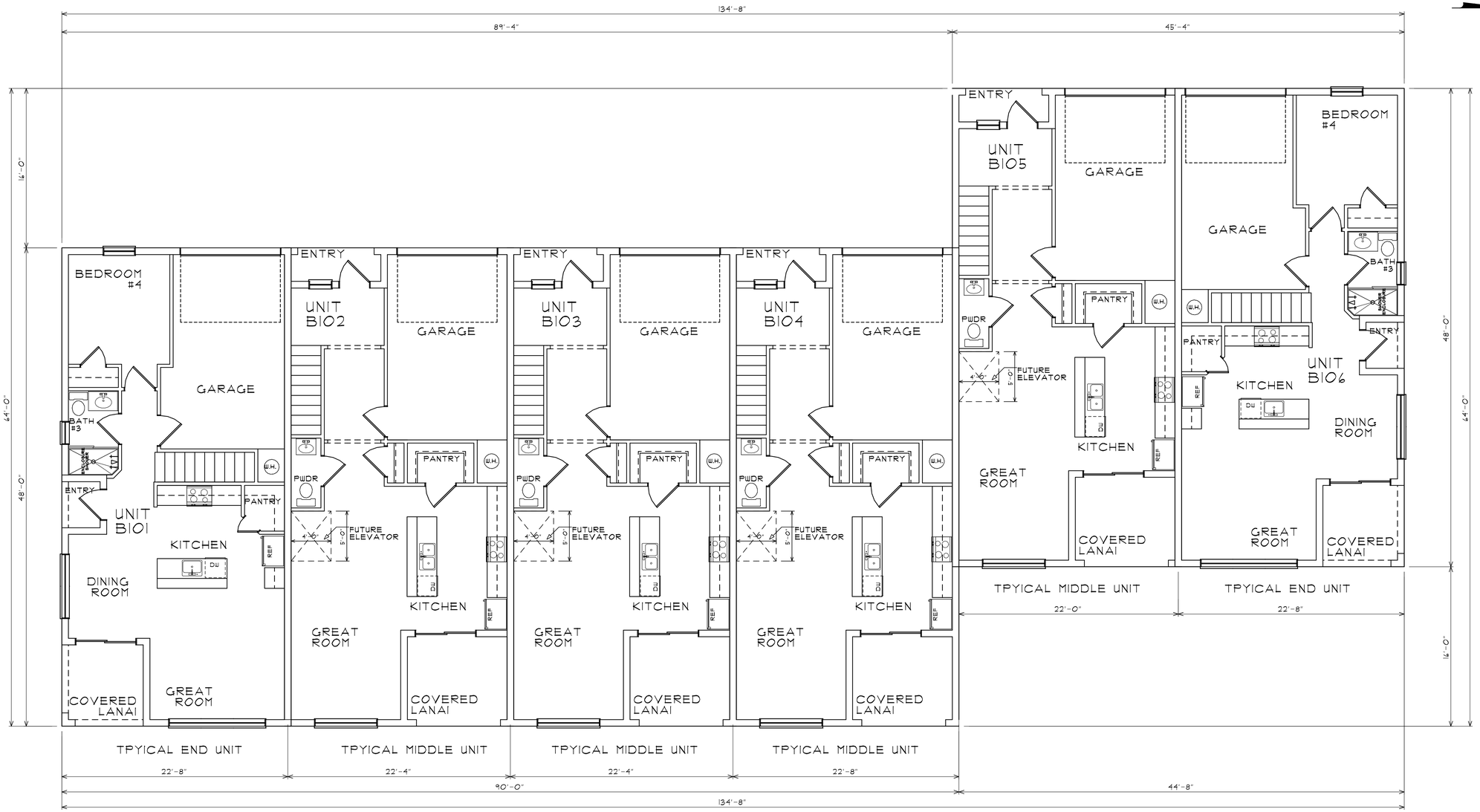

BUILDING B FLOOR PLAN

SCALE 3/16" = 1'-0"

Building B Square Footage TOTAL

First Floor Foot Print =	6,475	sq. ft.
Second Floor Foot Print =	6,375	sq. ft.
Total Footprint =	12,850	sq. ft.

Revisions :

Date Drawn: 8-15-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

BUILDING B FOR:
PALMETTO CALLE

Address: stuart florida

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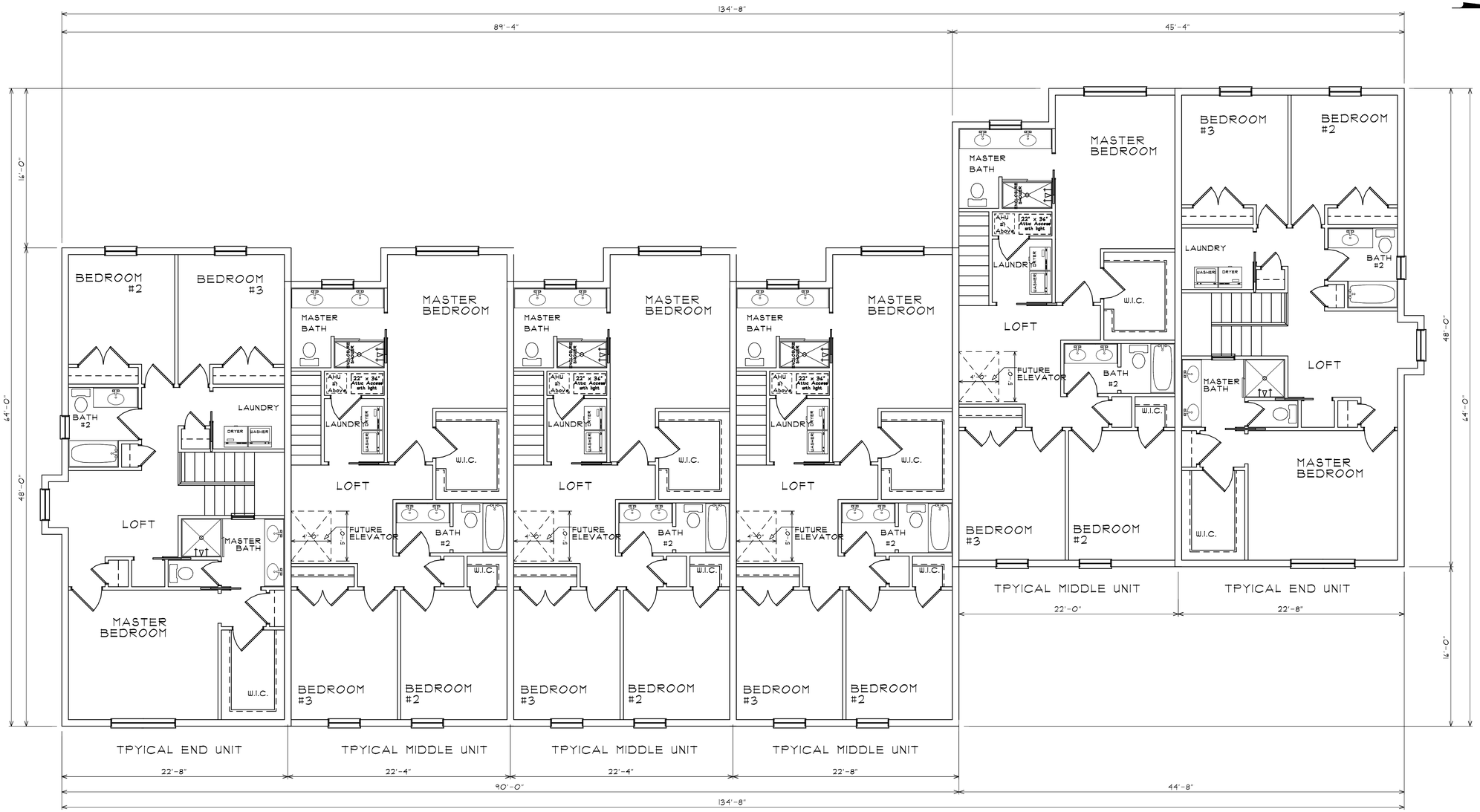
JOB NUMBER:
19-178B

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT



BUILDING B SECOND FLOOR PLAN

SCALE 3/16" = 1'-0"

Building Square Footage

First Floor Foot Print =	7,536 sq. ft.
Second Floor Foot Print =	7,409 sq. ft.
First Floor Total =	14,945 sq. ft.

Revisions :

Date Drawn: 8-15-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

BUILDING B FOR:
PALMETTO CALLE

Address: stuart florida

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SHEET NO:

OF X.

JOB NUMBER:
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AR 9770
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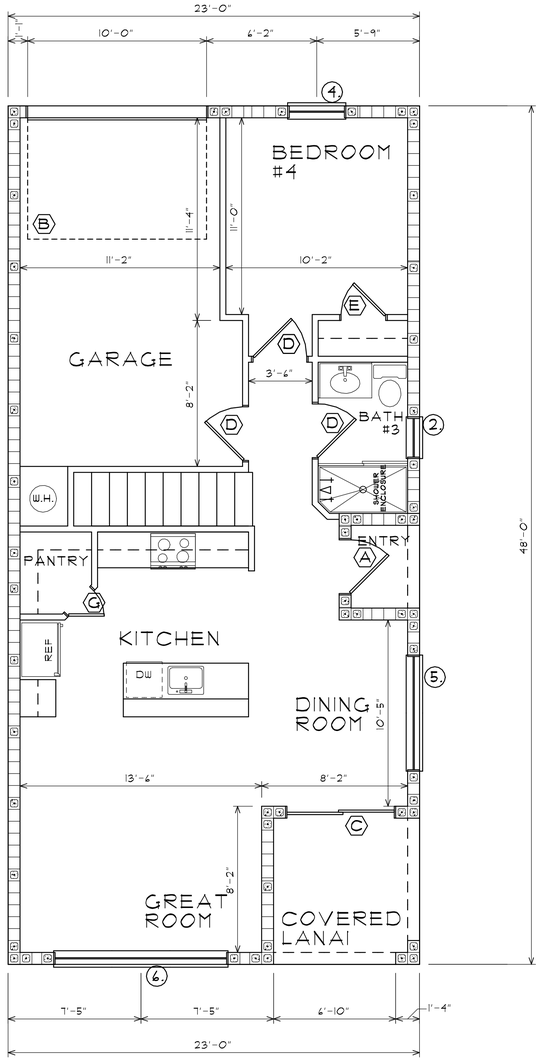
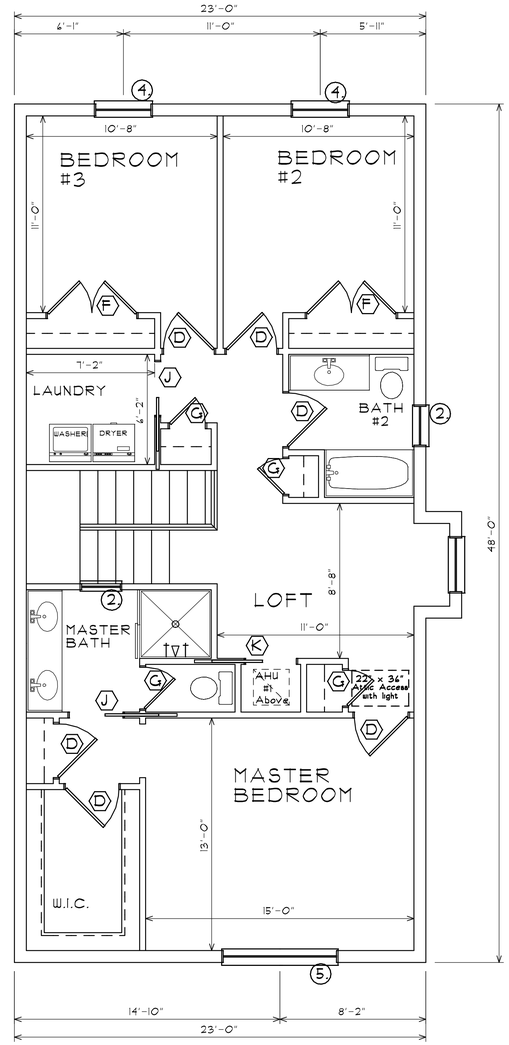


Typical End Unit 1st Floor Plan

SCALE 1/4" = 1'-0"



Typical End Unit 2nd Floor Plan

SCALE 1/4" = 1'-0"

TYPICAL END UNIT PLANS

First Floor Square Footage

First Floor A/C =	760 sq. ft.
Covered Porch Total =	84 sq. ft.
Garage =	260 sq. ft.
First Floor Total =	1,104 sq. ft.

Second Floor Square Footage

Second Floor A/C =	1,054 sq. ft.

A/C Space Breakdown

First Floor A/C =	760 sq. ft.
Second Floor A/C =	1,054 sq. ft.
Total A/C space =	1,814 sq. ft.

Revisions :

Date Drawn: 9-25-19
Drawn by: N.T.C.
Checked by: D.R.B.

Residence For:
Southern Landmark

Address: stuart florida

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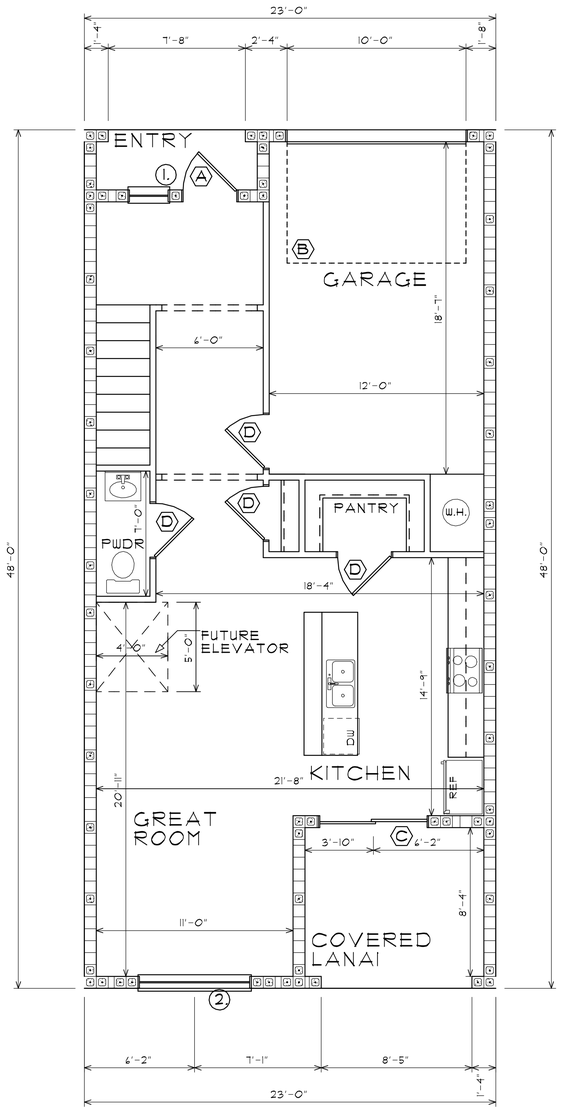
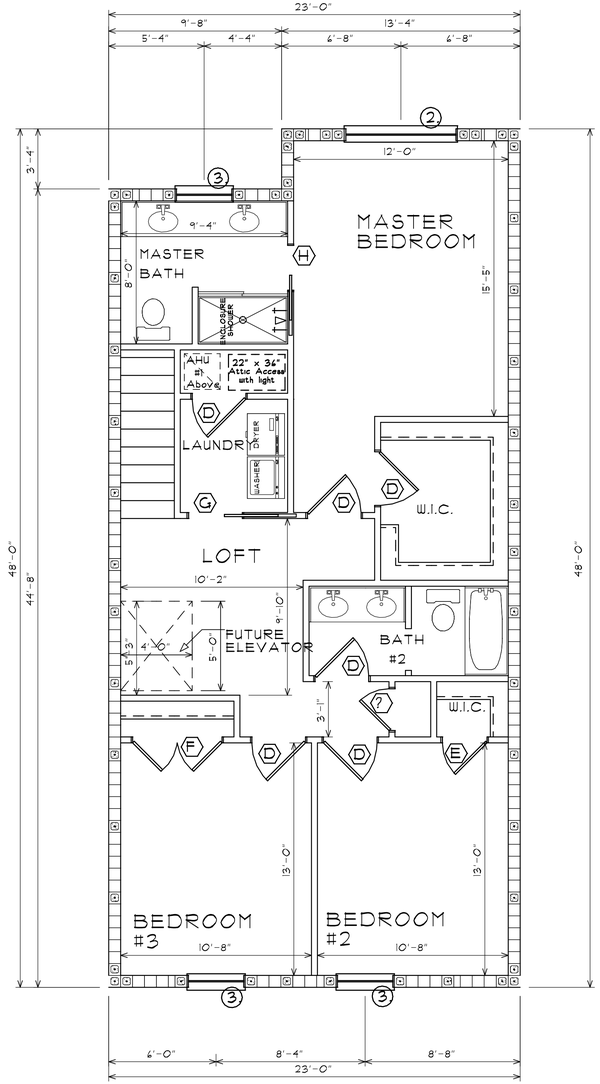


Typical Middle Unit 1st Floor Plan

SCALE 1/4" = 1'-0"



Typical Middle Unit 2nd Floor Plan

SCALE 1/4" = 1'-0"

TYPICAL MIDDLE UNIT PLANS

First Floor Square Footage

First Floor A/C =	684 sq. ft.
Covered Porch Total =	96 sq. ft.
Garage =	245 sq. ft.
First Floor Total =	1,055 sq. ft.

Second Floor Square Footage

Second Floor A/C =	982 sq. ft.

A/C Space Breakdown

First Floor A/C =	684 sq. ft.
Second Floor A/C =	982 sq. ft.
Total A/C space =	1,667 sq. ft.

Revisions :

Date Drawn: 8-21-20
Drawn by: D.R.B.
Checked by: D.R.B.

Residence For:
Southern Landmark

Address: stuart florida

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SHEET NO:

OF xx

JOB NUMBER:
18-

STATE OF FLORIDA
DANIEL R. BRADEN
AR 9770
REGISTERED ARCHITECT

PALMETTO CALLE - STUART, FL

PALM CITY ROAD WEST FACING

PALM CITY ROAD SOUTHWEST FACING

Braden & Braden AIA, PA
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Website: www.bradenarchitects.com
Stuart, FL 34996 #AAC000032

BUILDING A FOR:
PALMETTO CALLE

Address: stuart florida

Date Drawn: 8-21-20
Drawn by: D.R.B. C.C.U.
Checked by: D.R.B.

Revisions :

JOB NUMBER: 19-178A

SHEET NO:

OF X.

STATE OF FLORIDA DANIEL R. BRADEN AR 9770 REGISTERED ARCHITECT

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
City Commission

Meeting Date: 3/28/2022 **Prepared by:** Tom Reetz

Title of Item:
SILVERTHORN RESIDENTIAL PUD (QUASI-JUDICIAL) (RC):

ORDINANCE No. 2472-2022; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR A 9.43 ACRE PARCEL ANNEXED BY ORDINANCE NO. 1527-97, OWNED BY TED GLASRUD ASSOCIATES FL LLC, LOCATED ON THE SOUTH EAST CORNER OF SE INDIAN STREET AND SE COMMERCE AVENUE, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY BE REZONED FROM COMMERCIAL PLANNED UNIT DEVELOPMENT "CPUD" TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; ESTABLISHING THE SILVERTHORN RPUD CONSISTING OF SEVENTY SEVEN (77) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

History:
On February 28, 2022, the City Commission voted to continue this item until tonight's meeting. Prior to then, on November 4, 2021, the Local Planning Agency deemed the proposal not in compliance and therefore not approved. Following the LPA meeting, staff requested the applicant submit a market demand/supply land use feasibility study to determine if the proposed land use changes are feasible. The applicant was also asked to resubmit a revised Master Site Plan, Landscaping Plan, Tree Mitigation Plan and Paving Grading and Drainage Plan that addressed design elements including Low Impact Development, buffers native vegetation, storm-water management techniques that incorporated underground storage, irregular shaped detention, littoral zones and bio-swales, rain gardens and pervious pavement, comprehensive architecture and street-scape design with a variety of unit types and finally, to consult the County's Economic Impact Action Plan, referencing an Innovation district that anchors an ecosystem to support, retain and expand the existing cluster of marine and aerospace sectors by encouraging residential campus form of development. See attachment: Martin County Economic Development Action Plan.
Additionally, the applicant was asked to provide a list of PUD amenities that enhance the project beyond those required under the city's standard zoning regulations.

Since the LPA Meeting:
Since the LPA meeting in November of last year, the applicant has submitted a revised site plan with low impact design features to enhance stormwater runoff. Rear-facing units have been removed on the corner of Indian Street and Commerce Avenue. Connectivity has been improved by using precast walls, decorative aluminum fencing and pedestrian gates on Indian Street and Commerce Avenue. A monument

sign has been added, signaling entry to the 'Innovation District'. The number of units was reduced from 86 to 77 units, lowering the density to just 8.1 dwelling units per acre and reducing the traffic to 569 average daily trips. An 8 foot wide meandering sidewalk with an enhanced pedestrian park marking the entrance to the Innovation District has been added. Traffic safety, capacity and flow improvements to Indian Street and Commerce Avenue are now proposed.
The following storm water and landscape enhancements have been added since LPA.

- Water Quality Treatment Volume increased to providing 179% of the City of Stuart's and SFWMD standards;
- Swales, rain gardens, and bioswales provide nutrient removal and water quality benefits prior to runoff, providing benefits *in excess* of the requirements set forth by the City of Stuart and SFWMD;
- Bioswales along the perimeter of property and between buildings;
- 1 acre lake with lake fountain and four beesmats at the corners of the lake;
- Littoral plantings with native vegetation;
- Tree preservation of seventeen existing trees and palms on site;
- Relocation of seventy-three sabal palms on site;
- Providing 636 trees and palms on-site, which yields 389 tree credits, exceeding the 275 minimum tree credits required;
- Exceeding the hardwood tree mitigation requirement by 283 inches;
- Exceeding the softwood tree mitigation requirement by 576 inches;
- Providing 28% of the perimeter of the site is planted as native vegetation with no sod areas.

Additionally, the applicant has provided the following project amenities:

- Pavers on front and rear patios;
- Vehicular Pavers at community entrance and on all driveways;
- Pool and Cabana;
- Two EV charging stations in a common parking area;
- Additional visitor parking.

The Developer has also agreed to contribute a payment of $275,000 prior to final certificate of occupancy to the Martin County Board of County Commissioners in respect of the following works to SE Indian Street and SE Commerce Avenue, to be completed in coordination with, and final inspection by, Martin County's Engineering department to:

a. Eliminate the northbound left-turn lane on to Indian Street and converting the northbound approach on Commerce Avenue to right-out only.
b. Include a landscaped median on Commerce Avenue and the extension of the existing right turn lane. To be maintained by the Silverthorne Homeowners Association.
c. Extend the median on Indian Street which Meritage will landscape. To be maintained by the Silverthorne Homeowners Association.
d. Extend the westbound left-turn lane on Indian Street and adding a northbound left-turn lane at Fischer Street.
e. Installation of STOP signs on Commerce Avenue when the northbound left-turn lane on Fischer Street is installed.

Summary/Request:
The property was annexed into the City via Ordinance 1527-97 with a Commercial future land use designation and a Commercial Planned Unit Development zoning designation. The applicant is requesting to change the land use from commercial to multi-family residential and a rezoning to a Residential Planned unit development allowing for a 77 unit attached town-home community.

The project is located at the southeast corner of SE Indian Street and SE Commerce Avenue. The Silverthorn RPUD project proposes 77 attached town-home units within 13 buildings with a gross density of 8.1 units per acre.

The applicant's environmental assessment states that no native upland habitat was observed on the property and the City's environmental consultant confirms that no wetlands or native habitat occur on-site, and no avoidance and minimization efforts regarding wetlands and environmental impacts will be required per Chapter 5 of the City's Land Development Code. 28 percent of the site is now proposed to be planted with Native ground covers and trees with no sod. This native landscape perimeter includes a public area park like setting that is owned and maintained by the HOA.

The applicant is providing 389 tree credits when only 275 credits are required. The applicant is also exceeding the on-site tree mitigation by providing 1,188 hardwood inches where only 905 inches are required by providing 4.5 DBH size hardwood trees and 14 foot min. ht. clear trunk palm trees. In addition, the applicant is providing 1,491 inches of softwood mitigation when only 915 inches of softwood (Pine) is required.

The developer's traffic engineer has coordinated with Martin County and recommended the following improvements: the developer will coordinate with Martin County to extend the westbound left-turn lane on SE Indian Street at SE Commercial Avenue; add a northbound left-turn lane on SE Commerce Avenue at SE Fischer Street; eliminate the northbound left-turn lane on SE Commerce Avenue at the intersection of SE Indian Street; and adopt a Resolution authorizing the installation of STOP signs on SE Commerce Avenue upon the addition of a northbound left-turn lane at SE Fischer Street and the removal of the northbound left-turn lane at SE Indian Street."

Funding Source:
N/A

Recommended Action:
Staff's recommendation is for the application to be approved.

However, the Commission shall consider the proposal and either find the application:
A. In compliance – Approved
B. In compliance - Subject to stated conditions or modifications; or
C. Not in compliance – Not approved

ATTACHMENTS:
1. A.1 2472-2022 Silverthorn RPUD
2. A.2 Ord. 2472-2022 Silverthorn RPUD - Exhibit D compressed
3. B.1 Staff Report/Review CC 3.28
4. C.1 Application_for_Agenda
5. D.1 Review comments & applicant's response
6. D.2 Environmental_Assessment
7. D.3 Martin County Action Plan
8. D.4 Silverthorn- Land Use Narrative - by applicant
9. D.5 Silverthorn- Traffic Report
10. D.6 Silverthorn - stormwater overview 030922
11. D.7 Silverthorn - Stormwater Report 030922

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2472-2022

* * * * *

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR A 9.43 ACRE PARCEL ANNEXED BY ORDINANCE NO. 1527-97, OWNED BY TED GLASRUD ASSOCIATES FL LLC, LOCATED ON THE SOUTH EAST CORNER OF SE INDIAN STREET AND SE COMMERCE AVENUE, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY BE REZONED FROM COMMERCIAL PLANNED UNIT DEVELOPMENT "CPUD" TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; ESTABLISHING THE SILVERTHORN RPUD CONSISTING OF SEVENTY SEVEN (77) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by Lucido and Associates and Meritage Homes representing Ted Glasrud Associates Fl, LLC (owner), for a 9.43-acre parcel of land located on the south-east corner of S.E. Indian Street and Commerce Avenue; and

WHEREAS, the City of Stuart has determined the need to change the Future Land Use and Land Development zoning district for said lands; and

WHEREAS, the City Commission, has considered the Petitioner's voluntary request for land use and zoning designations, and has also considered the recommendation of the City staff.

WHEREAS, the Applicant has committed to the City that its development will comply with all development codes, plans, standards and conditions approved by the City Commission; and that it will bind its successors in title to any such commitments made upon approval of the RPUD; and

WHEREAS, at the hearing the applicant showed by substantial competent evidence that the application is consistent with the Stuart Comprehensive Plan, and the Land Development Code of the City, and with the procedural requirements of law; and

WHEREAS, the RPUD development will be in harmony with surrounding properties and their anticipated development;

WHEREAS, the foregoing recitals are true and adopted as findings of fact and conclusions of law.

WHEREAS, the property is legally described in **"Exhibit A"** of this ordinance. A map depicting the property is attached hereto as **Exhibit "B"** and made a part hereof by reference; and development conditions including a timetable for construction attached hereto as **Exhibit "C";**

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA THAT:

SECTION 1: The following new documents are on file as public records of the City, at the office of the City Clerk in City Hall, and attached hereto as **Exhibit "D"**, hereinafter

the "Development Documents", shall be deemed a part of the development conditions, and shall supplement any earlier approvals:

a. **Master Site Plan, Sheet SP-1, prepared by Lucido & Associates, dated 04.01.21, & resubmitted on 08.02.21, 10.22.21 & 3.11.22.**
b. **Boundary Survey with Tree Locations, dated 04.01.21, Sheets 1 thru 6, prepared by Caulfield & Wheeler, Inc., dated 11/02/2020, and revised with Legal description on 01.26.21**
c. **The Landscape Plans, Tree Plan, Tree Mitigation Plan/Plant Schedule, Landscape Details, and Landscape Specifications, Sheets LA-1, LA-2, LA-3, LA-4, LA-5, LA-6, LA-7, LA-8 & LA-9 prepared by Lucido & Associates, dated 04.01.21, & resubmitted on 08.02.21, 10.22.21, & 03.16.22**
d. **Architectural Floor Plans with Elevation and Rendering, Sheets A1.1L, A1.1R, A1.4Le, A1.4Re & A3.1 by Fieldstone Architecture & Engineering for Meritage Homes, with control date of 12.2.19.**
e. **Master Paving, Grading & Drainage Plan, Sheets 1,2 & 3, prepared by The Milcor Group, Inc., dated March, 2022**

SECTION 2: The Future Land Use designation in the City's Comprehensive Land Use Plan shall be established as "Multi-Family Residential". The Land Development (Zoning) District designation on the City of Stuart Official Zoning Map shall be established as "RPUD" Residential Planned Unit Development amended by this ordinance to allow for 77 attached townhome units.

SECTION 3: This ordinance becomes effective upon adoption.

SECTION 4: Except as otherwise provided herein, no development permits, site permits, or building permits shall be issued by the City except in compliance with the City's Land Development Code.

SECTION 5: All ordinances or parts of ordinances in conflict with this ordinance

or any part thereof is hereby repealed to the extent of such conflict. If any provision of this ordinance conflicts with any contractual provision between the City and the developer of the site, this ordinance shall prevail.

SECTION 6: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared severable.

SECTION 7: Following the adoption and acceptance of this ordinance by the Owners, and in addition to any other action for failure to complete development or otherwise comply with the Development Documents, the City Development Director may obtain a hearing before the City Commission and shall thereupon give at least five (5) days written notice of the time, date and location of the hearing, along with specific notice of the alleged breach. At the hearing before the City Commission the developer may appear and may contest the allegation of breach or explain the reason or reasons for the breach. Upon a finding of a material breach of the Development Documents and therefore, the Ordinance(s) adopting the same, the City Commission may impose or do any or all of the following:

a. Initiate the process to amend or repeal this or any other ordinance pertaining to the development.
b. Direct the City Development Director to initiate the process to rezone the PUD property or any portion of the PUD property.
c. Impose an administrative penalty of up to $1,000.00 for each violation, and up to $5,000.00 for each repeat violation that occurs, along with all reasonable costs, including attorney's fees incurred by the City.

Any breach of any provision or condition of this PUD ordinance by the developer shall be considered a zoning violation subject to any remedies provided herein, or as otherwise provided by law. In the event a violation found continues from day to day, each day the violation is found to continue shall be deemed a separate violation.

SECTION 8: This ordinance shall be effective upon the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owner.

SECTION 9: The complete execution and recording of this Ordinance by the City Clerk shall occur no later than 60 days from the date of this approval, failing which this ordinance shall be void.

SECTION 10: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owner, the City Clerk is directed to record a Certified Copy of the same in the Public Records of Martin County, Florida.

Passed on first reading the __ day of _____ 2022.

Commissioner _____ offered the foregoing Ordinance and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

Commissioner _____ offered the foregoing Ordinance and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MERRITT MATHESON, MAYOR				
TROY MCDONALD, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
EULA R. CLARKE, COMMISSIONER				
MIKE MEIER, COMMISSIONER				

ADOPTED on second and final reading this _____day of _____, 2022.

ATTEST:

_____ _____
MARY R. KINDEL MERRITT MATHESON
CITY CLERK MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL, ESQ.
CITY ATTORNEY

ACCEPTANCE AND AGREEMENT

BY SIGNING THIS ACCEPTANCE AND AGREEMENT, THE UNDERSIGNED HEREBY ACCEPTS AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN A RESIDENTIAL PLANNED UNIT DEVELOPMENT AND IN ALL EXHIBITS, ATTACHMENTS AND DEVELOPMENT DOCUMENTS, INTENDING TO BE BOUND THEREBY, AND THAT SUCH ACCEPTANCE AND AGREEMENT IS DONE FREELY, KNOWINGLY, AND WITHOUT ANY RESERVATION, AND FOR THE PURPOSES EXPRESSED WITHIN THE ABOVE ORDINANCE. IF IT IS LATER DISCOVERED THAT THE UNDERSIGNED, OR ITS SUCCESSORS OR ASSIGNS HAVE FAILED IN ANY MATERIAL WAY TO DEVELOP THIS RESIDENTIAL PLANNED UNIT DEVELOPMENT ACCORDING TO THIS ORDINANCE, ITS CONDITIONS, AND THE DEVELOPMENT PLANS AND DOCUMENTS, THE UNDERSIGNED UNDERSTANDS AND AGREES THAT THIS ORDINANCE MAY BE AMENDED OR REPEALED BY THE CITY COMMISSION, AND THAT OTHER ACTIONS MAY BE TAKEN AGAINST THE UNDERSIGNED BY THE CITY, INCLUDING BUT NOT LIMITED TO CODE ENFORCEMENT ACTIONS, PERMIT AND LICENSING REVOCATIONS, AND ALL APPLICABLE CIVIL AND CRIMINAL ACTIONS.

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

_____

Print Name: _____

_____

Print Name: _____

Ted Glasrud Associates FL, LLC

By: _____

Theodore G. Glasrud (President of Glasrud Management, Inc.)

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2022, by Theodore G. Glasrud, President of Glasrud Management, Inc.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before The above Ordinance, Acceptance and Agreement was acknowledged before me by means of ☒ physical presence or ☐ online notarization this _____ day of _____, 2022 Merritt Matheson, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation, who ☐ are personally known to me or ☐ have produced _____as identification.

(Notary Seal)

_____

Signature of Notary Public

Printed Name: _____

EXHIBIT A – LEGAL DESCRIPTION

PARCEL I:

TRACTS 65, 66 AND 67 LYING EAST OF SE COMMERCE AVENUE AND SOUTH OF SE INDIAN STREET AND WEST OF THE FLORIDA EAST COAST RAILWAY, SEWALL'S POINT LAND COMPANY SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA.

LESS AND EXCEPTING FROM TRACT 65 AND 66 LANDS CONVEYED TO HAROLD H. DUBNER, AS TRUSTEE IN OFFICIAL RECORDS BOOK 450, PAGE 1798 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF LOTS 65 AND 66, PORT SEWALL, AS RECORDED IN PLAT BOOK 3, PAGE 7, PALM BEACH (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS, BEING MORE PARTICULARLY DESCRIBED AS:

BEGIN AT THE NORTHEASTERLY CORNER OF LOT 65 (BEING THE INTERSECTION OF THE SOUTHWESTERLY RIGHT–OF–WAY LINE OF THE FLORIDA EAST COAST RAILWAY AND THE SOUTHEASTERLY RIGHT–OF–WAY LINE OF INDIAN AVENUE). THENCE SOUTH 66°46'28" WEST ALONG THE SOUTHEASTERLY RIGHT–OF–WAY LINE OF INDIAN AVENUE A DISTANCE OF 290 FEET; THENCE SOUTH 23°13'32" EAST A DISTANCE OF 190 FEET; THENCE NORTH 66°46'28" EAST A DISTANCE OF 352.85 FEET TO THE SOUTHWESTERLY RIGHT–OF–WAY LINE OF THE FLORIDA EAST COAST RAILWAY; THENCE NORTH 41°31'42" WEST ALONG SAID RIGHT–OF–WAY LINE A DISTANCE OF 200.12 FEET TO THE POINT OF BEGINNING.

PARCEL II:

The Easterly 100 feet of Lot F–78, Plat Book 1, Page 129, Sheet Two, Public Records of Palm Beach County, Florida, also described as the Easterly 100 feet of the Southerly 301 feet of Lot 65 and the Easterly 100 feet of the Northerly 123 feet of Lot 106, Port Sewall Subdivision, Plat Book 3, Page 7, Public Records of Palm Beach County, Florida, more particularly described as follows, to wit:

Begin at the intersection of the Westerly limit of the right of way of the Florida East Coast Railway, and the North line of said Lot F–78, said point of intersection being 499.26 feet distance, southerly, from the intersection of said right–of–way limit and the center of Indian Avenue; thence Southerly along said right of way limit 446.59 feet, more or less, to the South line of said Lot F–78; thence Westerly along said South line, 105.33 feet to a point; thence Northerly, parallel to and 100 feet distance from said right of way limit, 446.59 feet, more or less, to the North line of said Lot F–78; thence Easterly along the North line of said Lot F–78, 105.33 feet to the Place of Beginning.

LESS AND EXCEPTING THE FOLLOWING:

A parcel of land being a portion of lands described in Official Records Book 441, Page 2161, Martin County, Florida, Public Records.

Being more particularly described as follows:

Commence at the intersection of the Southwesterly right–of–way line of the Florida East Coast Railroad and the Southeasterly right–of–way line of S.E. Indian Street; thence South 41°59'54" East along the Southwesterly right–of–way line of the Florida East Coast Railroad, a distance of 762.83 feet to the Point of Beginning; thence continue South 41°59'54" East a distance of 130.35 feet; thence, departing said right–of–way, South 66°19'23" West a distance of 105.33 feet; thence North 41°59'54" West a distance of 130.35 feet; thence North 66°19'23" East a distance of 105.33 feet to the Point of Beginning.

CONTAINING 9.503 ACRES, MORE OR LESS.

EXHIBIT B – LOCATION MAP

EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents

The Silverthorn RPUD project and use thereof shall comply with the following drawings:

a. **Master Site Plan, Sheet SP-1, prepared by Lucido & Associates, dated 04.01.21, & resubmitted on 08.02.21, 10.22.21 & 3.11.22.**
b. **Boundary Survey with Tree Locations, dated 04.01.21, Sheets 1 thru 6, prepared by Caulfield & Wheeler, Inc., dated 11/02/2020, and revised with Legal description on 01.26.21.**
c. **The Landscape Plans, Tree Plan, Tree Mitigation Plan/Plant Schedule, Landscape Details, and Landscape Specifications, Sheets LA-1, LA-2, LA-3, LA-4, LA-5, LA-6, LA-7, LA-8 & LA-9 prepared by Lucido & Associates, dated 04.01.21, & resubmitted on 08.02.21, 10.22.21, & 03.16.22**
d. **Architectural Floor Plans with Elevation and Rendering, Sheets A1.1L, A1.1R, A1.4Le, A1.4Re & A3.1 by Fieldstone Architecture & Engineering for Meritage Homes, with control date of 12.2.19.**
e. **Master Paving, Grading & Drainage Plan, Sheets 1,2 & 3, prepared by The Milcor Group, Inc., dated March, 2022**

1. Any modifications to the Master RPUD Site Plan less than 10% of the approved building footprint, building setbacks, gross square footage, building location, parking size, location and number of parking, drainage areas, and location of landscaping may be approved by the City's Development Director, provided however, the Development Director may refer the matter to the City Commission for approval via a public hearing.

2. Development of the Subject Property as a RPUD shall include an impervious area of not more than 238,384 sf or 5.47 acres (69.8% of the site) within the RPUD. The maximum building height within the RPUD shall be 2 stories or 30 feet. Height shall be measured from the lowest permissible finished first floor elevation to the surface of a flat roof or to

the eave of a pitched roof. The peak of a pitched roof may not exceed 15 feet above the maximum building height.

3. The developer shall post a sign at the mailboxes located along perpendicular stalls reserving spaces specifically for mail delivery and pick-up only.

Landscaping

4. The common areas including the projects cabana and pool area shall be provided with landscaping with an irrigation system of enough capacity to maintain the landscaping in a healthy growing condition.

5. The City's landscape inspector shall have the opportunity to inspect all trees and/or landscape material with the landscape architect prior to installation. The developer shall bear the pass-thru fee for landscape consulting fees not to exceed $1,500.00.

6. A Landscape maintenance plan, executed in accordance with the Land Development Regulations, shall be submitted to the Development Department and approved prior to the issuance of a certificate of occupancy.

Required Pervious and Open Space

7. Not less than 4.03 acres of the RPUD or shall be open space that may include landscaped buffer areas as depicted on the Master Site Plan by Lucido and Associates as described in Exhibit C.

Tree Mitigation

8. The project shall comply with project's Tree Mitigation/Plant Schedule plan, Sht. LA-7 by Lucido and Associates.

Prior to Issuance of Site Permits

9. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of a site permit.

10. Civil Plans shall be reviewed and approved by all applicable City departments prior to the issuance of a site permit.

11. All regulatory agency permits, including but not limited to the South Florida Water Management District and Army Corp of Engineers, shall be obtained by the applicant and copies provided to the City prior to the commencement of any development activities.

12. All development activities shall comply with the City's Concurrency Management System prior to the issuance of building permits.

Development and Construction

13. The Developer shall install landscaping and gates at the development's entry as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit. The entry gates shall be made operational with gate code coordination for accessibility by the City's Public Works Department for trash pickup and meter reading prior to issuance of the third certificate of occupancy.

14. The proposed cabana and pool landscaping shall be completed before the certificate of occupancy has been issued for the 10th residential unit or within 12 months from the start of any development activity.

15. The developer shall eradicate all invasive vegetation for the entire site to be completed and inspected prior the first building permit being issued.

16. The property owner shall provide easements for licensed cable services.

17. Water and Sewer Services shall be provided by Martin County Utilities. Additionally, the development shall use reclaimed water (Purple Pipe) for watering common areas and make available to individual lots if made available by Martin County.

18. The Developer shall provide 3-foot & 6-foot tall Decorative Architectural fencing on a 3-foot tall precast wall at the perimeter of the property at certain locations per the site plan by Lucido & Associates. Also, at certain locations, a 6-foot tall precast wall will be provided at the perimeter of the property per the site plan by Lucido & Associates.

19. In the event of any conflict in the provisions of Exhibit 'C' Development Conditions and attached exhibits, Exhibit 'C' shall prevail.

20. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

21. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

22. All utility improvements constructed by the developer within Martin County's right-of-way, shall be constructed in a manner and form acceptable to the County's Engineering department.

23. The developer shall provide both transponders and individual gate access codes for Public Works sanitation pickup.

24. The project's Native Planting schemes at the lake will be designed using Low Impact Development "(LID) Techniques as described in the University of Florida IFSA Extension publication LID Practices: Integration Wetlands and Enhancing Storm water Basins".

25. Temporary or freestanding storage units are prohibited on the property once construction is complete.

26. The installation of a Knox key switch to operate the gate is required for City of Stuart fire rescue and Martin County Fire Rescue and the gate codes are to be posted with the City's Police Department.

27. A lighting plan shall be included on the Landscape plan for the community's common areas including any street lighting at permitting. All lights at the common areas shall be limited to 15 feet in height and shielded from neighboring property.

28. Site work including but not limited to land preparation, lake excavation, clearing and grading, drainage and water, sewer and irrigation lines, and private road shall be reviewed and approved by the City's Public Works department and the City's engineering consultant prior to permitting. Specifically,

    a. Private Road (entry and within the development)

    b. Proposed Lake, Rain Garden & Bioswales

    c. Cabana and Pool

29. The Developer shall contribute a payment of $275,000 prior to final certificate of occupancy to the Martin County Board of County Commissioners in respect of the following works to SE Indian Street and SE Commerce Avenue, to be completed in coordination with, and final inspection by, Martin County's Engineering department to:

    a. Eliminate the northbound left-turn lane on to Indian Street and converting the northbound approach on Commerce Avenue to right-out only.

    b. Include a landscaped median on Commerce Avenue and the extension of the existing right turn lane. To be maintained by the Silverthorne Homeowners Association.

    c. Extend the median on Indian Street which Meritage will landscape. To be maintained by the Silverthorne Homeowners Association.

    d. Extend the westbound left-turn lane on Indian Street and adding a northbound left-turn lane at Fischer Street.

    e. Installation of STOP signs on Commerce Avenue when the northbound left-turn lane on at Fischer Street is installed.

<u>Signage</u>

30. All signs throughout the PUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit

Development. The development's monument sign shall adhere to the City of Stuart Land Development Code.

Platting- HOA Requirements & Future Amendments

31. Plat approval per Section 11.01.06.1 shall occur prior to any future development permit for any development activity, no permit for development including site work and infrastructure, shall be issued by the City unless and until a plat has been approved by the City Commission and recorded in the public records.

32. The PUD may be conveyed to 77 separate homeowners without further amendment to this Ordinance. Prior to application for any development, the applicant/developer shall form a HOA (Homeowners Association) or other similar entity acceptable to the City Attorney, which shall be singularly responsible for the perpetual maintenance of the common site features and include restrictions regarding boats, boat trailers, sheds, etc.

33. City of Stuart waste receptacles, including recycle shall be stored in garages only. The developments HOA shall be responsible for enforcing this waste receptable policy. The receptacles at the amenity areas shall be stored inside the clubhouse or outside in an approved enclosure. The developments HOA shall be responsible for enforcing this waste receptable policy. The property-owners association shall pay for initial bins (one trash bin and one recycle bin) for each unit including the cabana for a total of 78 trash bins and 78 recycle bins at the time of permitting. The City will provide a single bill to the HOA for trash pick-up.

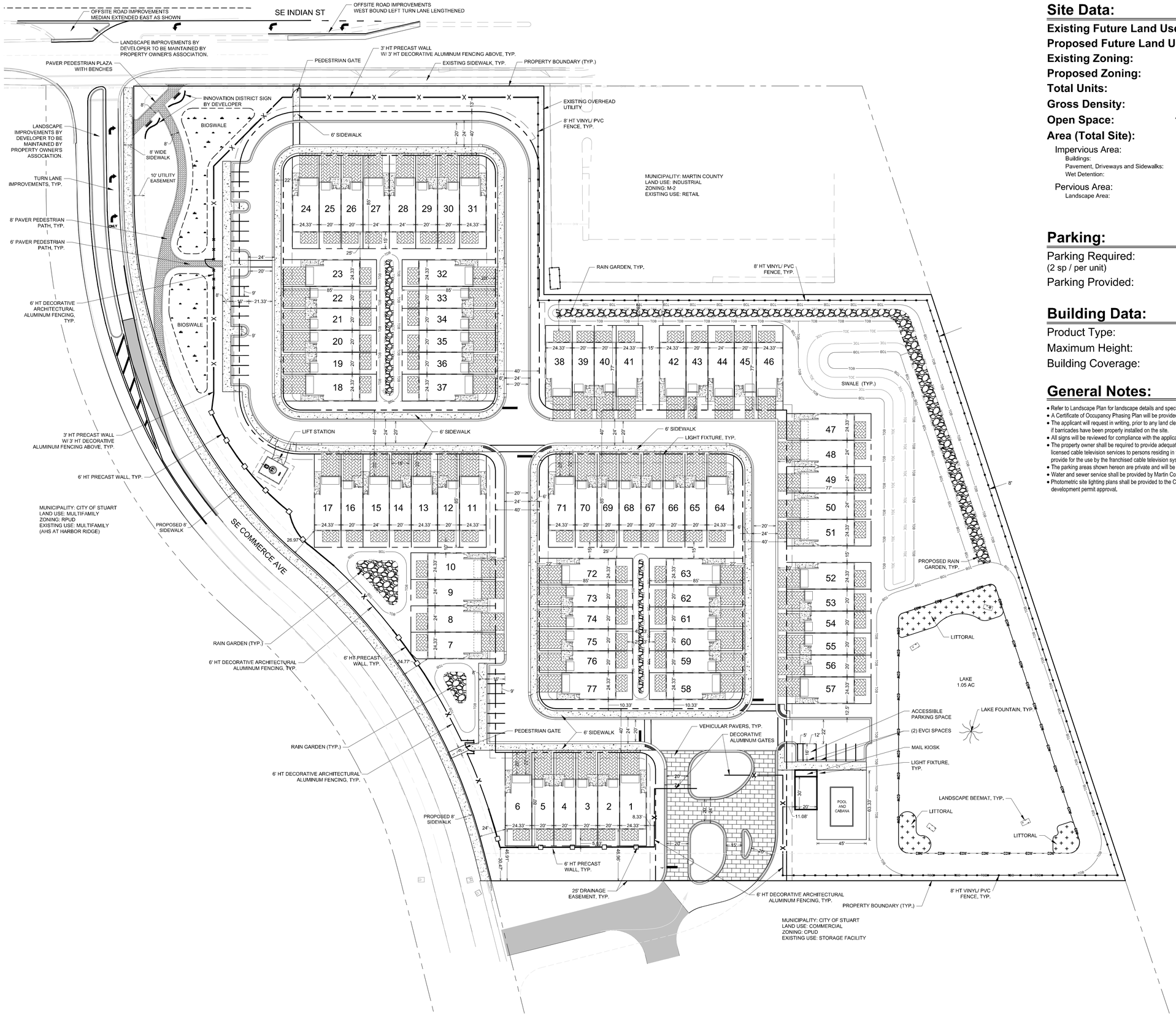
34. There shall be no on street parking on trash/recycle collection days. The developer and home-owners association shall request and consent to law enforcement entry to property and enforcement of state and city laws to include traffic enforcement. Additionally, the City of Stuart Police Department shall have authority to enforce city laws and all conditions of development of Ordinance 2472-2022.

35. No yard waste shall be placed in the street.

36. All new fences shall be maintained by the Silverthorn Home-Owners Association.

37. Any applications to amend this Ordinance shall be limited to the developer or the Home-Owners Association.

38. The Home-Owner's Association shall regulate any permits for guest parking.



Site Data:

Existing Future Land Use:		**Commercial**
Proposed Future Land Use:		**Multifamily**
Existing Zoning:		**CPUD**
Proposed Zoning:		**RPUD**
Total Units:		**77 Units**
Gross Density:		**8.1 DU/ac.**
Open Space:	**175,547 sf**	**4.03 ac.**
Area (Total Site):	**413,931 sf**	**9.50 ac.**
Impervious Area:	238,384 sf	5.47 ac. (69.8%)
Buildings:	79,715 sf	1.83 ac.
Pavement, Driveways and Sidewalks:	30,902 sf	2.95 ac.
Wet Detention:	30,056 sf	0.69 ac.
Pervious Area:	175,547 sf	4.03 ac. (30.2%)
Landscape Area:	175,547 sf	4.03 ac.

Parking:

Parking Required: (2 sp / per unit)	154 spaces
Parking Provided:	186 spaces

Building Data:

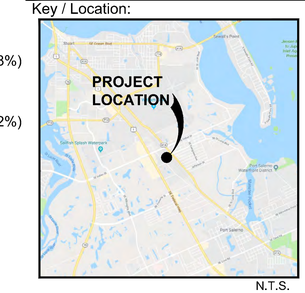
Product Type:	Townhomes
Maximum Height:	2 Stories - 30'
Building Coverage:	19.3%

General Notes:

- Refer to Landscape Plan for landscape details and specifications.
- A Certificate of Occupancy Phasing Plan will be provided with the final site plan application.
- The applicant will request in writing, prior to any land clearing, that a field inspection be performed to determine if barricades have been properly installed on the site.
- All signs will be reviewed for compliance with the applicable regulations at the time the sign permit is issued.
- The property owner shall be required to provide adequate easements to ensure non-exclusive access to duly licensed cable television services to persons residing in this development. The easement shall specifically provide for the use by the franchised cable television system.
- The parking areas shown hereon are private and will be owned and maintained by the homeowners association.
- Water and sewer service shall be provided by Martin County Utilities.
- Photometric site lighting plans shall be provided to the City of Stuart for review and approval prior to site development permit approval.

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:



N.T.S.

Project Team:

PROPERTY OWNER:	TED GLASSRUD ASSOCIATES FL LLC 1700 W HIGHWAY 36 #650 ROSEVILLE, MN 55113
APPLICANT:	MERITAGE HOMES 5337 MILLENIA LAKES BLVD, SUITE 410 ORLANDO, FL 32839
LAND PLANNER/ LANDSCAPE ARCHITECT:	LUCIDO & ASSOCIATES 701 EAST OCEAN BOULEVARD STUART, FL 34994
ENGINEER:	THE MILCOR GROUP, INC. 10975 SE FEDERAL HIGHWAY HOBE SOUND, FL 33455
SURVEYOR:	CAULFIELD & WHEELER, INC. 7900 GLADES ROAD, SUITE 100 BOCA RATON, FLORIDA 33434

SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

SITE PLAN

Date	By	Description
3.11.2022	S.L.S.	Resubmittal

NORTH

SCALE: 1" = 40'

0 20' 40' 80'

REG. # 1018
Thomas P. Lucido

Designer	SLS	Sheet
Manager	DF	**SP-1**
Project Number	20-605	
Municipal Number	---	
Computer File	Meritage - Silverthorne - Site Plan.dwg	

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Drawing Name: J:\Projects Active\20-605 Meritage Homes - Glasrud Parcel 2 - Silverthorne\Site Plan\City Commission\ Mar 17, 2022 - 10:43am Meritage - Silverthorne - Site Plan.dwg

DESCRIPTION:

PARCEL I:

TRACTS 65, 66 AND 67 LYING EAST OF SE COMMERCE AVENUE AND SOUTH OF SE INDIAN STREET AND WEST OF THE FLORIDA EAST COAST RAILWAY, SEWALL'S POINT LAND COMPANY SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA.

LESS AND EXCEPTING FROM TRACT 65 AND 66 LANDS CONVEYED TO HAROLD H. DUBNER, AS TRUSTEE IN OFFICIAL RECORDS BOOK 450, PAGE 1798 MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PORTION OF LOTS 65 AND 66, PORT SEWALL, AS RECORDED IN PLAT BOOK 3, PAGE 7, PALM BEACH (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS, BEING MORE PARTICULARLY DESCRIBED AS:

BEGIN AT THE NORTHEASTERLY CORNER OF LOT 65 (BEING THE INTERSECTION OF THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF THE FLORIDA EAST COAST RAILWAY AND THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF INDIAN AVENUE). THENCE SOUTH 66°46'28" WEST ALONG THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF INDIAN AVENUE A DISTANCE OF 290 FEET; THENCE SOUTH 23°13'32" EAST A DISTANCE OF 190 FEET; THENCE NORTH 66°46'28" EAST A DISTANCE OF 352.85 FEET TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF THE FLORIDA EAST COAST RAILWAY; THENCE NORTH 41°31'42" WEST ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 200.12 FEET TO THE POINT OF BEGINNING.

PARCEL II:

The Easterly 100 feet of Lot F-78, Plat Book 1, Page 129, Sheet Two, Public Records of Palm Beach County, Florida, also described as the Easterly 100 feet of the Southerly 301 feet of Lot 65 and the Easterly 100 feet of the Northerly 123 feet of Lot 106, Port Sewall Subdivision, Plat Book 3, Page 7, Public Records of Palm Beach County, Florida, more particularly described as follows, to wit:
Begin at the intersection of the Westerly limit of the right of way of the Florida East Coast Railway, and the North line of said Lot F-78, said point of intersection being 499.26 feet distance, southerly, from the intersection of said right-of-way limit and the center of Indian Avenue; thence Southerly along said right of way limit 446.59 feet, more or less, to the South line of said Lot F-78; thence Westerly along said South line, 105.33 feet to a point; thence Northerly, parallel to and 100 feet distance from said right of way limit, 446.59 feet, more or less, to the North line of said Lot F-78; thence Easterly along the North line of said Lot F-78, 105.33 feet to the Place of Beginning.

LESS AND EXCEPTING THE FOLLOWING:

A parcel of land being a portion of lands described in Official Records Book 441, Page 2161, Martin County, Florida, Public Records.

Being more particularly described as follows:

Commence at the intersection of the Southwesterly right-of-way line of the Florida East Coast Railroad and the Southeasterly right-of-way line of S.E. Indian Street; thence South 41°59'54" East along the Southwesterly right-of-way line of the Florida East Coast Railroad, a distance of 762.83 feet to the Point of Beginning; thence continue South 41°59'54" East a distance of 130.35 feet; thence, departing said right-of-way, South 66°19'23" West a distance of 105.33 feet; thence North 41°59'54" West a distance of 130.35 feet; thence North 66°19'23" East a distance of 105.33 feet to the Point of Beginning.

CONTAINING 9.503 ACRES, MORE OR LESS.

THE FOLLOWING IS A PARTIAL LIST OF NUMBERED EXCEPTIONS WHICH CORRESPOND TO THE NUMBERED EXCEPTIONS CONTAINED IN SCHEDULE B OF FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE HAVING A FILE NUMBER: 2037-5017406, WITH AN COMMITMENT DATE OF OCTOBER 09, 2020 @ 8:00 A.M.

SCHEDULE "BII" EXCEPTIONS

9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of Sewall's Point Land Company Subdivision, as recorded in Plat Book 3, Page(s) 7, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c).
(AFFECTS NOTHING TO PLOT)

10. Declaration of Protective Covenants recorded in Book 450, Page 945; Amendment recorded in Book 624, Page 1191; Amendment recorded February 25, 1986, in Book 665, Page 1397; Amendment recorded January 24, 1995, in Book 1106, Page 1383; Assignment recorded May 16, 2017, in Book 2925, Page 2705.
(AFFECTS NOTHING TO PLOT)

11. Easement in favor of Florida Power & Light Company recorded February 29, 1980, in Book 490, Page 1211.
(AFFECTS PLOTTED)

12. Restrictive Covenant Running With the Land recorded August 4, 1982, in Book 550, Page 2332.
(AFFECTS NOTHING TO PLOT)

13. Easement Maintenance Agreement in favor of Martin County recorded in Book 631, Page 1635.
(AFFECTS NOTHING TO PLOT)

14. Planned Unit Development Agreement recorded December 12, 1997, in Book 1277, Page 1707; Amendment recorded December 12, 1997, in Book 1277, Page 1753; Amendment recorded July 11, 2003, in Book 1787, Page 2271; Amendment recorded October 4, 2006, in Book 2185, Page 2040; Amendment recorded September 7, 2007, in Book 2277, Page 156.
(AFFECTS NOTHING TO PLOT)

15. Easements in favor of Level 3 Communications LLC etc. recorded January 17, 2013, in Book 2625, Page 199; recorded June 12, 2013 in Book 2657, Page 13; Amendment recorded October 16, 2013, in Book 2682, Page 1312; Amendment recorded November 18, 2013, in Book 2688, Page 512.
(AFFECTS NOTHING TO PLOT)

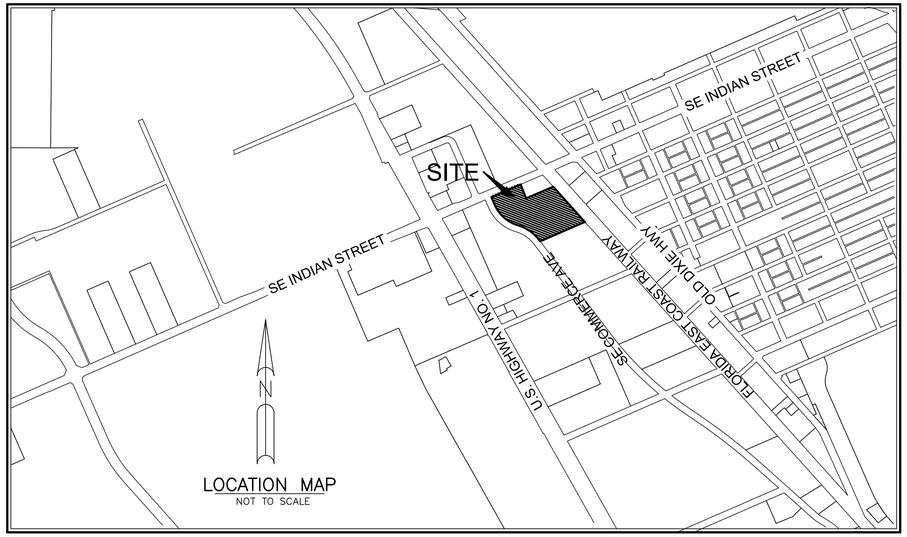
16. Ordinance No. 2411-2019 recorded September 26, 2019, in Book 3085, Page 416.
(DOES NOT AFFECT)

17. Drainage Easement in favor of Plantation Storage of Stuart, LLC recorded May 18, 2020, in Book 3129, Page 2403.
(AFFECTS PLOTTED)

18. Temporary Easement Agreement in favor of Plantation Storage of Stuart, LLC recorded May 18, 2020, in Book 3129, Page 2422.
(AFFECTS PLOTTED)

19. Terms and conditions of any existing unrecorded lease(s), and all rights of lessee(s) and any parties claiming through the lessee(s) under the lease(s).
(AFFECTS NOTHING TO PLOT)

Note: All of the recording information contained herein refers to the Public Records of MARTIN County, Florida, unless otherwise indicated. Any reference herein to a Book and Page or Instrument Number is a reference to the Official Record Books of said county, unless indicated to the contrary.



LOCATION MAP
NOT TO SCALE

SURVEY NOTES:

1. LAST DATE OF FIELD DATA ACQUISITION FOR THIS SURVEY IS OCTOBER 30, 2020.
2. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. ALL MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD FEET.
4. 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.
5. LANDS SHOWN HEREON WERE ABSTRACTED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT FILE NUMBER: 2037-5017406, EFFECTIVE DATE OCTOBER 09, 2020 AT 8:00 A.M. AND ALL PLOTTABLE EXCEPTIONS ARE SHOWN HEREON.
6. THE DESCRIPTION OF THE LAND CONTAINED ON THIS SURVEY HAS BEEN PROVIDE BY THE CLIENT.
7. BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH, AND ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT. THE BEARING BASE FOR THIS SURVEY IS THE NORTH LINE OF LOT 67, SEWALL'S POINT LAND COMPANY SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA. SAID LINE BEARS S 66°20'02" W AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
8. THE VERTICAL DATUM REFERENCES THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 AND IS IN THE U.S. SURVEY FOOT UNIT OF MEASUREMENT.
9. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS ESTABLISHED BY MARTIN COUNTY'S CONTROL POINT "IND-C" HAVING A PUBLISHED ELEVATION OF 17.87' (NAVD88).
10. TREES DEPICTED ON THIS SURVEY ARE NATIVE SPECIES 4"DIAMETER OR LARGER AT BREAST HEIGHT AND TAGGED WITH CORRESPONDING TAG NUMBER AS SHOWN IN THE TREE TABLE. TREE WERE LOCATED BY SURVEY FIELD CREW NOT TRAINED IN SPECIES DESIGNATION, DESIGNATION SHOULD BE VERIFIED BY A TRAINED BOTANIST.
11. SUBJECT PROPERTY FALLS WITHIN ZONE "X", ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM); COMMUNITY PANEL NO. 12085C0151G UNINCORPORATED MARTIN COUNTY, COMMUNITY NO. 120161; DATED MARCH 16, 2015.
12. THERE ARE NOT GAPS, GORES OR HIATUSES, THE TRACTS ARE CONTIGUOUS ALONG THEIR BOUNDARIES.
13. TREES DEPICTED ON THIS SURVEY ARE NATIVE SPECIES 4"DIAMETER AT BREAST HEIGHT AND TAGGED WITH CORRESPONDING TAG NUMBER AS SHOWN IN THE TREE TABLE. TREE WERE LOCATED BY SURVEY FIELD CREW NOT TRAINED IN SPECIES DESIGNATION, DESIGNATION SHOULD BE VERIFIED BY A TRAINED BOTANIST.

SURVEYOR'S CERTIFICATE:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 3, 4, 5, 8, 16 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON OCTOBER 30, 2020.

_____
RONNIE L. FURNISS
PROFESSIONAL SURVEYOR MAPPER #6272
STATE OF FLORIDA

CAULFIELD AND WHEELER, INC
SURVEYORS – ENGINEERS – PLANNERS
7900 GLADES ROAD, SUITE 100
CERTIFICATION OF AUTHORIZATION NO. LB 3591

CERTIFIED TO:

MERITAGE HOMES OF FLORIDA, INC.
DEAN, MEAD, EGERTON, BLOODWORTH, CAPOUANO & BOZARTH, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY

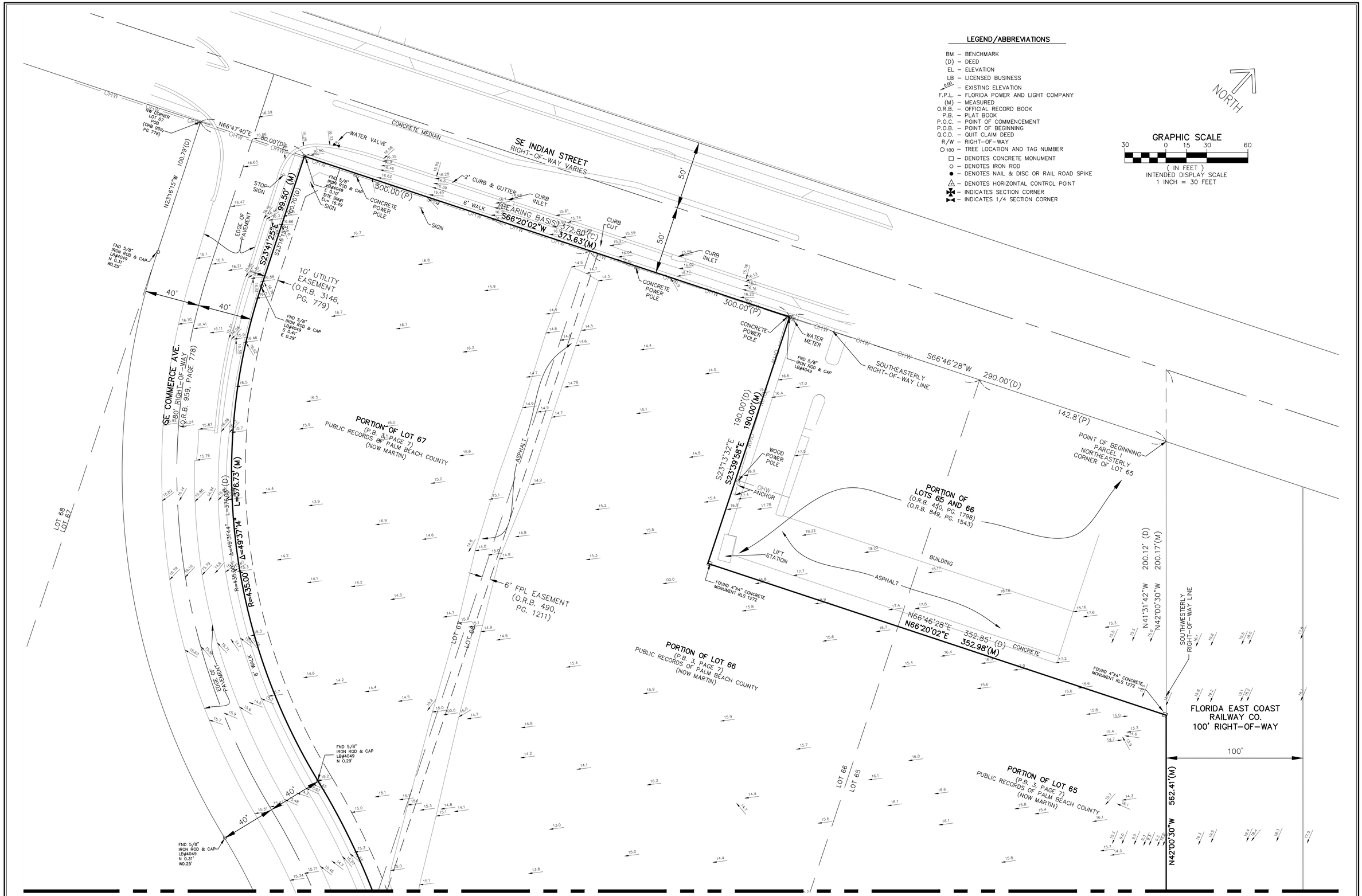
REVISIONS DUE TO REVISED LEGAL PROVIDED	01/26/21	RLF
REVISIONS	DATE	BY
FILE NAME 9111-ALTA-BNDY.DWG		

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERS
LANDSCAPE ARCHITECTS SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/NSPS LAND TITLE BOUNDARY SURVEY
PORTION OF TRACTS 65, 66 AND 67
PORT SEWALL'S POINT LAND CO.
HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE	11/02/2020
DRAWN BY	RLF
F.B./ PG.	ELECT
SCALE	AS SHOWN

JOB # 9111
SHT.NO. 1
OF 6 SHEETS



SEE SHEET 3

REVISIONS	DATE	BY

FILE NAME 9111-ALTA-BNDY.DWG

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/NSPS LAND TITLE BOUNDARY SURVEY
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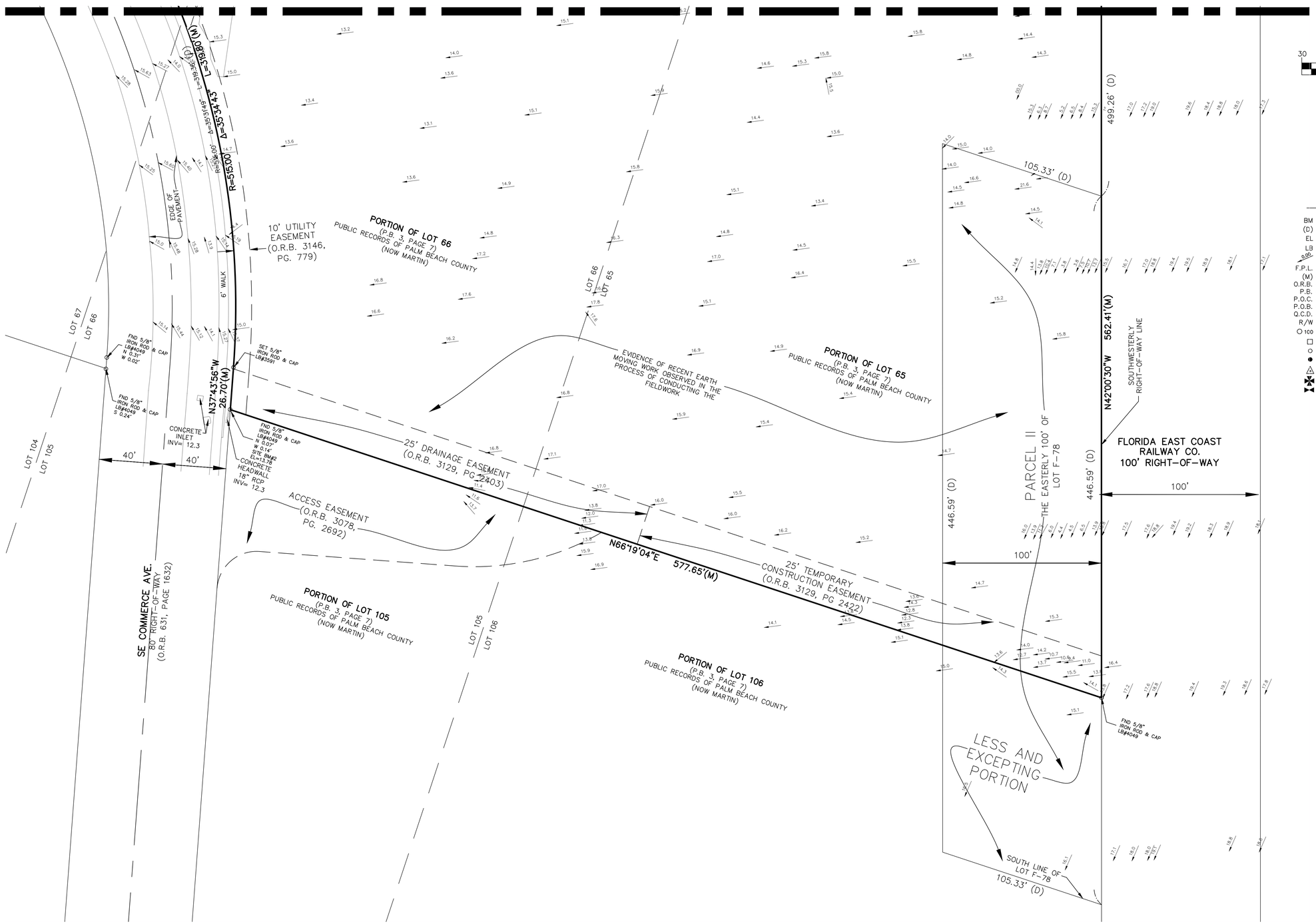
HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE	11/02/2020
DRAWN BY	RLF
F.B./ PG.	ELECT
SCALE	AS SHOWN

JOB # 9111
SHT.NO. 2
OF 6 SHEETS



LEGEND/ABBREVIATIONS

- BM – BENCHMARK
- (D) – DEED
- EL – ELEVATION
- LB – LICENSED BUSINESS
- 0.00 – EXISTING ELEVATION
- F.P.L. – FLORIDA POWER AND LIGHT COMPANY
- (M) – MEASURED
- O.R.B. – OFFICIAL RECORD BOOK
- P.B. – PLAT BOOK
- P.O.C. – POINT OF COMMENCEMENT
- P.O.B. – POINT OF BEGINNING
- Q.C.D. – QUIT CLAIM DEED
- R/W – RIGHT-OF-WAY
- 100 – TREE LOCATION AND TAG NUMBER
- □ – DENOTES CONCRETE MONUMENT
- ○ – DENOTES IRON ROD
- ● – DENOTES NAIL & DISC OR RAIL ROAD SPIKE
- △ – DENOTES HORIZONTAL CONTROL POINT
- ✠ – INDICATES SECTION CORNER
- ✠ – INDICATES 1/4 SECTION CORNER

REVISIONS	DATE	BY

FILE NAME 9111-ALTA-BNDY.DWG

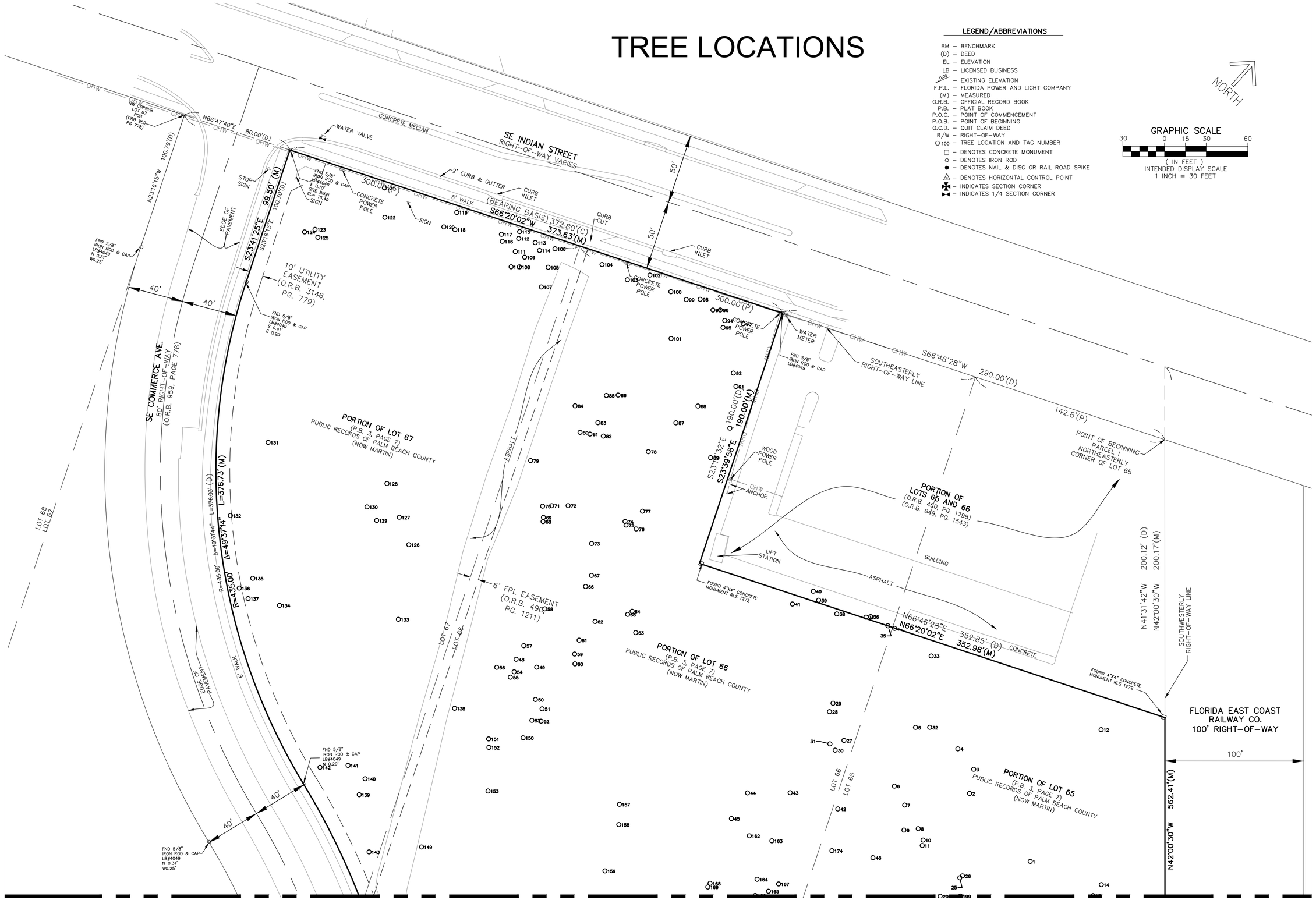
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/NSPS LAND TITLE BOUNDARY SURVEY
PORTION OF TRACTS 65, 66 AND 67
PORT SEWALL'S POINT LAND CO.
HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE	11/02/2020
DRAWN BY	RLF
F.B./ PG.	ELECT
SCALE	AS SHOWN

JOB # 9111
SHT.NO. 3
OF 6 SHEETS

TREE LOCATIONS



SEE SHEET 5

REVISIONS	DATE	BY

FILE NAME 9111-ALTA-BNDY.DWG

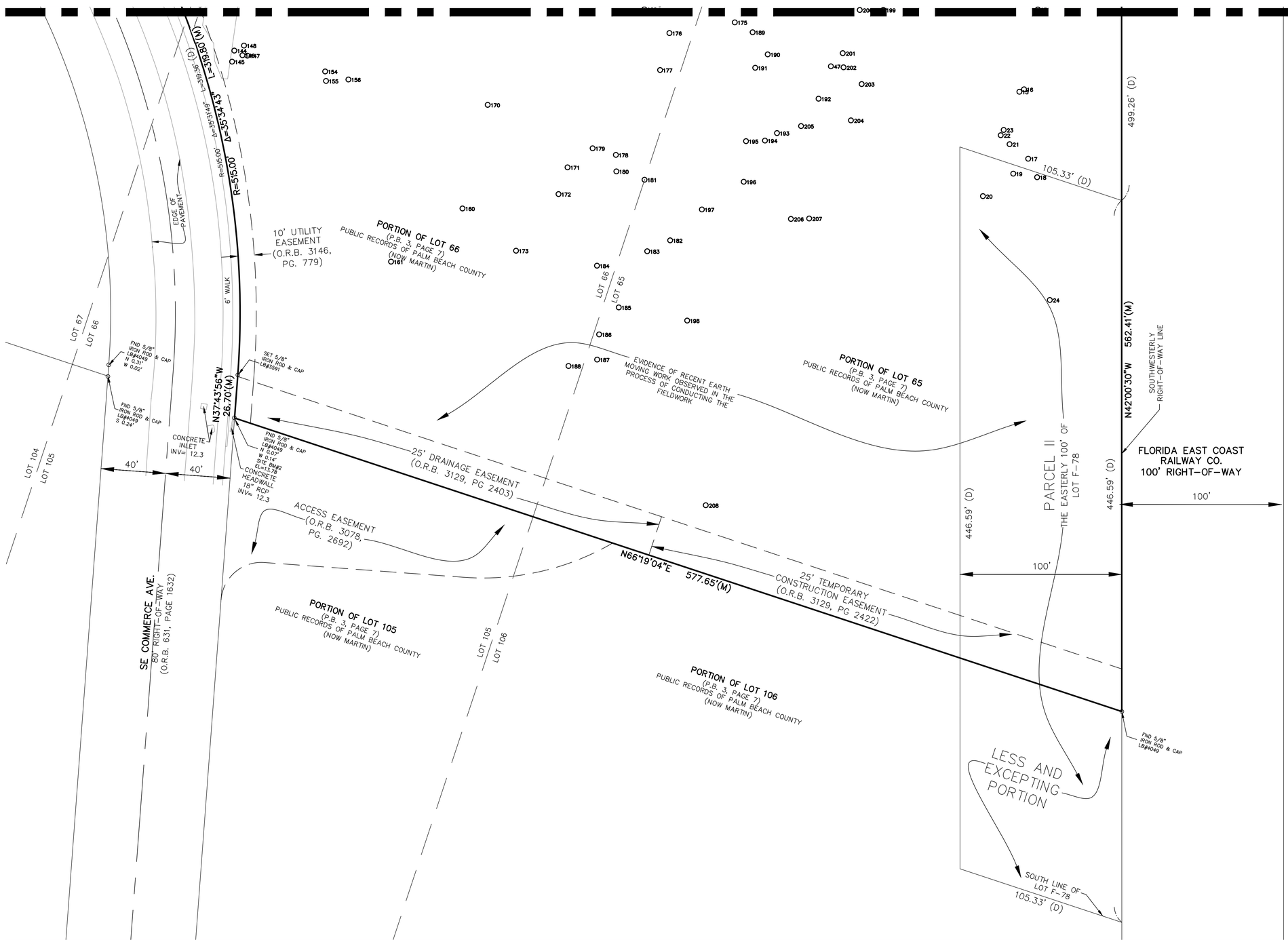
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERS
LANDSCAPE ARCHITECTS SURVEYORS
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/NSPS LAND TITLE BOUNDARY SURVEY
PORTION OF TRACTS 65, 66 AND 67
PORT SEWALL'S POINT LAND CO.
HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE 11/02/2020
DRAWN BY RLF
F.B./ PG. ELECT
SCALE AS SHOWN

JOB # 9111
SHT.NO. 4
OF 6 SHEETS

TREE LOCATIONS
SEE SHEET 4



REVISIONS	DATE	BY

FILE NAME 9111-ALTA-BNDY.DWG

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
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HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE	11/02/2020
DRAWN BY	RLF
F.B./ PG.	ELECT
SCALE	AS SHOWN

JOB # 9111
SHT.NO. 5
OF 6 SHEETS

TREE LIST

TREE TABLE		
POINT ID	TREE DIAMETER	TREE TYPE
1	4	OAK
2	22	SABAL PALM
3	10	PINE
4	14	PINE
5	18	OAK
6	10	OAK
7	6	OAK
8	14	SABAL PALM
9	10	OAK
10	14	OAK
11	9	OAK
12	18	PINE
13	4	OAK
14	6	OAK
15	8	PINE
16	4	OAK
17	10	PINE
18	18	OAK
19	18	SABAL PALM
20	10	PINE
21	5	OAK
22	7	OAK
23	12	OAK
24	13	SABAL PALM
25	5	OAK
26	6	QUEEN PALM
27	16	PINE
28	19	PINE
29	15	PINE
30	11	SABAL PALM
31	20	PINE
32	5	OAK
33	10	OAK
34	13	OAK
35	13	OAK
36	14	SABAL PALM
37	14	SABAL PALM
38	9	OAK
39	18	SABAL PALM
40	18	SABAL PALM
41	16	SABAL PALM
42	7	OAK
43	19	SABAL PALM
44	17	SABAL PALM
45	16	SABAL PALM
46	20	PINE
47	9	OAK
48	13	PINE
49	14	SABAL
50	16	PINE
51	16	PINE
52	14	PINE
53	14	SABAL
54	12	PINE
55	12	PINE
56	8	OAK
57	15	PINE
58	21	PINE
59	13	PINE
60	13	PINE

TREE TABLE		
POINT ID	TREE DIAMETER	TREE TYPE
61	13	SABAL
62	6	OAK
63	9	OAK
64	10	OAK
65	5	OAK
66	9	PINE
67	9	PINE
68	11	PINE
69	8	PINE
70	8	OAK
71	9	PINE
72	12	PINE
73	9	OAK
74	10	PINE
75	14	SABAL
76	12	PINE
77	13	PINE
78	15	SABAL
79	10	PINE
80	7	OAK
81	12	PINE
82	8	PINE
83	15	SABAL
84	4	BLACK OLIVE
85	4	OAK
86	14	SABAL
87	13	OAK
88	8	PINE
89	14	SABAL
90	18	SABAL
91	14	SABAL
92	17	SABAL
93	7	BLAK OLIVE
94	18	PINE
95	6	OAK
96	6	OAK
97	22	SABAL
98	7	BLACK OLIVE
99	7	OAK
100	5	OAK
101	13	OAK
102	13	SABAL
103	18	SABAL
104	17	SABAL
105	12	PINE
106	16	SABAL
107	8	PINE
108	10	PINE
109	10	PINE
110	8	PINE
111	8	PINE
112	16	SABAL
113	13	SABAL
114	13	SABAL
115	16	SABAL
116	13	PINE
117	18	SABAL
118	10	PINE
119	17	SABAL
120	11	PINE

TREE TABLE		
POINT ID	TREE DIAMETER	TREE TYPE
121	20	SABAL
122	16	PINE
123	17	SABAL
124	13	SABAL
125	8	PINE
126	14	SABAL
127	15	SABAL
128	22	SABAL
129	14	SABAL
130	12	SABAL
131	18	SABAL
132	14	PINE
133	8	PINE
134	14	SABAL
135	8	PINE
136	9	PINE
137	8	PINE
138	8	PINE
139	9	PINE
140	8	PINE
141	8	PINE
142	10	PINE
143	15	SABAL
144	14	SABAL
145	15	SABAL
146	14	SABAL
147	13	SABAL
148	8	PINE
149	16	SABAL
150	8	PINE
151	12	PINE
152	10	PINE
153	12	SABAL
154	12	SABAL
155	16	SABAL
156	14	SABAL
157	10	OAK
158	7	OAK
159	14	SABAL
160	12	SABAL
161	14	SABAL
162	14	SABAL
163	13	PINE
164	14	SABAL
165	14	SABAL
166	14	SABAL
167	15	SABAL
168	4	OAK
169	14	PINE
170	8	PINE
171	13	PINE
172	12	SABAL
173	14	SABAL
174	13	SABAL
175	14	SABAL
176	14	SABAL
177	14	SABAL
178	12	PINE
179	12	PINE
180	12	SABAL

TREE TABLE		
POINT ID	TREE DIAMETER	TREE TYPE
181	12	SABAL
182	15	SABAL
183	12	SABAL
184	5	OAK
185	7	FOXTAIL PALM
186	14	SABAL
187	5	OAK
188	15	SABAL
189	11	OAK
190	7	OAK
191	11	PINE
192	12	OAK
193	12	PINE
194	13	SABAL
195	16	SABAL
196	10	PINE
197	8	PINE
198	13	SABAL
199	7	OAK
200	12	OAK
201	13	SABAL
202	7	OAK
203	12	SABAL
204	12	SABAL
205	12	SABAL
206	14	SABAL
207	8	PINE
208	16	SABAL

REVISIONS	DATE	BY
FILE NAME 9111-ALTA-BNDY.DWG		

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/NSPS LAND TITLE BOUNDARY SURVEY
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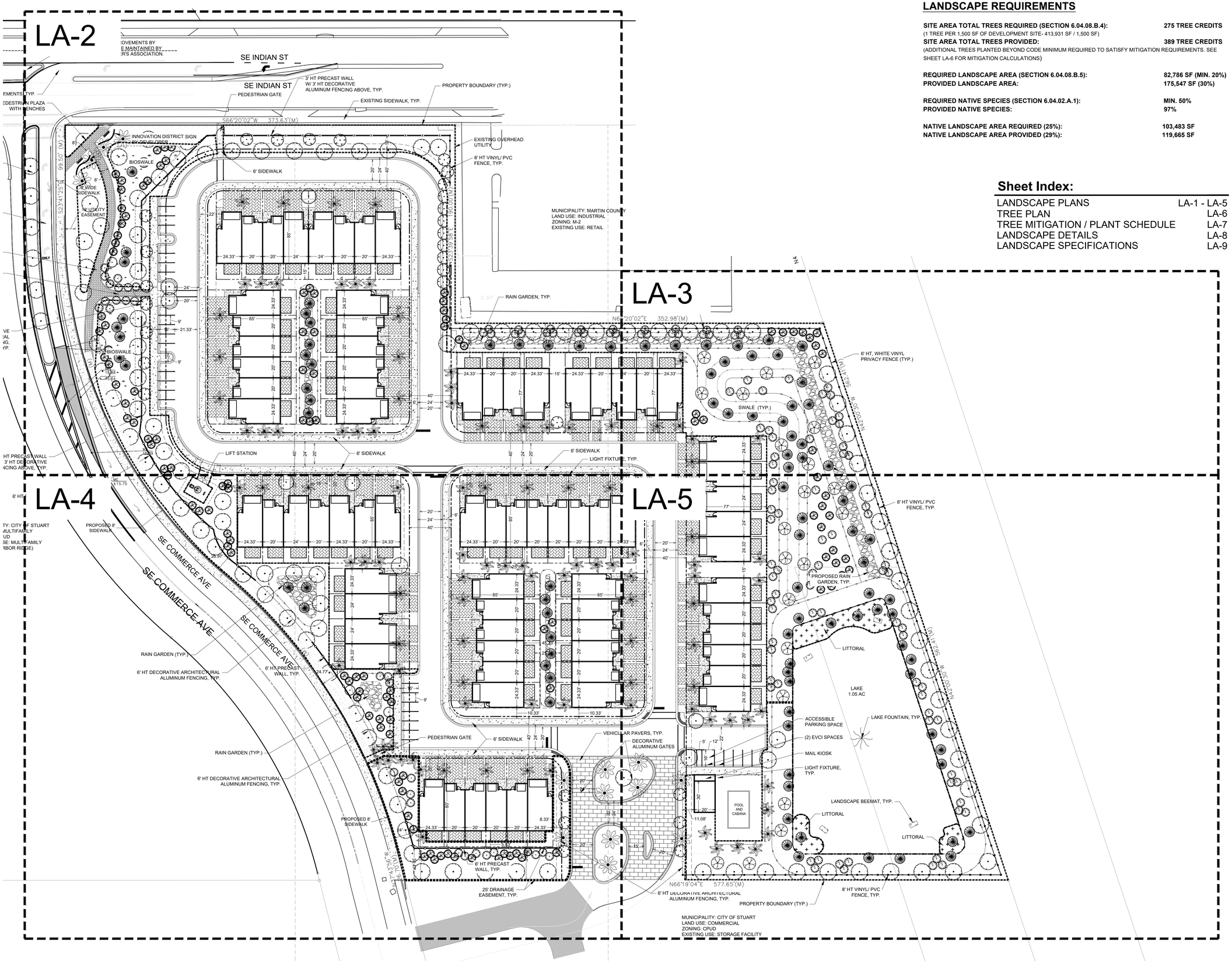
HARRISON GRANT
MARTIN COUNTY, FLORIDA

DATE 11/02/2020
DRAWN BY RLF
F.B./ PG. ELECT
SCALE AS SHOWN

JOB # 9111
SHT.NO.
6
OF 6 SHEETS



LANDSCAPE REQUIREMENTS

SITE AREA TOTAL TREES REQUIRED (SECTION 6.04.08.B.4):	**275 TREE CREDITS**
(1 TREE PER 1,500 SF OF DEVELOPMENT SITE- 413,931 SF / 1,500 SF)	
SITE AREA TOTAL TREES PROVIDED:	**389 TREE CREDITS**
(ADDITIONAL TREES PLANTED BEYOND CODE MINIMUM REQUIRED TO SATISFY MITIGATION REQUIREMENTS. SEE SHEET LA-6 FOR MITIGATION CALCULATIONS)	
REQUIRED LANDSCAPE AREA (SECTION 6.04.08.B.5):	**82,786 SF (MIN. 20%)**
PROVIDED LANDSCAPE AREA:	**175,547 SF (30%)**
REQUIRED NATIVE SPECIES (SECTION 6.04.02.A.1):	**MIN. 50%**
PROVIDED NATIVE SPECIES:	**97%**
NATIVE LANDSCAPE AREA REQUIRED (25%):	**103,483 SF**
NATIVE LANDSCAPE AREA PROVIDED (29%):	**119,665 SF**

Sheet Index:

LANDSCAPE PLANS	LA-1 - LA-5
TREE PLAN	LA-6
TREE MITIGATION / PLANT SCHEDULE	LA-7
LANDSCAPE DETAILS	LA-8
LANDSCAPE SPECIFICATIONS	LA-9

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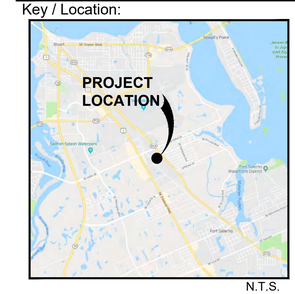

N.T.S.

Project Team:

PROPERTY OWNER:	TED GLASSRUD ASSOCIATES FL LLC 1700 W HIGHWAY 36 #650 ROSEVILLE, MN 55113
APPLICANT:	MERITAGE HOMES 5337 MILLENIA LAKES BLVD, SUITE 410 ORLANDO, FL 32839
LAND PLANNER/ LANDSCAPE ARCHITECT:	LUCIDO & ASSOCIATES 701 EAST OCEAN BOULEVARD STUART, FL 34994
ENGINEER:	THE MILCOR GROUP, INC. 10075 SE FEDERAL HIGHWAY HOBE SOUND, FL 33455
SURVEYOR:	CAULFIELD & WHEELER, INC. 7900 GLADES ROAD, SUITE 100 BOCA RATON, FLORIDA 33434

SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE PLAN

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 40'

0 20' 40' 80'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	**LA-1**
Project Number	20-605	
Municipal Number	---	
Computer File	20-605 Landscape -SCC Update.dwg	

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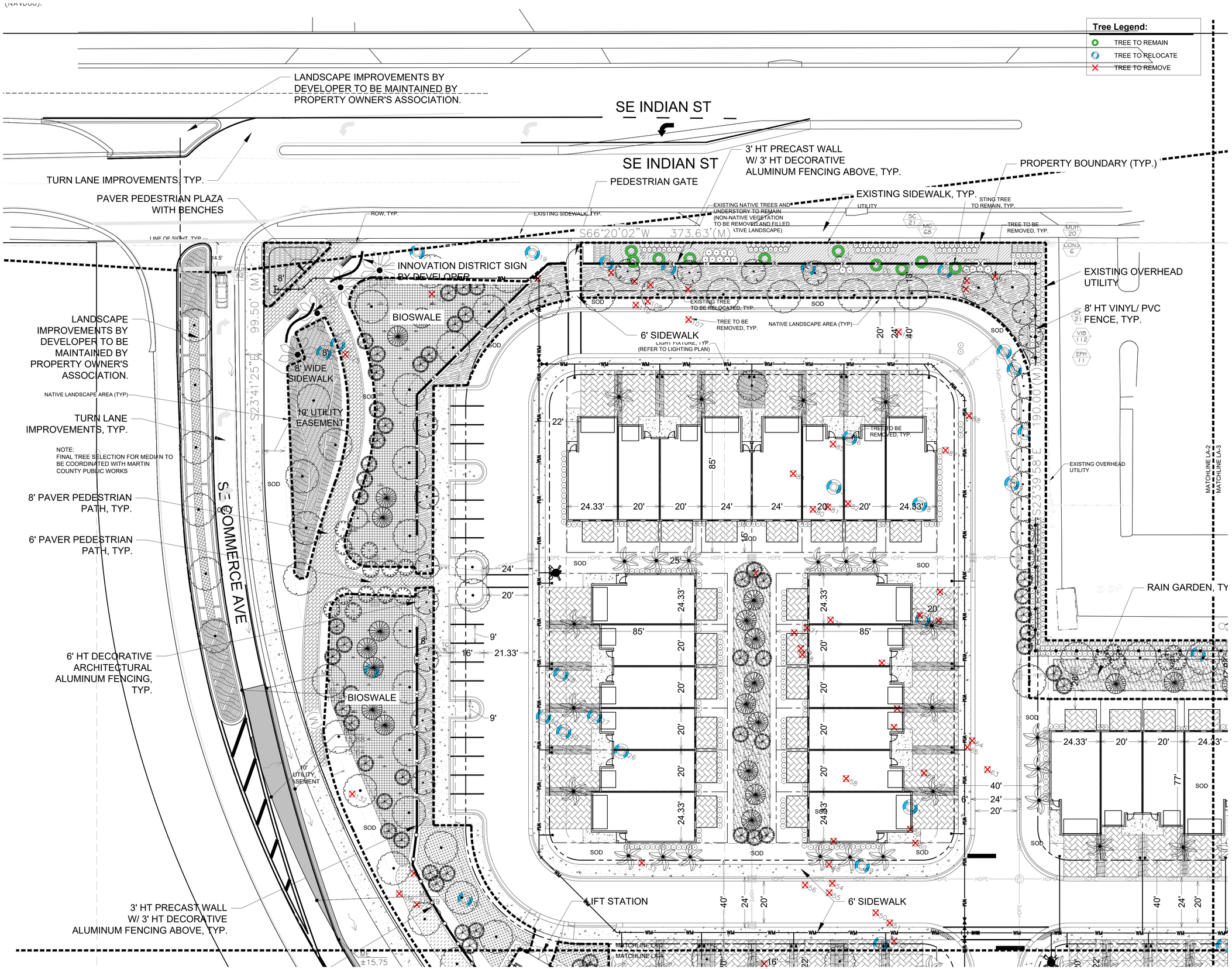

Tree Legend:

- TREE TO REMAIN
- TREE TO RELOCATE
- TREE TO REMOVE

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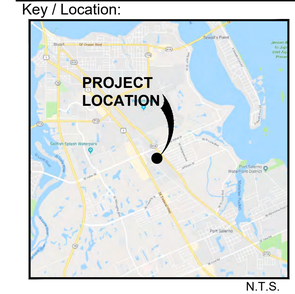
Key / Location:



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SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

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03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-2
Project Number	20-605	
Municipal Number	---	
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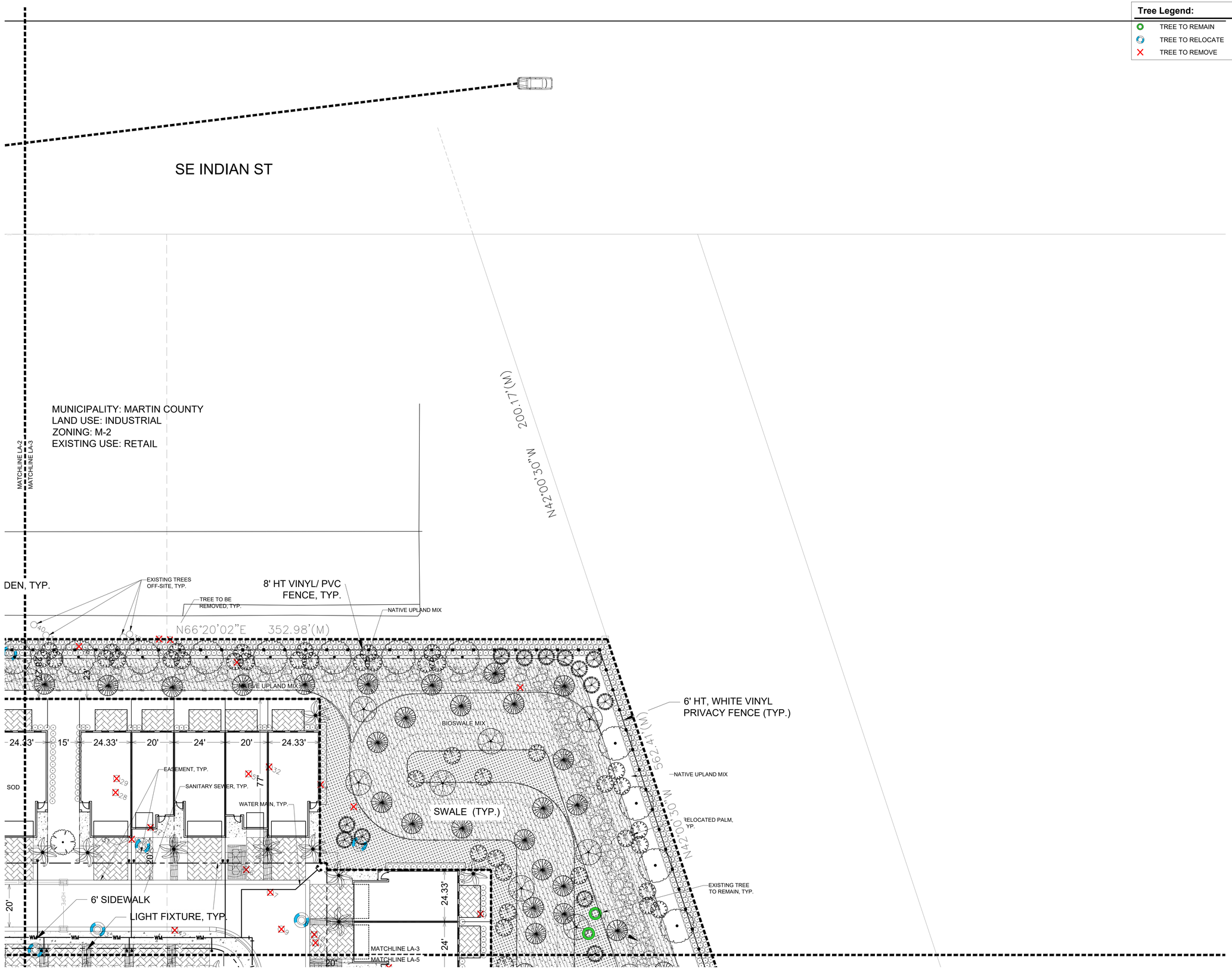

Tree Legend:

- TREE TO REMAIN
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- TREE TO REMOVE

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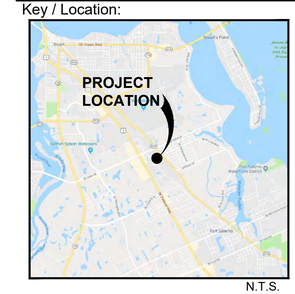

N.T.S.

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SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE PLAN

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-3
Project Number	20-605	
Municipal Number	---	
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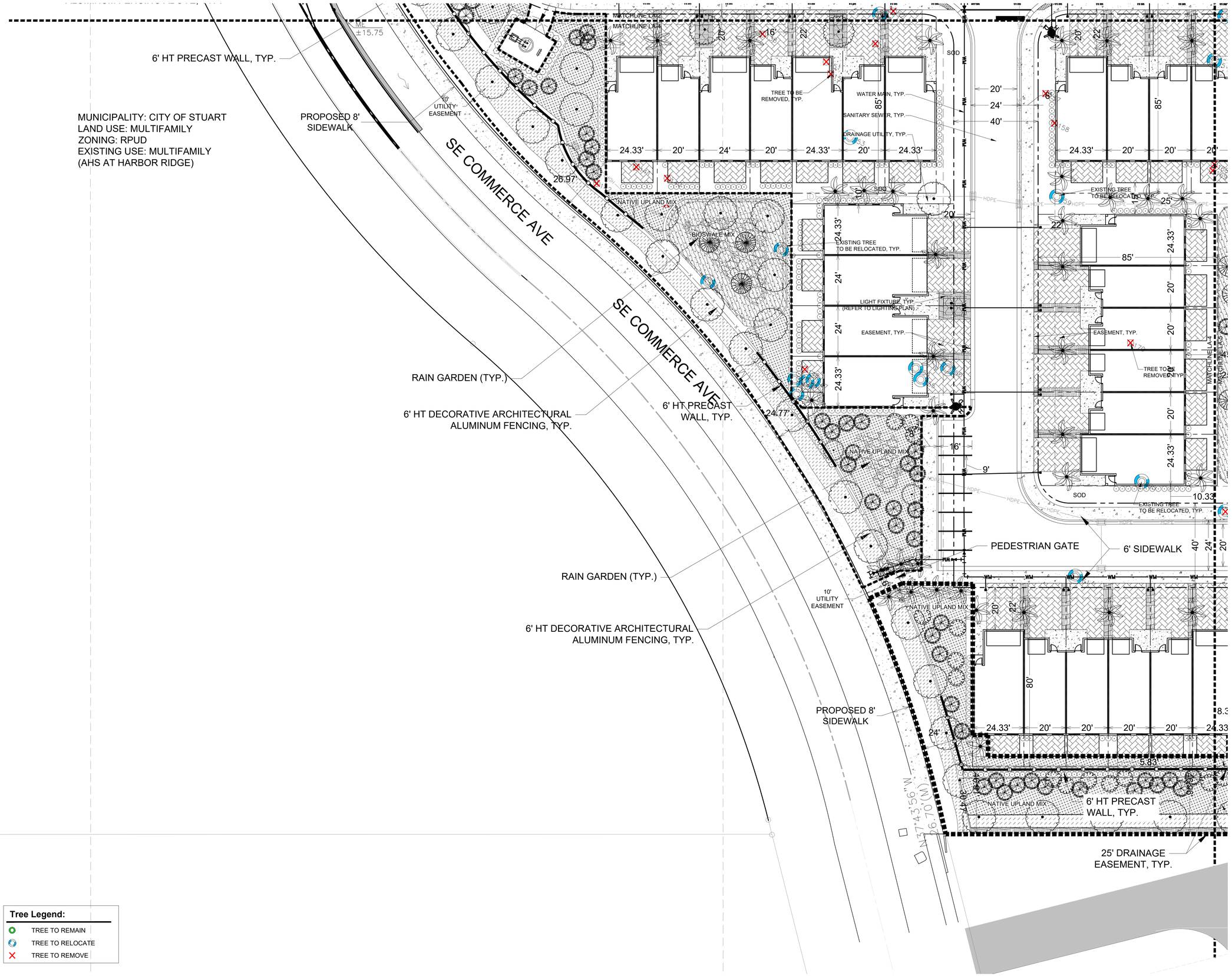

Tree Legend:

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- TREE TO REMOVE

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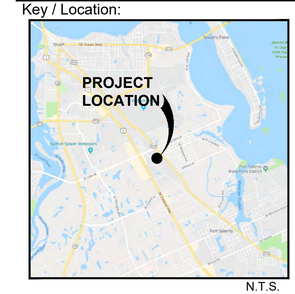

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SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE PLAN

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 20'

0 10 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-4
Project Number	20-605	
Municipal Number	---	
Computer File	20-605 Landscape -SCC Update.dwg	

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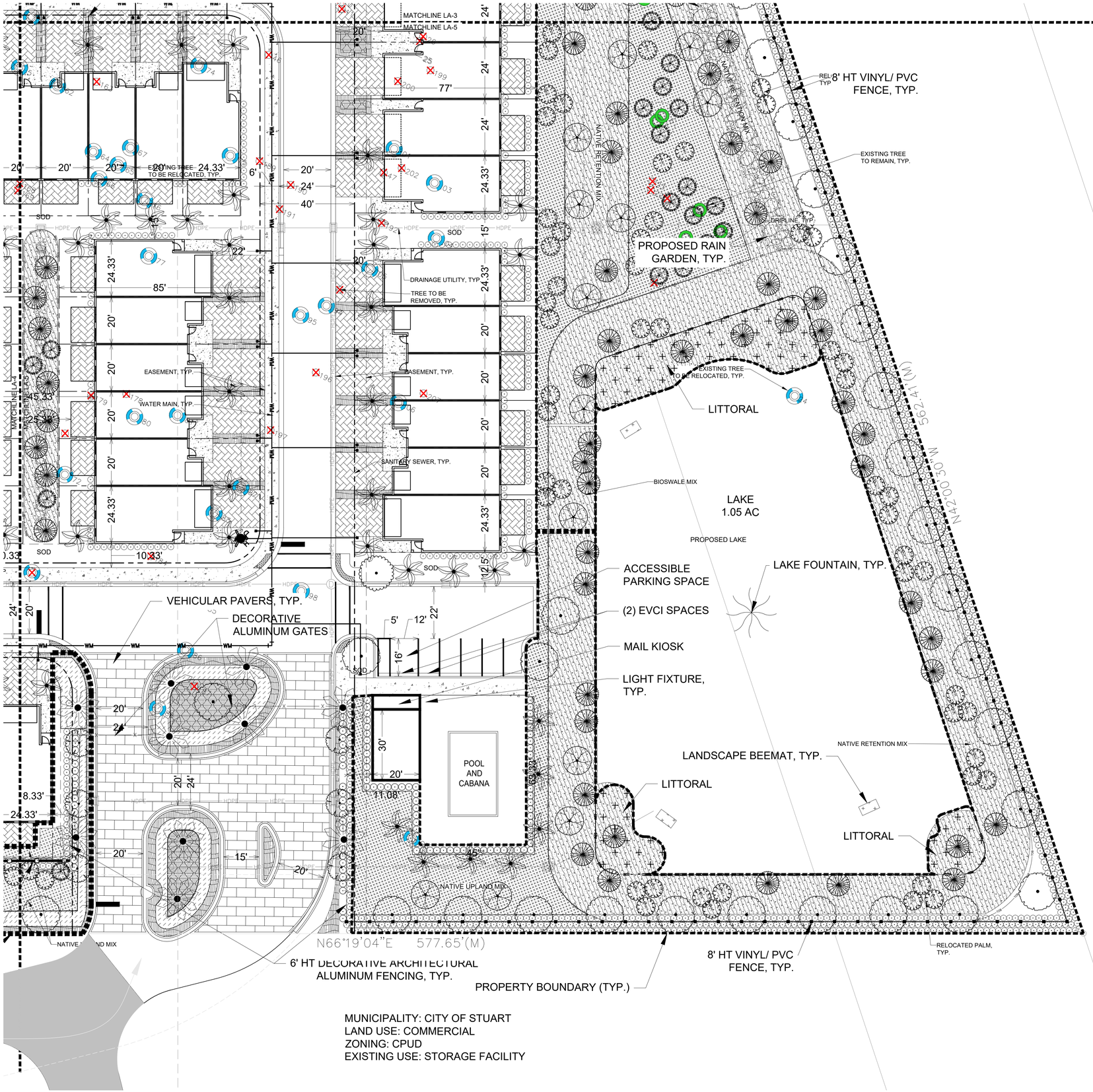

MUNICIPALITY: CITY OF STUART
LAND USE: COMMERCIAL
ZONING: CPUD
EXISTING USE: STORAGE FACILITY

Tree Legend:

- TREE TO REMAIN
- TREE TO RELOCATE
- TREE TO REMOVE

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Key / Location:

N.T.S.

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SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE PLAN

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08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	**LA-5**
Project Number	20-605	
Municipal Number	---	
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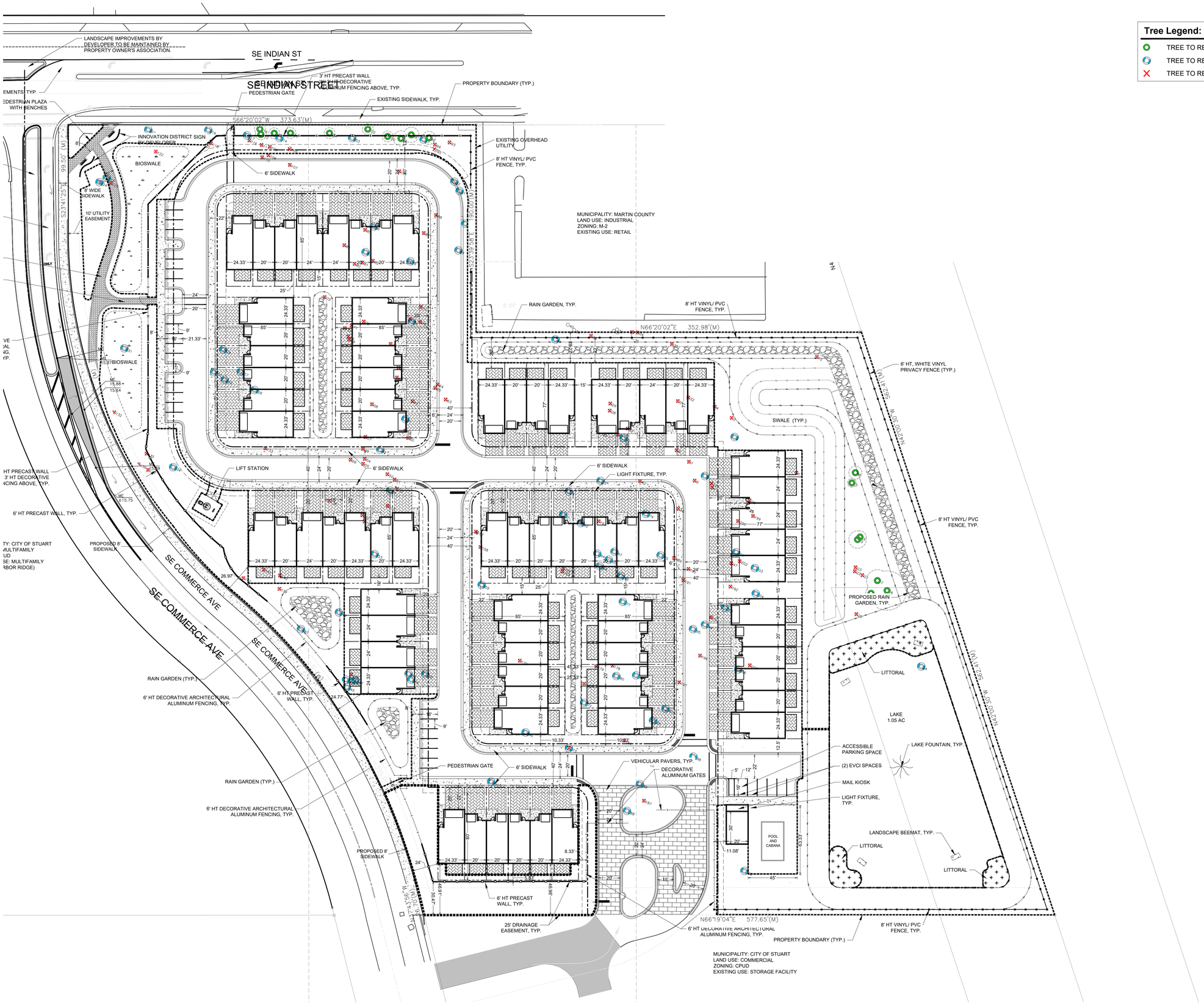

Tree Legend:

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- TREE TO REMOVE

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Key / Location:

N.T.S.

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SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

TREE PLAN

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
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10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 40'

0 20' 40' 80'

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-6
Project Number	20-605	
Municipal Number	---	
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SILVERTHORNE - TREE MITIGATION DATA

Hardwood Calculation

362	inches (x)	2.5"	=	905	Inches
Total Inches Required (4.5" DBH min.)				**905**	**Inches**
Total Inches Provided for Mitigation:				**1188**	**Inches**
21	Acer rubrum (4.5" DBH)	4.5"		94.5	Inches
111	Quercus virginiana (4.5" DBH)	4.5"		499.5	Inches
29	Ilex x attenuata 'Eagleston' (4.5" DBH)	4.5"		130.5	Inches
96	Taxodium ascendens (4.5" DBH)	4.5"		432.0	Inches
4	Tabebuia impetginosa (4.5" DBH)	4.5"		18.0	Inches
3	Tabebuia caraiba (4.5" DBH)	4.5"		13.5	Inches

Pine Calculation

610	inches (x)	1.5"	=	915.0	Inches
Total Inches Required (3" DBH min.)				**915.0**	**Inches**
Total Inches Provided for Mitigation:				**1491.0**	**Inches**
122	Pinus elliottii (3" DBH)	3.0"		366.0	Inches
108	Wodyetia bifurcata	4.5"		486.0	Inches
14	Phoenix sylvestris	4.5"		63.0	Inches
55	Sabal Palmetto	4.5"		247.5	Inches
73	Relocated Sabal Palmetto	4.5"		328.5	Inches

SPECIMEN HARDWOOD DBH TO BE REMOVED: 362
SPECIMEN PINE DBH TO BE REMOVED: 610

TOTAL DBH TO BE REMOVED: 972

TREES TO BE REMOVED

#	SPECIES	DBH
1	OAK	4
3	PINE	10
4	PINE	14
5	OAK	18
6	OAK	10
7	OAK	6
9	OAK	10
10	OAK	14
11	OAK	9
12	PINE	18
20	PINE	10
21	OAK	5
22	OAK	7
23	OAK	12
25	OAK	5
26	QUEEN PA	6
27	PINE	16
28	PINE	19
29	PINE	15
31	PINE	20
32	OAK	5
33	OAK	10
34	OAK	13
35	OAK	13
38	OAK	9
42	OAK	7
46	PINE	20
47	OAK	9
48	PINE	13
50	PINE	16
51	PINE	16
52	PINE	14
54	PINE	12
55	PINE	12
56	OAK	8
57	PINE	15
58	PINE	21
59	PINE	13
60	PINE	13
62	OAK	6
63	OAK	9
64	OAK	10
65	OAK	5
66	PINE	9
67	PINE	9
68	PINE	11
69	PINE	8
70	OAK	8
71	PINE	9
72	PINE	12
73	OAK	9
74	PINE	10
76	PINE	12
77	PINE	13
79	PINE	10
80	OAK	7
81	PINE	12
82	PINE	8
84	BLACK OLI	4
85	OAK	4
87	OAK	13
88	PINE	8
93	BLAK OLIV	7
94	PINE	18
95	OAK	6
101	OAK	13
105	PINE	12
107	PINE	8
108	PINE	10
109	PINE	10
110	PINE	8
111	PINE	8
116	PINE	13
118	PINE	10
120	PINE	11
122	PINE	16
125	PINE	8
132	PINE	14
133	PINE	8
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157	OAK	10
158	OAK	7
163	PINE	13
168	OAK	4
169	PINE	14
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171	PINE	13
178	PINE	12
179	PINE	12
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189	OAK	11
190	OAK	7
191	PINE	11
192	OAK	12
193	PINE	12
196	PINE	10
197	PINE	8
199	OAK	7
200	OAK	12
202	OAK	7
207	PINE	8

TREES TO RELOCATE

#	SPECIES	DBH
2	SABAL PAI	22
8	SABAL PAI	14
24	SABAL PAI	13
30	SABAL PAI	11
41	SABAL PAI	16
43	SABAL PAI	19
44	SABAL PAI	17
45	SABAL PAI	16
49	SABAL	14
53	SABAL	14
61	SABAL	13
75	SABAL	14
78	SABAL	15
83	SABAL	15
86	SABAL	14
89	SABAL	14
90	SABAL	18
91	SABAL	14
92	SABAL	17
97	SABAL	22
103	SABAL	18
117	SABAL	18
119	SABAL	17
121	SABAL	20
123	SABAL	17
124	SABAL	13
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127	SABAL	15
128	SABAL	22
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194	SABAL	13
195	SABAL	16
198	SABAL	13
201	SABAL	13
203	SABAL	12
204	SABAL	12
205	SABAL	12
206	SABAL	14
208	SABAL	16
114	SABAL	13

TREES TO REMAIN

#	SPECIES	DBH
13	OAK	4
14	OAK	6
15	PINE	8
16	OAK	4
17	PINE	10
18	OAK	18
19	SABAL PAI	18
96	OAK	6
98	BLACK OLI	7
99	OAK	7
100	OAK	5
102	SABAL	13
104	SABAL	17
106	SABAL	16
112	SABAL	16
113	SABAL	13
115	SABAL	16

Required Xeriscape Points

**At least 51% of the grass areas are made up of drought-tolerant grass species	10 points
At least 51% of the required shrubs are made up of drought-tolerant species	10 points
At least 51% of the required trees are made up of drought-tolerant species	10 points
Utilization of moisture sensing controller other than a rain-sensor override device	5 points
Extra shade trees in vehicular use areas 25% more of required shade trees in vehicular use area	5 points
Utilization of compacted mulch with a 3" min. depth in all planted areas	10 points
except ground cover.	50 total points

PLANT SCHEDULE LANDSCAPE PLAN

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	21	Acer rubrum	Red Maple	CG	15` MIN	6` SPR	F, SP	Native	4.5" DBH
	29	Ilex x attenuata `Eagleston`	Eagleston Holly	CG	15` MIN	6` SPR	STD, F, SP	Native	4.5" DBH
	122	Pinus elliotti	Slash Pine	FG	15` MIN	6` SPR	F, SP	Native	3" DBH
	111	Quercus virginiana	Southern Live Oak	CG	16` min.	6` SPR	F, SP	Native	4.5" DBH
	3	Tabebuia caraiba	Yellow Tabebuia	FG	12` MIN	6` SPR	F, SP	Non-native	4.5" DBH
	4	Tabebuia impetiginosa	Purple Trumpet Tree	FG	14`OA	6`W		Non-native	4.5" Caliper
	96	Taxodium ascendens	Pond Cypress	CG	15` MIN	6` SPR	F, SP	Native	4.5" DBH

PALMS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	14	Phoenix sylvestris	Wild Date Palm	FG	14`CT		FH, SP, MATCHING	Non-native	HVY CAL
	73	Relocated Sabal Palm	Relocated Sabal Palm	.					
	55	Sabal palmetto	Sabal Palm	FG	18`CT		HVY CAL, SP	Native	
	108	Wodyetia bifurcata	Foxtail Palm	FG	16`CT		SGL, FH, SP	Non-native	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	2,082	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	3G	24" HT	18"W	FTB	Native
	114	Clusia guttifera	Small Leaf Clusia	3G	3` HT	3`W	FTB, SP	Non-native
	12	Conocarpus erectus sericeus	Silver Buttonwood	3G	24" HT	18"W	FTB	Native
	68	Muhlenbergia capillaris	Pink Muhly Grass	3G	30" HT	24"W	F	Native
	24	Myrcianthes fragrans	Simpson`s Stopper	7G	4` HT	3`W	FTB, SP	Native
	21	Serenoa repens 'Cinerea'	Silver Saw Palmetto	7G	18" OA		F, SP	Native
	566	Viburnum odoratissimum	Sweet Viburnum	3G	24" HT	18"	F	Non-native

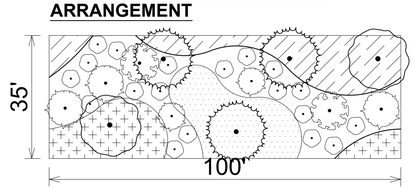
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	
	244	Chrysobalanus icaco `Horizontal`	Horizontal Cocoplum	3G	24"HT	12" W		Native	30" o.c.
	98	Clusia rosea 'Nana'	Dwarf Pitch Apple	3G	18" OA		F	Non-native	18" o.c.
	1,083	Tripsacum dactyloides	Fakahatchee Grass	3G	18" HT			Native	36" o.c.

GRASSES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	
	388	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native	24" o.c.
	599	Spartina bakeri	Sand Cordgrass	1G	24"HT	18"W	Full	Native	36" o.c.
	1,756	Tripsacum floridanum	Dwarf Fakahatchee	3G	24" OA		Full	Native	24" o.c.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	
	4,168	Ilex vomitoria `Stokes Dwarf`	Dwarf Yaupon	3G	24"OA	12"W	Full	Native	18" o.c.

NOTE:
-ALL AREAS INDICATED BY "SOD" ON PLAN SHALL BE PLANTED WITH STENOTAPHRUM SECUNDATUM 'FLORATAM' SOD UNLESS NOTED OTHERWISE.
-ALL NATIVE AREAS TO RECEIVE PINE STRAW MULCH.
-IMPORTANT: TREE HEIGHT SET TO MINIMUM HEIGHT, ACTUAL TREE MAY BE SIGNIFICANTLY TALLER. CALIPER OF TREE MUST BE MET FOR TREE MITIGATION.

TYPICAL NATIVE MIX PLANTING ARRANGEMENT



Native Landscape Mix

NATIVE UPLAND LANDSCAPE

Chrysobalanus icaco `Red Tip` / Red Tip Cocoplum	133
Muhlenbergia capillaris / Pink Muhly Grass	577
Myrica cerifera / Wax Myrtle	58
Serenoa repens / Saw Palmetto	15
Spartina bakeri / Sand Cord Grass	325
Tripsacum dactyloides / Fakahatchee Grass	721

NATIVE RETENTION LANDSCAPE

Iris virginica / Blue Flag Iris	771
Pontederia cordata / Pickerel Weed	386
Spartina bakeri / Sand Cord Grass	3,210
Tripsacum dactyloides / Fakahatchee Grass	1,338

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:

N.T.S.

Project Team:

PROPERTY OWNER:	TED GLASSRUD ASSOCIATES FL LLC 1700 W HIGHWAY 36 #650 ROSEVILLE, MN 55113
APPLICANT:	MERITAGE HOMES 5337 MILLENIA LAKES BLVD, SUITE 410 ORLANDO, FL 32839
LAND PLANNER/ LANDSCAPE ARCHITECT:	LUCIDO & ASSOCIATES 701 EAST OCEAN BOULEVARD STUART, FL 34994
ENGINEER:	THE MILCOR GROUP, INC. 10075 SE FEDERAL HIGHWAY HOBE SOUND, FL 33455
SURVEYOR:	CAULFIELD & WHEELER, INC. 7900 GLADES ROAD, SUITE 100 BOCA RATON, FLORIDA 33434

SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

TREE MITIGATION/ PLANT SCHEDULE

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" =

0

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-7
Project Number	20-605	
Municipal Number	---	
Computer File	20-605 Landscape -SCC Update.dwg	

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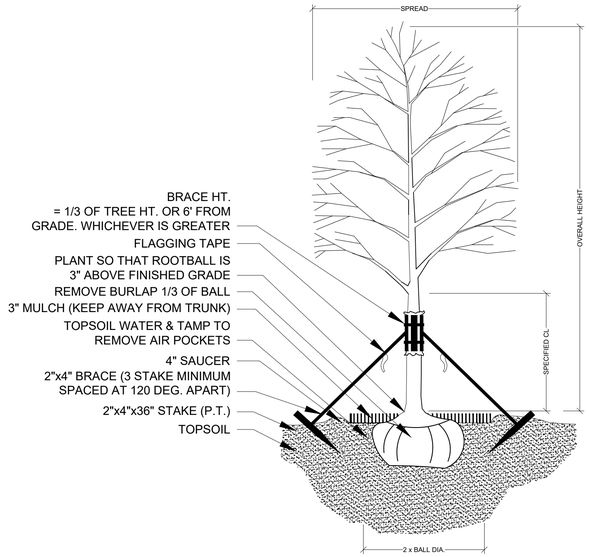
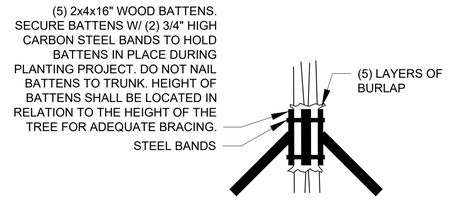


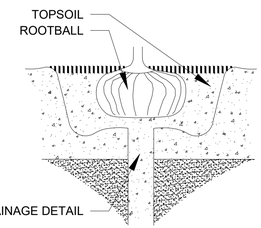
TREE PLANTING & STAKING

NOT TO SCALE



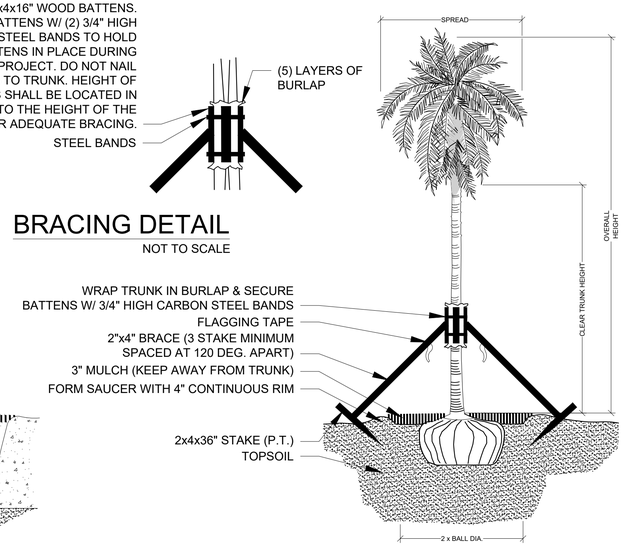
BRACING DETAIL

NOT TO SCALE



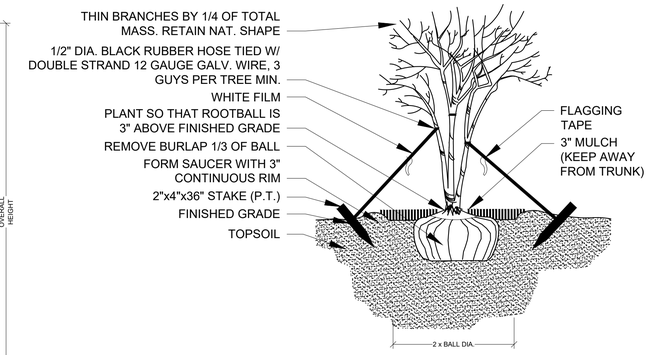
DRAINAGE TESTING DETAIL

NOT TO SCALE



PALM PLANTING - ANGLE STAKE

NOT TO SCALE



MULTI-TRUNK PLANTING & GUYING

NOT TO SCALE

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Key / Location:

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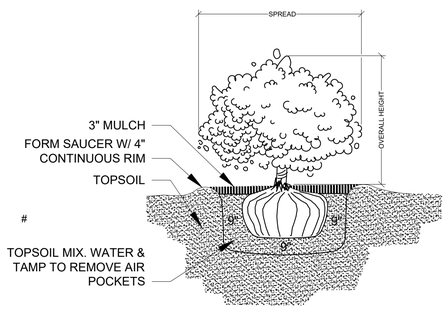
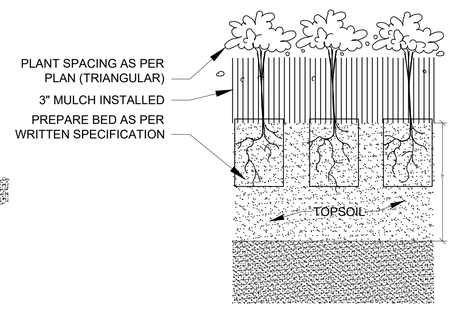


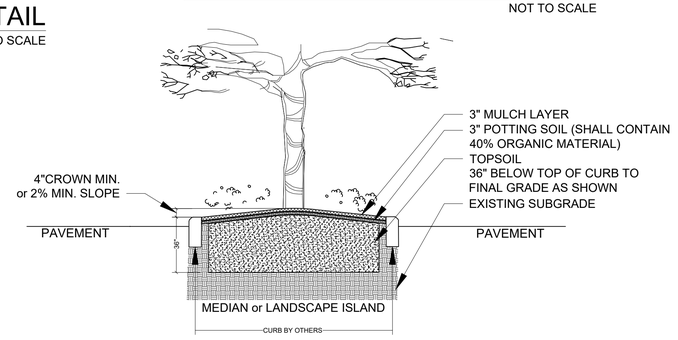
SHRUB PLANTING

NOT TO SCALE



GROUNDCOVER PLANTING DETAIL

NOT TO SCALE

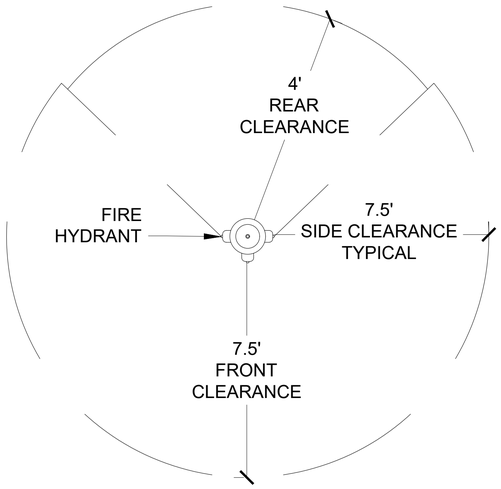


THIS DETAIL SHOWN DEPICTS A MEDIAN AND/OR LANDSCAPE ISLAND AND IS FOR GRAPHIC PURPOSES ONLY; SOIL PREPARATION SHALL APPLY TO ALL TREE, SHRUB, & GROUND COVER AREAS. THIS DOES NOT INCLUDE SOD AREAS

LANDSCAPE AREA PREPARATION DETAIL

NOT TO SCALE

- *TOPSOIL SHALL BE NATURAL, FRIABLE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY OF THE PROJECT SITE THAT PRODUCES HEAVY GROWTH.
- TOPSOIL SHALL HAVE A PH RANGE OF 5.5-7.4, FREE FROM SUBSOIL, WEEDS, LITTER, SODS, CLAY, STONES, STUMPS, ROOTS, TRASH, HERBICIDES, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH, OR HINDER PLANTING OPERATIONS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 3% ORGANIC MATERIAL.
- TOPSOIL MUST PERCOLATE WATER AT A RATE OF 1" PER HOUR (SEE ALSO DRAINAGE TESTING DETAIL FOR TREES)
- LANDSCAPE AREA SOILS SHALL BE APPROVED BY LANDSCAPE ARCHITECT/OWNER PRIOR TO PLANTING



FIRE HYDRANT CLEARANCE DETAIL

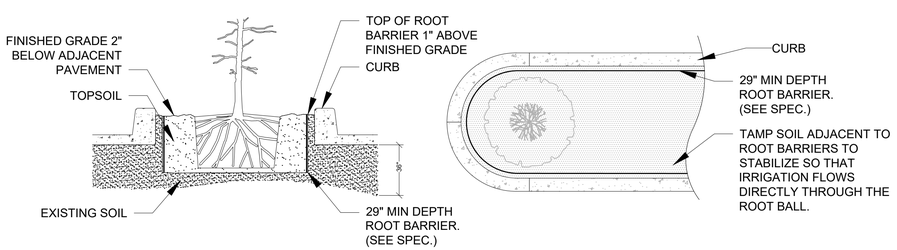
NOT TO SCALE

SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE DETAILS

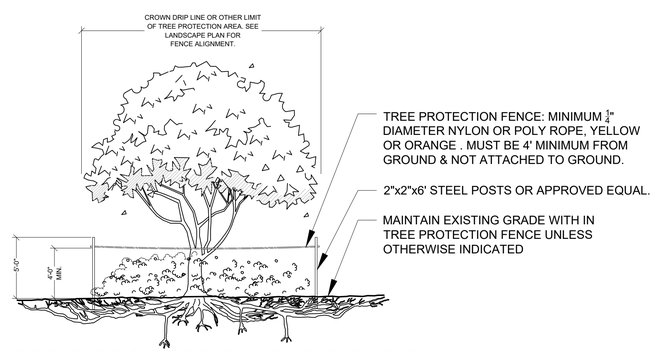
Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS



SPECIAL APPLICATIONS ROOT BARRIER DETAIL

NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE "BIO-BARRIER 29" DEPTH OR APPROVED EQUAL.
2- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.



TREE PROTECTION BARRICADE

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS.

PRIOR TO PLANTING, ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER.

A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED. IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

E. WHEN BACKFILLING PLANTING PITS WITH NATIVE TOPSOIL, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.

NORTH

SCALE: 1" =

0

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-8
Project Number	20-605	
Municipal Number	---	
Computer File	20-605 Landscape -SCC Update.dwg	

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LANDSCAPE SPECIFICATIONS

PART 1: GENERAL CONDITIONS

1.01 SCOPE:
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in: Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herlself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and, additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS:
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well versed in plant materials, planting methods, reading plans, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Foreman shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the Superintendent is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e. damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE:
The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of 18 MONTHS from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guaranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God, as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. # The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY:
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.).

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data:
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000.00 per person and $300,000.00 per aggregate or as required by owner and agreed to in the contract. The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MATERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes, and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. Substitutions: Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections, grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION

A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails

2.06 TOP SOIL:
A. Planting soil for all plantings shall consist of topsoil and be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity of the project site that produces heavy growth. Topsoil shall have a PH range of 5.5-7.4, free from subsoil, weeds, litter, sods, clay, stones, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth, or hinder planting operations. Topsoil shall contain a minimum of 3% organic material. Topsoil must percolate water at a rate of 1" per hour (See also drainage testing detail for trees)

B. Landscape Area Preparation. The intent of this section is to ensure a healthy growing environment for all planting material in all landscaped areas. Landscape Contractor to examine existing soils prior to planting to ensure conformance to all definitions of "Topsoil" (seeLandscape Area Preparation Detail); In addition, a 3" layer of high organic (min 40%) potting soil shall be added to the topsoil and mixed in at time of planting. *East Coast Recycling Inc.* is a recommended source for imported Topsoil (if needed) as well as the top 3" layer of potting soil.

Existing soils must meet all definitions of 'Topsoil' as described above in all planting areas throughout the site. If existing soils do not meet all definitions of Topsoil, please refer to the 'Landscape Area Preparation' detail. Examination may require existing soils to be tested by an accredited testing laboratory. Should a soil test be necessary, Contractor shall contact soil testing lab directly to confirm such lab's soil collection and transmittal protocol; all costs if any shall be borne by the Contractor. Contractor shall provide to Landscape Architect for review the results of the soil test if conducted. Contractor shall schedule an on-site meeting with Landscape Architect to review existing and/or imported soils prior to planting. The Landscape Area Preparation is the responsibility of the Landscape Contractor. He/she shall except all responsibility of planting soils and shall honor all guarantee items in section 1.08.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state and local fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected.

B. Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tabletized fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tabletized fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container	1 tablet
3 gallon container	2 tablets
5 gallon container	3 tablets
7 gallon container	5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material. The Landscape Architect reserves the right to inspect and review the application of fertilizer.

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited.

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs, keep 6" away from tree & palm trunks or as required by local jurisdiction.

PART 3 EXECUTION
3.01 DIGGING:
A. The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A. Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others.

B. It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified.

3.03 PLANTING:
A. Planting shall take place during favorable weather conditions.

B. The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them.

C. Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D. Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the landscape plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams".

E. A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Details for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and backfilled with Topsoil- see Landscape Area Preparation Detail;
1 Gallon material (1 gal.): 12" x 12" x 12" min.
3 Gallon material (3 gal.): 20" x 20" x 18" min.
Lerio material (7 gal.): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be initiated until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc. and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep.

H. Each plant shall be planted in an individual hole as specified for trees, shrubs, and vines.

I. All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in.

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future watering's. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner.

3.04 PRUNING:
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted.

C. Trees shall not be poled or topped.

D. Remove all trimming from site.

3.05 GUYING:

A. All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail.

B. Wires shall not come in direct contact with the tree but shall be covered with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

C. Stake & Brace all trees larger than 12' oa. See detail. Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

D. Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER:
A. Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect.

B. Prior to installing any irrigation system components, the contractor shall obtain a water sample from the proposed water supply and conduct a particle size and count analysis on the sample using the services of a reputable lab certified in such analysis. Submit the test results to the owner/owner's representative for review and approval. Do not proceed further with system installation until given written approval to do so.

3.07 SOD:
A. The Landscape Contractor shall sod all areas indicated on the drawings.

B. It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F. Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface.

G. The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs, walks, paving and wood borders to allow for building turf.

H. If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A. The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application: Argentine Bahia Grass seed- 200 Pounds per acre mixed with common hulled Bermuda seed- 30 lbs. per acre. All other seed mixtures shall be applied per the manufacturer's instructions.

C. Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre.

D. Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP:
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and/or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly.

C. Replacement of plants during the maintenance period shall be the responsibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

E. All trees & shrubs shall be straight and in correct position per the landscape plans, details and specifications. All nursery, shipping and identification tags & ribbons shall be removed from trees & shrubs immediately after planting.

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:

N.T.S.

Project Team:

PROPERTY OWNER:	TED GLASSRUD ASSOCIATES FL LLC 1700 W HIGHWAY 36 #650 ROSEVILLE, MN 55113
APPLICANT:	MERITAGE HOMES 5337 MILLENIA LAKES BLVD, SUITE 410 ORLANDO, FL 32839
LAND PLANNER/ LANDSCAPE ARCHITECT:	LUCIDO & ASSOCIATES 701 EAST OCEAN BOULEVARD STUART, FL 34994
ENGINEER:	THE MILCOR GROUP, INC. 10975 SE FEDERAL HIGHWAY HOBE SOUND, FL 33455
SURVEYOR:	CAULFIELD & WHEELER, INC. 7900 GLADES ROAD, SUITE 100 BOCA RATON, FLORIDA 33434

SILVERTHORN RPUD

STUART, MARTIN COUNTY, FL

LANDSCAPE SPECS.

Date	By	Description
04.01.21	KV	INITIAL SUBMITTAL
08.02.21	KV	RESUBMITTAL
10.22.21	KV	ADDRESS STAFF COMMENTS
03.16.22		ADDRESS STAFF COMMENTS

NORTH

SCALE: 1" = 0

0 0 0 0

REG. # 1018
Thomas P. Lucido

Designer	KV	Sheet
Manager	DF	LA-9
Project Number	20-605	
Municipal Number	---	
Computer File	20-605 Landscape -SCC Update.dwg	

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Drawing Name: C:\Users\dfitzwater\AppData\Local\Temp\AcPublish_7884\ Mar 18, 2022 – 7:43am 20-605 Landscape -SCC Update.dwg

TYPICAL WALL TYPES

GENERAL NOTES - WALL TYPES

ALL INTERIOR PARTITIONS ARE WALL TYPE 1 U.N.O.

FOR ADDITIONAL INFORMATION ABOUT WALL ASSEMBLIES ALSO REFER TO SHEETS DESIGNATED AS:

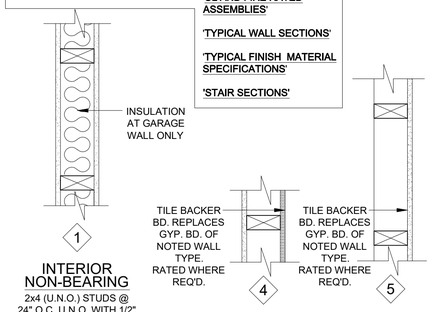
'FIRE RATING DETAILS'

'UL AND FIRE RATED ASSEMBLIES'

'TYPICAL WALL SECTIONS'

'TYPICAL FINISH MATERIAL SPECIFICATIONS'

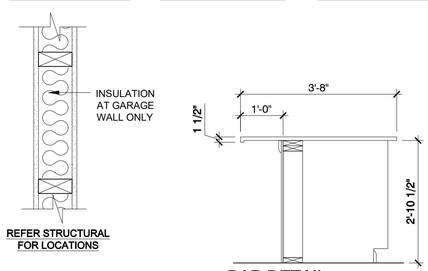
'STAIR SECTIONS'



1 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
-OR ALTERNATE-
METAL STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
NON-RATED INTERIOR WALL

4 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD BOTH SIDES.
NON-RATED INTERIOR FRAME WALL

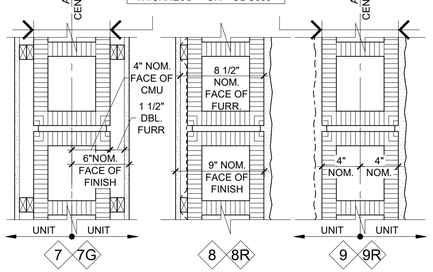
5 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD ONE SIDE. (P.T. WHEN AGAINST MASONRY)
NON-RATED INTERIOR FRAME WALL



INTERIOR BEARING
2x4 (U.N.O.) STUDS @ 16" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
NON-RATED INT. BEARING WALL

BAR DETAIL
SCALE: N.T.S.

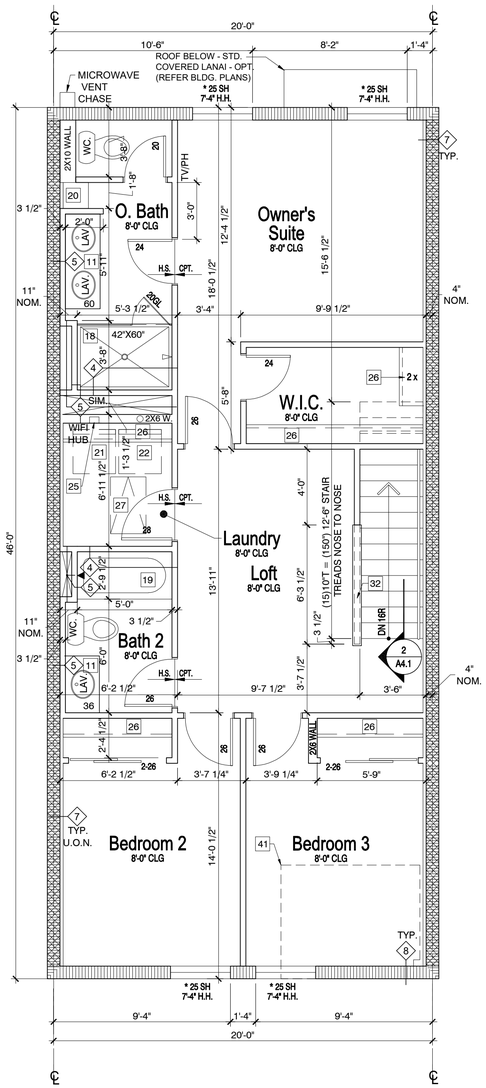
2 HR. FIRE RATED CMU AREA SEPARATION WALL BETWEEN UNITS PER FBC TABLE 722.3.2 MINIMUM EQUIVALENT THICKNESS - OR - UL U905



TYPICAL AREA SEPARATION WALL
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 1/2" GYP. BD. OVER DOUBLE FURRING (1X2 PT) @ 24" O.C. (FURR FOR ELECTRICAL INSTALLATION). ACOUSTICAL INSULATION PER COMMUNITY / DEVELOPERS SPEC.
7G GARAGE: EXPOSED CMU, STRUCK JOINTS, PAINTED, (NO FURRING OR GYPSUM BOARD).
(2) HOUR RATED WALL AREA SEPARATION

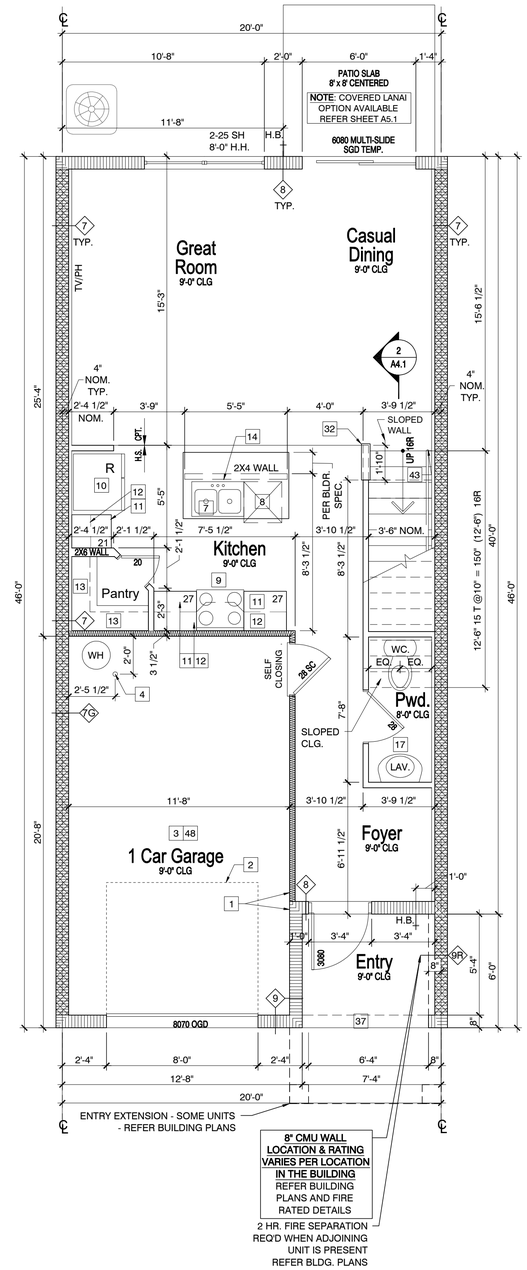
TYPICAL FIRST FL. EXTERIOR
8" CONCRETE BLOCK EXTERIOR WALL W/ 1/2" GYP. BD. OVER RADIANT BARRIER INSULATION OVER 1X2 PT. FURRING @ 24" O.C.ON INTERIOR FACE OF WALL. STUCCO ON EXTERIOR BLOCK
(1) HR RATED BY EQUIVALENT THICKNESS AT TYPE 8R
EXTERIOR CONC. BLOCK WALL

CMU - A.S.W. AT EXTERIOR 9R
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 5/8" MIN.STUCCO AT EXTERIOR CONDITIONS.
9
GARAGE: NON RATED, EXPOSED CMU, STRUCK JOINTS, PAINTED. EXTERIOR 5/8" MIN.STUCCO
(2) HOUR RATED WALL AREA SEPARATION



SECOND FLOOR PLAN - UNIT T148
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"
LEFT HAND

T148 - LN	
UNIT SQ. FTG. TABLE	
1st FLOOR	613 SQ. FT.
2nd FLOOR	872 SQ. FT.
TOTAL A/C	1485 SQ. FT.
GARAGE	249 SQ. FT.
ENTRY	44 SQ. FT.
TOTAL UR	1778 SQ. FT.



FIRST FLOOR PLAN - UNIT T148
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"
LEFT HAND

FLOOR PLAN NOTES:

THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. FLUSH THE FACE OF FINISHES
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. 36" HIGH BOLLARD
5. STAIR PER GOVERNING CODE.
6. 2x4 W/ GYP. BOARD CLOSURE UNDER STAIR
7. SINK W/GARBAGE DISPOSAL.
8. DISHWASHER.
9. RANGE w/ HOOD OR MICRO ABOVE PER SPEC.
10. REFRIGERATOR.
11. BASE CABINETS.
12. UPPER CABINETS.
13. PANTRY - (4) 12" D. SHELVES
14. HALF WALL +34 1/2" A.F.F. W/ COUNTERTOP PER PLAN.
15. OPTIONAL UPPER CABINETS.
16. OPTIONAL CABINETS.
17. PEDESTAL SINK.
18. TILED SHOWER W/TEMPERED GLASS ENCLOSURE, PER BUILDER SPEC.
19. 30" X 60" TUB/SHOWER
20. LINEN SHELVES, PER BUILDER SPEC.
21. WASHER SPACE W/ DRAIN PAN BELOW. PROVIDE DRAIN PAN TO EXTERIOR
22. DRYER SPACE w/ VENT TO EXTERIOR.
23. STACKED WASHER/ DRYER.
24. OPTIONAL LAUNDRY SINK.
25. HANSON BOX
26. ROD & SHELF, PER BUILDER SPECS.
27. ATTIC ACCESS (22"x36" U.N.O.).
28. ATTIC ACCESS W/ STAIRS (22 1/2"x54" U.N.O.).
29. GYPSUM BOARD OPENING.
30. OPTIONAL PRE-PLUMB FOR LAUNDRY SINK.
31. OPTIONAL COFFERED CEILING (AS NOTED PER PLAN)
32. 2X4 LOW WALL w/ GYPSUM BOARD & WOOD CAP - 42" HT. MIN.
33. 2X4 LOW WALL 42" A.F.F.
34. N/A
35. LOW WALL 32 1/2" A.F.F.
36. N/A
37. SOFFIT OR BEAM ABOVE, REFER TO STRUCTURAL & EXTERIOR ELEVATIONS FOR HEIGHTS & FINISHES.
38. PLANT SHELF
39. N/A
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. MASONRY PER BUILDER SPEC, SEE EXTERIOR ELEVATIONS.
43. HANDRAIL AT +36" ABV. STAIR NOSING OR LANDING - PER CODE - ALSO REFER STAIR SECTIONS.
44. COORD. PLUMBING SUPPLY & VENT IN FRAME OR MASONRY WALL
45. COORD. TOILET SUPPLY IN MASONRY WALL OR THROUGH FLOOR
46. N/A
47. INSTALL 1/2" GYP. AT WALLS & CEILINGS OF ACCESSIBLE AREAS UNDER STAIRS
48. INSTALL 1/2" GYP. BD. ON GARAGE SIDE OF WALL BETWEEN GARAGE & LIVING, INSTALL 5/8" TYPE 'X' GYP BD. ON GARAGE CEILING AT AREA BETWEEN LIVING ABOVE AND GARAGE

GENERAL PLAN NOTES:

ALL INTERIOR DOORS ARE 6'-8" HEIGHT PER BUILDER SPEC.

DOOR WIDTH DESIGNATIONS: 20 = 2'-0"; 24 = 2'-4"; ETC.

GARAGE DOORS SHALL BE SOLID CORE DOOR, A MIN. 1⅜" THICK w/ CLOSER.

WINDOWS MARKED WITH AN * MUST MEET EMERGENCY ESCAPE AND RESCUE (E.E.R.) REQUIREMENTS. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS MEETS (E.E.R.) REQUIREMENTS.

FOR ADDITIONAL INFORMATION SEE GENERAL NOTES, TYPICAL FINISH MATERIAL SPECIFICATIONS, WALL SECTIONS AND DETAILS.

PLUMBING NOTE: OFFSET ALL PLUMBING VENTS, DRYER VENTS, AND BATH FAN EXHAUST MIN. 5'-0" FROM CENTER LINE OF PARTY WALL TO AVOID PENETRATING FIRE RESISTANT ROOF SHEATHING.

FALL PROTECTION

IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.
2. WINDOW OPENING CONTROL DEVICES SHALL COMPLY WITH ASTM F2090.

THE WINDOW OPENING CONTROL DEVICE, AFTER OPERATION TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN, **SHALL NOT REDUCE THE NET CLEAR OPENING AREA OF THE WINDOW UNIT**.

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Florida
12906 Tampa Oaks Blvd
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+1 813.466.3310
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www.fieldstoneae.com

Meritage Homes

1127 Gateway Boulevard
Boynton Beach, FL 33426
561-847-7515 Phone

Control Date: 12/02/19

Date/Issued for:

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Project Title
FRONT LOAD TOWNHOMES

Sheet Title
UNIT T148 - L
Floor Plans

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DO NOT SCALE DRAWINGS

Sheet No.
A1.1L

P:\32060\SR_Fronload\Master_TH_Live_New_Units1_DWG\Arc\A1_Units.dwg , Plot Date: Thursday, September 03, 2020, 9:04 PM , Plotted By:jparrow

TYPICAL WALL TYPES

GENERAL NOTES - WALL TYPES

ALL INTERIOR PARTITIONS ARE WALL TYPE (1) U.N.O.

FOR ADDITIONAL INFORMATION ABOUT WALL ASSEMBLIES ALSO REFER TO SHEETS DESIGNATED AS:

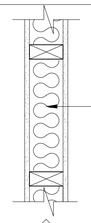
'FIRE RATING DETAILS'

'UL AND FIRE RATED ASSEMBLIES'

'TYPICAL WALL SECTIONS'

'TYPICAL FINISH MATERIAL SPECIFICATIONS'

'STAIR SECTIONS'



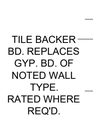
(1)

INTERIOR NON-BEARING

2x4 (U.N.O.) STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE

-OR ALTERNATE-
METAL STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE

NON-RATED INTERIOR WALL

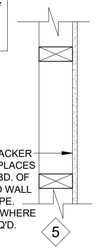


(4)

INTERIOR NON-BEARING

2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD BOTH SIDES.

NON-RATED INTERIOR FRAME WALL

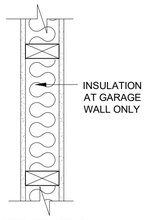


(5)

INTERIOR NON-BEARING

2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD ONE SIDE. (P.T. WHEN AGAINST MASONRY)

NON-RATED INTERIOR FRAME WALL

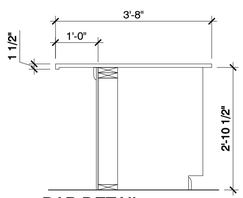


REFER STRUCTURAL FOR LOCATIONS

INTERIOR BEARING

2x4 (U.N.O.) STUDS @ 16" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE

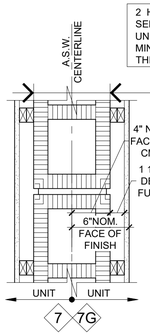
NON-RATED INT. BEARING WALL



BAR DETAIL

SCALE: N.T.S.

2 HR. FIRE RATED CMU AREA SEPARATION WALL BETWEEN UNITS PER FBC TABLE 722.3.2 MINIMUM EQUIVALENT THICKNESS - OR - UL U905



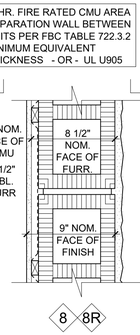
(7) (7G)

TYPICAL AREA SEPARATION WALL

8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 1/2" GYP. BD. OVER DOUBLE FURRING (1X2 PT) @ 24" O.C. (FURR FOR ELECTRICAL INSTALLATION). ACOUSTICAL INSULATION PER COMMUNITY / DEVELOPERS SPEC.

(7G) GARAGE: EXPOSED CMU, STRUCK JOINTS, PAINTED, (NO FURRING OR GYPSUM BOARD).

(2) HOUR RATED WALL AREA SEPARATION



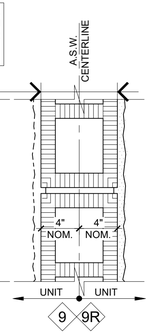
(8) (8R)

TYPICAL FIRST FL. EXTERIOR

8" CONCRETE BLOCK EXTERIOR WALL W/ 1/2" GYP. BD. OVER RADIANT BARRIER INSULATION OVER 1X2 PT. FURRING @ 24" O.C.ON INTERIOR FACE OF WALL. STUCCO ON EXTERIOR BLOCK

(1) HR RATED BY EQUIVALENT THICKNESS AT TYPE (8R)

EXTERIOR CONC. BLOCK WALL



(9) (9R)

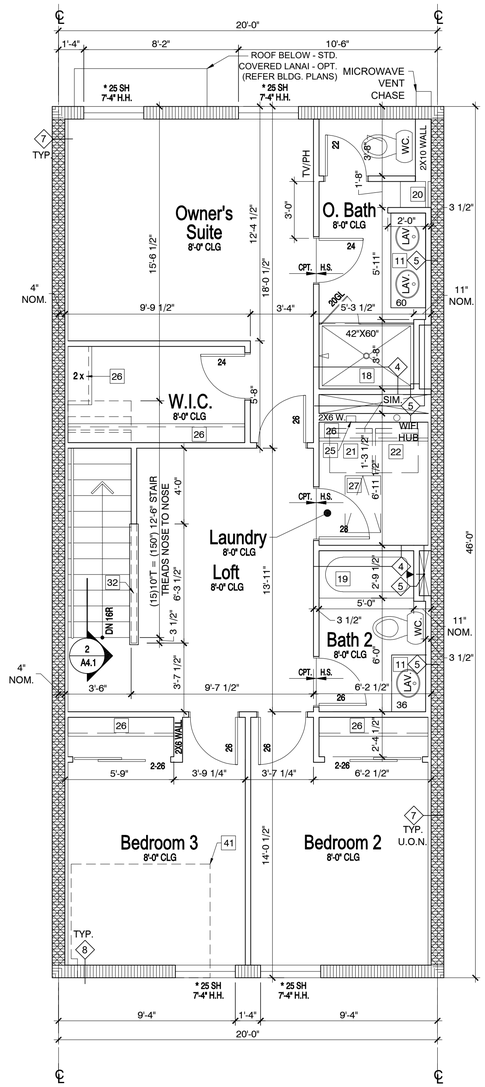
CMU - A.S.W. AT EXTERIOR (9R)

8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 5/8" MIN.STUCCO AT EXTERIOR CONDITIONS.

(9)

GARAGE: NON RATED, EXPOSED CMU, STRUCK JOINTS, PAINTED. EXTERIOR 5/8" MIN.STUCCO

(2) HOUR RATED WALL AREA SEPARATION

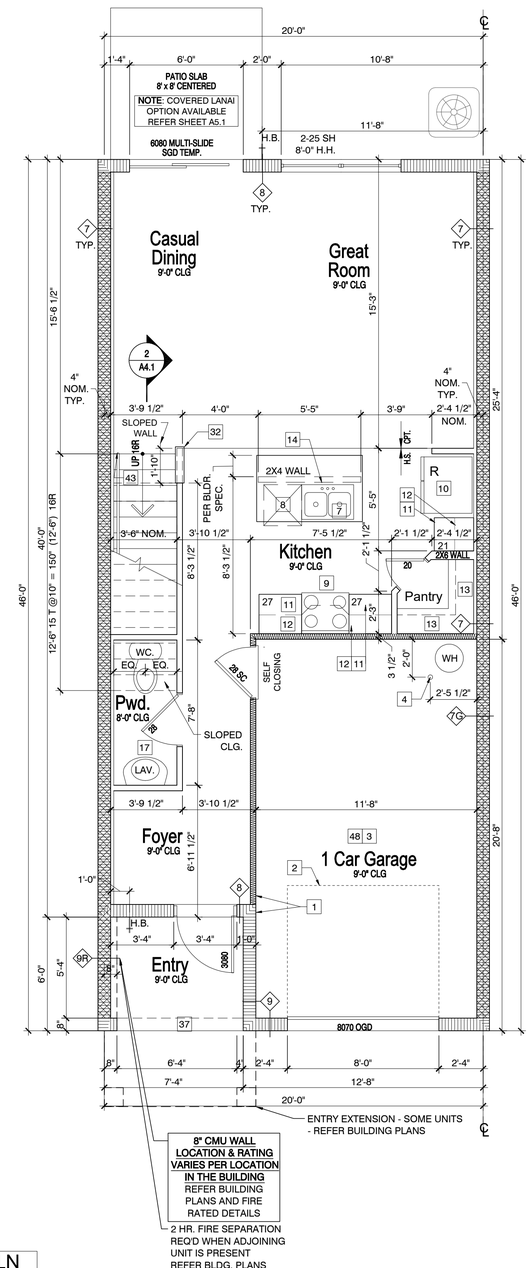


SECOND FLOOR PLAN - UNIT T148

22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"

RIGHT HAND

T148 - LN	
UNIT SQ. FTG. TABLE	
1st FLOOR	613 SQ. FT.
2nd FLOOR	872 SQ. FT.
TOTAL A/C	1485 SQ. FT.
GARAGE	249 SQ. FT.
ENTRY	44 SQ. FT.
TOTAL UR	1778 SQ. FT.



FIRST FLOOR PLAN - UNIT T148

22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"

RIGHT HAND

FLOOR PLAN NOTES:

(#) THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. FLUSH THE FACE OF FINISHES
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. 36" HIGH BOLLARD
5. STAIR PER GOVERNING CODE.
6. 2x4 W/ GYP. BOARD CLOSURE UNDER STAIR
7. SINK W/GARBAGE DISPOSAL.
8. DISHWASHER.
9. RANGE w/ HOOD OR MICRO ABOVE PER SPEC.
10. REFRIGERATOR.
11. BASE CABINETS.
12. UPPER CABINETS.
13. PANTRY - (4) 12" D. SHELVES
14. HALF WALL +34 1/2" A.F.F. W/ COUNTERTOP PER PLAN.
15. OPTIONAL UPPER CABINETS.
16. OPTIONAL CABINETS.
17. PEDESTAL SINK.
18. TILED SHOWER W/TEMPERED GLASS ENCLOSURE, PER BUILDER SPEC.
19. 30" X 60" TUB/SHOWER
20. LINEN SHELVES, PER BUILDER SPEC.
21. WASHER SPACE W/ DRAIN PAN BELOW. PROVIDE DRAIN PAN TO EXTERIOR
22. DRYER SPACE w/ VENT TO EXTERIOR.
23. STACKED WASHER/ DRYER.
24. OPTIONAL LAUNDRY SINK.
25. HANSON BOX
26. ROD & SHELF, PER BUILDER SPECS.
27. ATTIC ACCESS (22"x36" U.N.O.).
28. ATTIC ACCESS W/ STAIRS (22 1/2"x54" U.N.O.).
29. GYPSUM BOARD OPENING.
30. OPTIONAL PRE-PLUMB FOR LAUNDRY SINK.
31. OPTIONAL COFFERED CEILING (AS NOTED PER PLAN)
32. 2X4 LOW WALL w/ GYPSUM BOARD & WOOD CAP - 42" HT. MIN.
33. 2X4 LOW WALL 42" A.F.F.
34. N/A
35. LOW WALL 32 1/2" A.F.F.
36. N/A
37. SOFFIT OR BEAM ABOVE, REFER TO STRUCTURAL & EXTERIOR ELEVATIONS FOR HEIGHTS & FINISHES.
38. PLANT SHELF
39. N/A
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. MASONRY PER BUILDER SPEC, SEE EXTERIOR ELEVATIONS.
43. HANDRAIL AT +36" ABV. STAIR NOSING OR LANDING - PER CODE - ALSO REFER STAIR SECTIONS.
44. COORD. PLUMBING SUPPLY & VENT IN FRAME OR MASONRY WALL
45. COORD. TOILET SUPPLY IN MASONRY WALL OR THROUGH FLOOR
46. N/A
47. INSTALL 1/2" GYP. AT WALLS & CEILINGS OF ACCESSIBLE AREAS UNDER STAIRS
48. INSTALL 1/2" GYP. BD. ON GARAGE SIDE OF WALL BETWEEN GARAGE & LIVING, INSTALL 5/8" TYPE 'X' GYP BD. ON GARAGE CEILING AT AREA BETWEEN LIVING ABOVE AND GARAGE

GENERAL PLAN NOTES:

ALL INTERIOR DOORS ARE 6'-8" HEIGHT PER BUILDER SPEC.

DOOR WIDTH DESIGNATIONS: 20 = 2'-0"; 24 = 2'-4"; ETC.

GARAGE DOORS SHALL BE SOLID CORE DOOR, A MIN. 1 3/8" THICK w/ CLOSER.

WINDOWS MARKED WITH AN * MUST MEET EMERGENCY ESCAPE AND RESCUE (E.E.R.) REQUIREMENTS. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS MEETS (E.E.R.) REQUIREMENTS.

FOR ADDITIONAL INFORMATION SEE GENERAL NOTES, TYPICAL FINISH MATERIAL SPECIFICATIONS, WALL SECTIONS AND DETAILS.

PLUMBING NOTE: OFFSET ALL PLUMBING VENTS, DRYER VENTS, AND BATH FAN EXHAUST MIN. 5'-0" FROM CENTER LINE OF PARTY WALL TO AVOID PENETRATING FIRE RESISTANT ROOF SHEATHING.

FALL PROTECTION

IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.
2. WINDOW OPENING CONTROL DEVICES SHALL COMPLY WITH ASTM F2090.

THE WINDOW OPENING CONTROL DEVICE, AFTER OPERATION TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN, SHALL NOT REDUCE THE NET CLEAR OPENING AREA OF THE WINDOW UNIT.

Fieldstone

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Florida
12906 Tampa Oaks Blvd
Suite 150
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+1 813.466.3310
Minnesota
6500 City West Pkwy
Suite 300
Eden Prairie, MN 55344
+1 612.607.1105

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Meritage Homes

1127 Gateway Boulevard
Boynton Beach, FL 33426
561-847-7515 Phone

Control Date: 12/02/19

Date/Issued for:

Project Title
FRONT LOAD TOWNHOMES

Sheet Title
UNIT T148 - R
Floor Plans

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Sheet No.
A1.1R

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TYPICAL WALL TYPES

GENERAL NOTES - WALL TYPES

ALL INTERIOR PARTITIONS ARE WALL TYPE (1) U.N.O.

FOR ADDITIONAL INFORMATION ABOUT WALL ASSEMBLIES ALSO REFER TO SHEETS DESIGNATED AS:

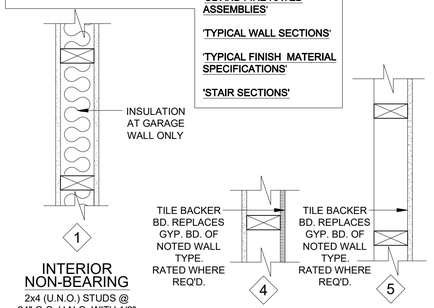
'FIRE RATING DETAILS'

'UL AND FIRE RATED ASSEMBLIES'

'TYPICAL WALL SECTIONS'

'TYPICAL FINISH MATERIAL SPECIFICATIONS'

'STAIR SECTIONS'



INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
-OR ALTERNATE-
METAL STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE

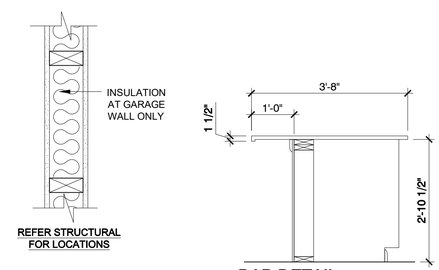
NON-RATED INTERIOR WALL

INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD BOTH SIDES.

NON-RATED INTERIOR FRAME WALL

INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD ONE SIDE. (P.T. WHEN AGAINST MASONRY)

NON-RATED INTERIOR FRAME WALL

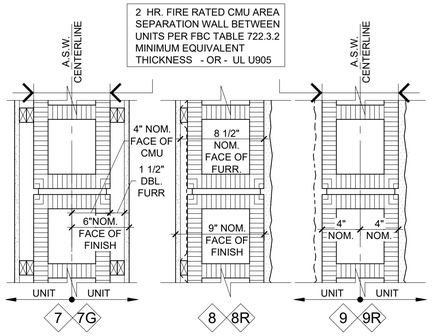


INTERIOR BEARING
2x4 (U.N.O.) STUDS @ 16" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE

NON-RATED INT. BEARING WALL

BAR DETAIL
SCALE: N.T.S.

2 HR. FIRE RATED CMU AREA SEPARATION WALL BETWEEN UNITS PER FBC TABLE 722.3.2 MINIMUM EQUIVALENT THICKNESS - OR - UL U905



TYPICAL AREA SEPARATION WALL
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 1/2" GYP. BD. OVER DOUBLE FURRING (1X2 PT) @ 24" O.C. (FURR FOR ELECTRICAL INSTALLATION). ACOUSTICAL INSULATION PER COMMUNITY / DEVELOPERS SPEC.

7G GARAGE: EXPOSED CMU, STRUCK JOINTS, PAINTED, (NO FURRING OR GYPSUM BOARD).

(2) HOUR RATED WALL AREA SEPARATION

TYPICAL FIRST FL. EXTERIOR
8" CONCRETE BLOCK EXTERIOR WALL W/ 1/2" GYP. BD. OVER RADIANT BARRIER INSULATION OVER 1X2 PT. FURRING @ 24" O.C.ON INTERIOR FACE OF WALL. STUCCO ON EXTERIOR BLOCK
(1) HR RATED BY EQUIVALENT THICKNESS AT TYPE 8R

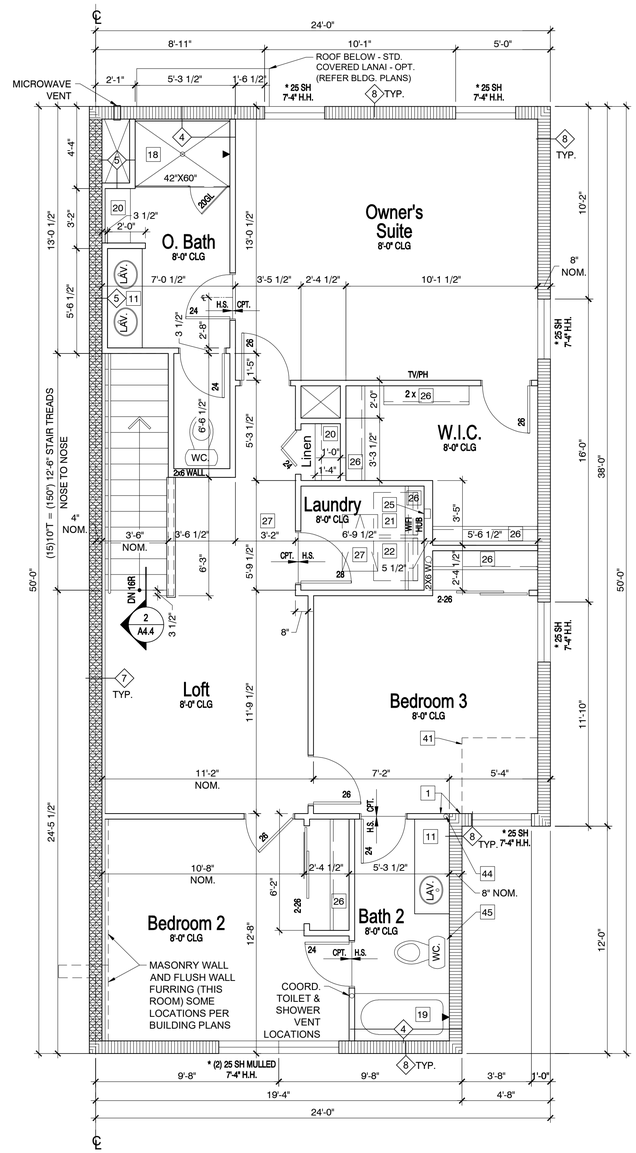
EXTERIOR CONC. BLOCK WALL

CMU - A.S.W. AT EXTERIOR 9R
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 5/8" MIN.STUCCO AT EXTERIOR CONDITIONS.

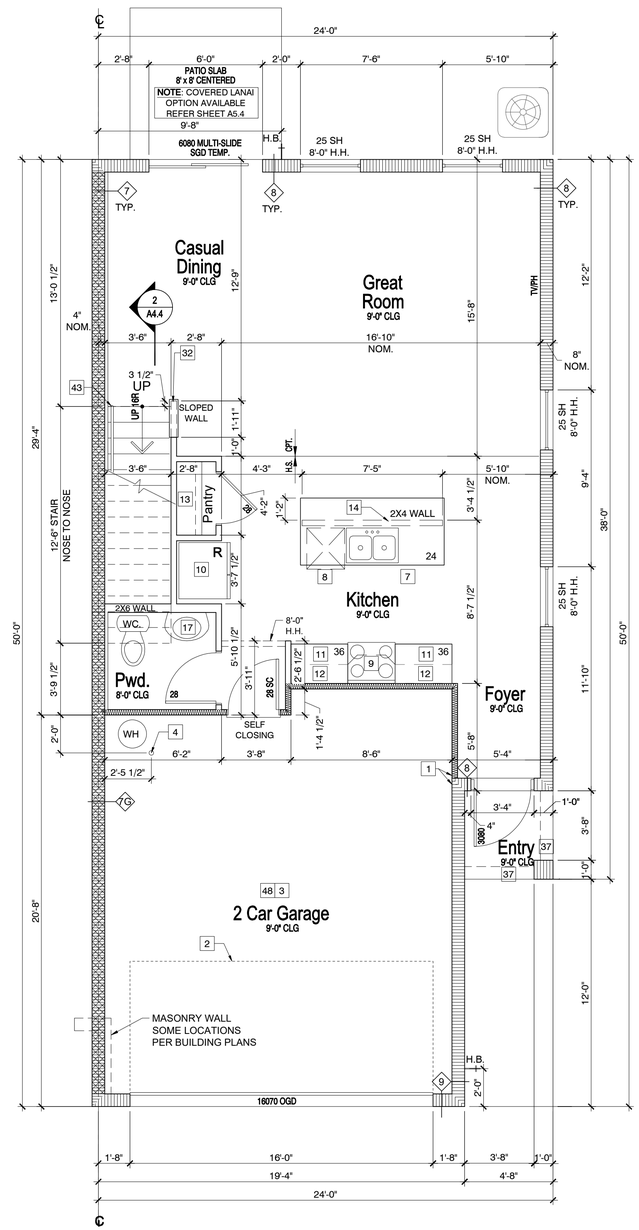
9

GARAGE: NON RATED, EXPOSED CMU, STRUCK JOINTS, PAINTED. EXTERIOR 5/8" MIN.STUCCO

(2) HOUR RATED WALL AREA SEPARATION



SECOND FLOOR PLAN - UNIT T179 (END)
LEFT HAND
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"



FIRST FLOOR PLAN - UNIT T179 (END)
LEFT HAND
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"

T179 - LN	
UNIT SQ. FTG. TABLE	
1st FLOOR	714 SQ. FT.
2nd FLOOR	1094 SQ. FT.
TOTAL A/C	1808 SQ. FT.
GARAGE	408 SQ. FT.
ENTRY	22 SQ. FT.
TOTAL UR	2238 SQ. FT.

FLOOR PLAN NOTES:

THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. FLUSH THE FACE OF FINISHES
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. 36" HIGH BOLLARD
5. STAIR PER GOVERNING CODE.
6. 2x4 W/ GYP. BOARD CLOSURE UNDER STAIR
7. SINK W/GARBAGE DISPOSAL.
8. DISHWASHER.
9. RANGE w/ HOOD OR MICRO ABOVE PER SPEC.
10. REFRIGERATOR.
11. BASE CABINETS.
12. UPPER CABINETS.
13. PANTRY - (4) 12" D. SHELVES
14. HALF WALL +34 1/2" A.F.F. W/ COUNTERTOP PER PLAN.
15. OPTIONAL UPPER CABINETS.
16. OPTIONAL CABINETS.
17. PEDESTAL SINK.
18. TILED SHOWER W/TEMPERED GLASS ENCLOSURE, PER BUILDER SPEC.
19. 30" X 60" TUB/SHOWER
20. LINEN SHELVES, PER BUILDER SPEC.
21. WASHER SPACE W/ DRAIN PAN BELOW. PROVIDE DRAIN PAN TO EXTERIOR
22. DRYER SPACE w/ VENT TO EXTERIOR.
23. STACKED WASHER/ DRYER.
24. OPTIONAL LAUNDRY SINK.
25. HANSON BOX
26. ROD & SHELF, PER BUILDER SPECS.
27. ATTIC ACCESS (22"x36" U.N.O.).
28. ATTIC ACCESS W/ STAIRS (22 1/2"x54" U.N.O.).
29. GYPSUM BOARD OPENING.
30. OPTIONAL PRE-PLUMB FOR LAUNDRY SINK.
31. OPTIONAL COFFERED CEILING (AS NOTED PER PLAN)
32. 2X4 LOW WALL w/ GYPSUM BOARD & WOOD CAP - 42" HT. MIN.
33. 2X4 LOW WALL 42" A.F.F.
34. N/A
35. LOW WALL 32 1/2" A.F.F.
36. N/A
37. SOFFIT OR BEAM ABOVE, REFER TO STRUCTURAL & EXTERIOR ELEVATIONS FOR HEIGHTS & FINISHES.
38. PLANT SHELF
39. N/A
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. MASONRY PER BUILDER SPEC, SEE EXTERIOR ELEVATIONS.
43. HANDRAIL AT +36" ABV. STAIR NOSING OR LANDING - PER CODE - ALSO REFER STAIR SECTIONS.
44. COORD. PLUMBING SUPPLY & VENT IN FRAME OR MASONRY WALL
45. COORD. TOILET SUPPLY IN MASONRY WALL OR THROUGH FLOOR
46. N/A
47. INSTALL 1/2" GYP. AT WALLS & CEILINGS OF ACCESSIBLE AREAS UNDER STAIRS
48. INSTALL 1/2" GYP. BD. ON GARAGE SIDE OF WALL BETWEEN GARAGE & LIVING, INSTALL 5/8" TYPE 'X' GYP BD. ON GARAGE CEILING AT AREA BETWEEN LIVING ABOVE AND GARAGE

GENERAL PLAN NOTES:

ALL INTERIOR DOORS ARE 6'-8" HEIGHT PER BUILDER SPEC.

DOOR WIDTH DESIGNATIONS: 20 = 2'-0"; 24 = 2'-4"; ETC.

GARAGE DOORS SHALL BE SOLID CORE DOOR, A MIN. 1 3/8" THICK w/ CLOSER.

WINDOWS MARKED WITH AN * MUST MEET EMERGENCY ESCAPE AND RESCUE (E.E.R.) REQUIREMENTS. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS MEETS (E.E.R.) REQUIREMENTS.

FOR ADDITIONAL INFORMATION SEE GENERAL NOTES, TYPICAL FINISH MATERIAL SPECIFICATIONS, WALL SECTIONS AND DETAILS.

PLUMBING NOTE: OFFSET ALL PLUMBING VENTS, DRYER VENTS, AND BATH FAN EXHAUST MIN. 5'-0" FROM CENTER LINE OF PARTY WALL TO AVOID PENETRATING FIRE RESISTANT ROOF SHEATHING.

FALL PROTECTION

IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.
2. WINDOW OPENING CONTROL DEVICES SHALL COMPLY WITH ASTM F2090.

THE WINDOW OPENING CONTROL DEVICE, AFTER OPERATION TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN, SHALL NOT REDUCE THE NET CLEAR OPENING AREA OF THE WINDOW UNIT.

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Control Date: 12/02/19

Date/Issued for:

Project Title
FRONT LOAD TOWNHOMES

Sheet Title
Unit T179 (end) - L
Floor Plans

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Sheet No.
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TYPICAL WALL TYPES

GENERAL NOTES - WALL TYPES

ALL INTERIOR PARTITIONS ARE WALL TYPE 1 U.N.O.

FOR ADDITIONAL INFORMATION ABOUT WALL ASSEMBLIES ALSO REFER TO SHEETS DESIGNATED AS:

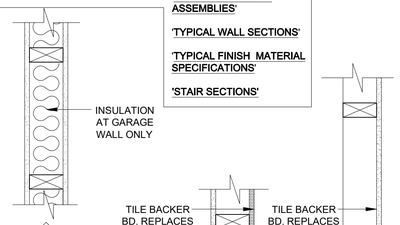
'FIRE RATING DETAILS'

'UL AND FIRE RATED ASSEMBLIES'

'TYPICAL WALL SECTIONS'

'TYPICAL FINISH MATERIAL SPECIFICATIONS'

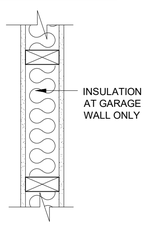
'STAIR SECTIONS'



1 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
-OR ALTERNATE-
METAL STUDS @ 24" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
NON-RATED INTERIOR WALL

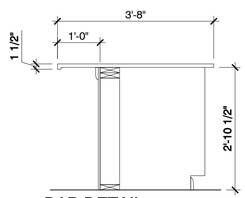
4 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD BOTH SIDES.
NON-RATED INTERIOR FRAME WALL

5 INTERIOR NON-BEARING
2x4 (U.N.O.) STUDS @ 24" O.C. WITH 1/2" GYPSUM BOARD ONE SIDE. (P.T. WHEN AGAINST MASONRY)
NON-RATED INTERIOR FRAME WALL



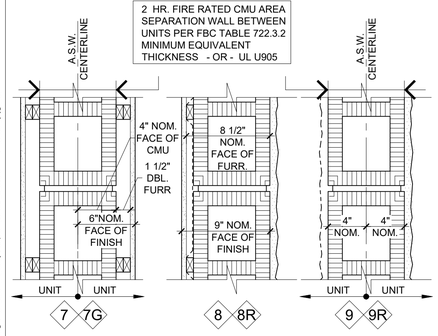
REFER STRUCTURAL FOR LOCATIONS

INTERIOR BEARING
2x4 (U.N.O.) STUDS @ 16" O.C. U.N.O. WITH 1/2" GYP. BOARD EACH SIDE
NON-RATED INT. BEARING WALL



BAR DETAIL
SCALE: N.T.S.

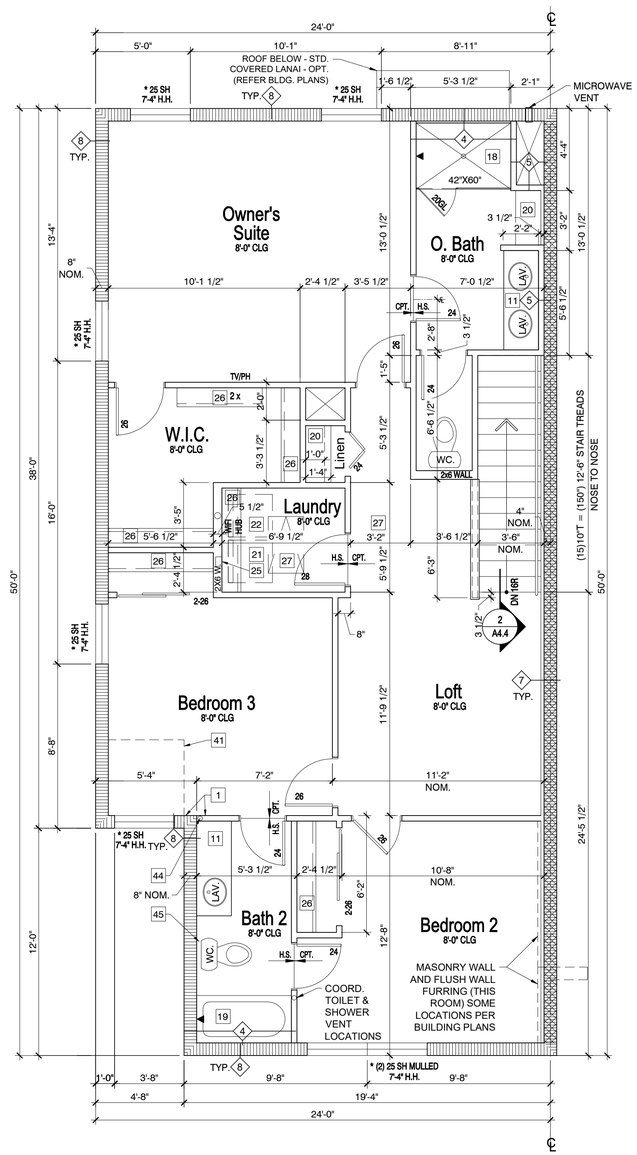
2 HR. FIRE RATED CMU AREA SEPARATION WALL BETWEEN UNITS PER FBC TABLE 722.3.2 MINIMUM EQUIVALENT THICKNESS - OR - UL U905



7 7G TYPICAL AREA SEPARATION WALL
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 1/2" GYP. BD. OVER DOUBLE FURRING (1X2 PT) @ 24" O.C. (FURR FOR ELECTRICAL INSTALLATION). ACOUSTICAL INSULATION PER COMMUNITY / DEVELOPERS SPEC.
7G GARAGE: EXPOSED CMU, STRUCK JOINTS, PAINTED, (NO FURRING OR GYPSUM BOARD).
(2) HOUR RATED WALL AREA SEPARATION

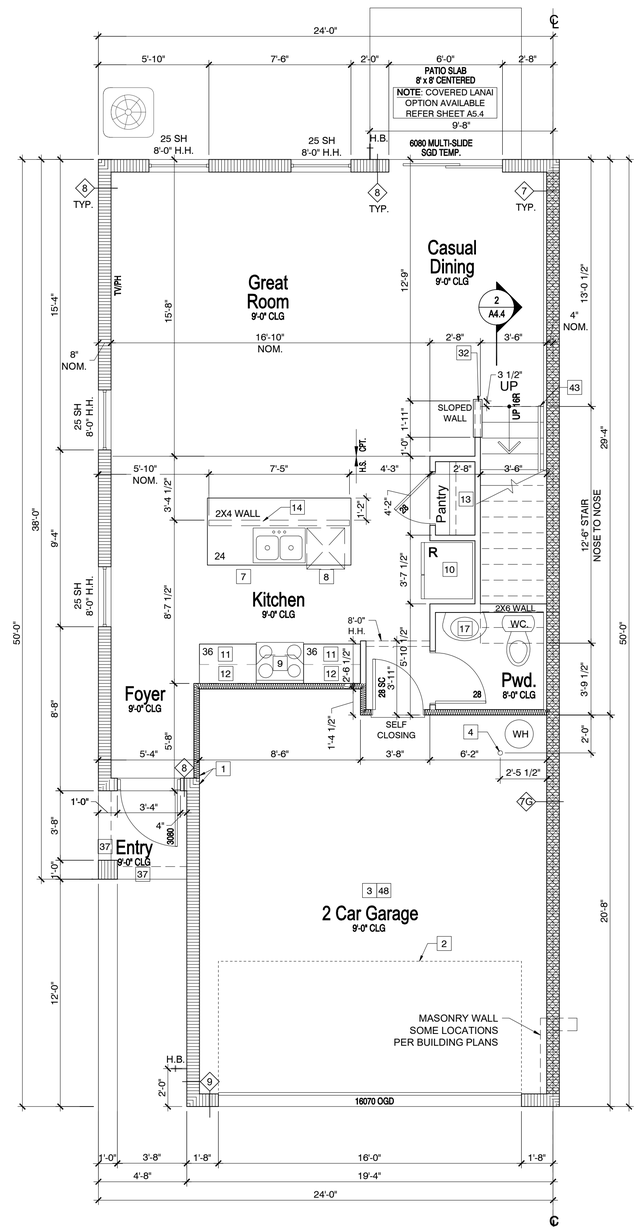
8 8R TYPICAL FIRST FL. EXTERIOR
8" CONCRETE BLOCK EXTERIOR WALL W/ 1/2" GYP. BD. OVER RADIANT BARRIER INSULATION OVER 1X2 PT. FURRING @ 24" O.C.ON INTERIOR FACE OF WALL. STUCCO ON EXTERIOR BLOCK
(1) HR RATED BY EQUIVALENT THICKNESS AT TYPE 8R
EXTERIOR CONC. BLOCK WALL

9 9R CMU - A.S.W. AT EXTERIOR
8" CONCRETE BLOCK WALL (SEE FIRE RATING INFO ABOVE) W/ 5/8" MIN.STUCCO AT EXTERIOR CONDITIONS.
9 GARAGE: NON RATED, EXPOSED CMU, STRUCK JOINTS, PAINTED. EXTERIOR 5/8" MIN.STUCCO
(2) HOUR RATED WALL AREA SEPARATION



SECOND FLOOR PLAN - UNIT T179 (END)
RIGHT HAND
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"

T179 - LN	
UNIT SQ. FTG. TABLE	
1st FLOOR	714 SQ. FT.
2nd FLOOR	1094 SQ. FT.
TOTAL A/C	1808 SQ. FT.
GARAGE	408 SQ. FT.
ENTRY	22 SQ. FT.
TOTAL UR	2238 SQ. FT.



FIRST FLOOR PLAN - UNIT T179 (END)
RIGHT HAND
22x34 SCALE: 1/4" =1'-0"
11x17 SCALE: 1/8" =1'-0"

FLOOR PLAN NOTES:

THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. FLUSH THE FACE OF FINISHES
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. 36" HIGH BOLLARD
5. STAIR PER GOVERNING CODE.
6. 2x4 W/ GYP. BOARD CLOSURE UNDER STAIR
7. SINK W/GARBAGE DISPOSAL.
8. DISHWASHER.
9. RANGE w/ HOOD OR MICRO ABOVE PER SPEC.
10. REFRIGERATOR.
11. BASE CABINETS.
12. UPPER CABINETS.
13. PANTRY - (4) 12" D. SHELVES
14. HALF WALL +34 1/2" A.F.F. W/ COUNTERTOP PER PLAN.
15. OPTIONAL UPPER CABINETS.
16. OPTIONAL CABINETS.
17. PEDESTAL SINK.
18. TILED SHOWER W/TEMPERED GLASS ENCLOSURE, PER BUILDER SPEC.
19. 30" X 60" TUB/SHOWER
20. LINEN SHELVES, PER BUILDER SPEC.
21. WASHER SPACE W/ DRAIN PAN BELOW. PROVIDE DRAIN PAN TO EXTERIOR
22. DRYER SPACE w/ VENT TO EXTERIOR.
23. STACKED WASHER/ DRYER.
24. OPTIONAL LAUNDRY SINK.
25. HANSON BOX
26. ROD & SHELF, PER BUILDER SPECS.
27. ATTIC ACCESS (22"x36" U.N.O.).
28. ATTIC ACCESS W/ STAIRS (22 1/2"x54" U.N.O.).
29. GYPSUM BOARD OPENING.
30. OPTIONAL PRE-PLUMB FOR LAUNDRY SINK.
31. OPTIONAL COFFERED CEILING (AS NOTED PER PLAN)
32. 2X4 LOW WALL w/ GYPSUM BOARD & WOOD CAP - 42" HT. MIN.
33. 2X4 LOW WALL 42" A.F.F.
34. N/A
35. LOW WALL 32 1/2" A.F.F.
36. N/A
37. SOFFIT OR BEAM ABOVE, REFER TO STRUCTURAL & EXTERIOR ELEVATIONS FOR HEIGHTS & FINISHES.
38. PLANT SHELF
39. N/A
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. MASONRY PER BUILDER SPEC, SEE EXTERIOR ELEVATIONS.
43. HANDRAIL AT +36" ABV. STAIR NOSING OR LANDING - PER CODE - ALSO REFER STAIR SECTIONS.
44. COORD. PLUMBING SUPPLY & VENT IN FRAME OR MASONRY WALL
45. COORD. TOILET SUPPLY IN MASONRY WALL OR THROUGH FLOOR
46. N/A
47. INSTALL 1/2" GYP. AT WALLS & CEILINGS OF ACCESSIBLE AREAS UNDER STAIRS
48. INSTALL 1/2" GYP. BD. ON GARAGE SIDE OF WALL BETWEEN GARAGE & LIVING, INSTALL 5/8" TYPE 'X' GYP BD. ON GARAGE CEILING AT AREA BETWEEN LIVING ABOVE AND GARAGE

GENERAL PLAN NOTES:

ALL INTERIOR DOORS ARE 6'-8" HEIGHT PER BUILDER SPEC.

DOOR WIDTH DESIGNATIONS: 20 = 2'-0"; 24 = 2'-4"; ETC.

GARAGE DOORS SHALL BE SOLID CORE DOOR, A MIN. 1 3/8" THICK w/ CLOSER.

WINDOWS MARKED WITH AN * MUST MEET EMERGENCY ESCAPE AND RESCUE (E.E.R.) REQUIREMENTS. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS MEETS (E.E.R.) REQUIREMENTS.

FOR ADDITIONAL INFORMATION SEE GENERAL NOTES, TYPICAL FINISH MATERIAL SPECIFICATIONS, WALL SECTIONS AND DETAILS.

PLUMBING NOTE: OFFSET ALL PLUMBING VENTS, DRYER VENTS, AND BATH FAN EXHAUST MIN. 5'-0" FROM CENTER LINE OF PARTY WALL TO AVOID PENETRATING FIRE RESISTANT ROOF SHEATHING.

FALL PROTECTION

IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLE WINDOW OPENING IS LOCATED LESS THAN 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES (1829 MM) ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4-INCH-DIAMETER (102 MM) SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.
2. WINDOW OPENING CONTROL DEVICES SHALL COMPLY WITH ASTM F2090.

THE WINDOW OPENING CONTROL DEVICE, AFTER OPERATION TO RELEASE THE CONTROL DEVICE ALLOWING THE WINDOW TO FULLY OPEN, SHALL NOT REDUCE THE NET CLEAR OPENING AREA OF THE WINDOW UNIT.

Fieldstone

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+1 813.466.3310
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Suite 300
Eden Prairie, MN 55344
+1 612.607.1105

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Meritage Homes

1127 Gateway Boulevard
Boynton Beach, FL 33426
561-847-7515 Phone

Control Date: 12/02/19

Date/Issued for:

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Project Title
FRONT LOAD TOWNHOMES

Sheet Title
Unit T179 (end) - R
Floor Plans

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Sheet No.
A1.4Re

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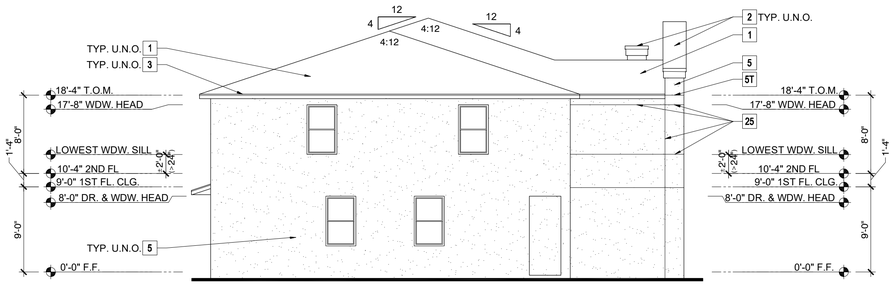
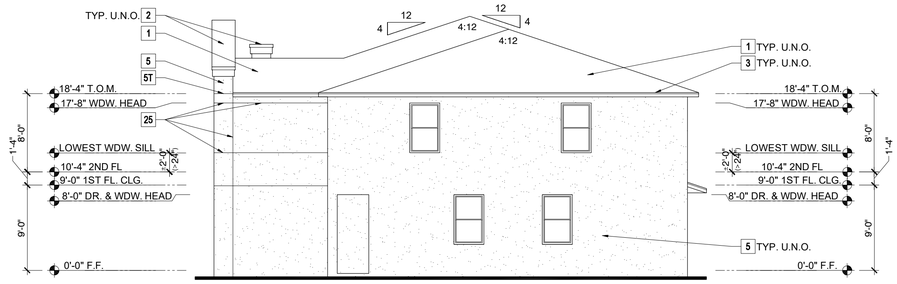


2 Car-T179-Sandpiper
GARAGE RIGHT

6-UNIT BUILDING - LEFT ELEVATION
22x34 SCALE: 1/8" =1'-0"
11x17 SCALE: 1/16" =1'-0"
Contemporary Elevation



2 Car-T179-Sandpiper
GARAGE LEFT

6-UNIT BUILDING - RIGHT ELEVATION
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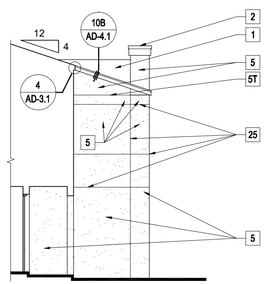
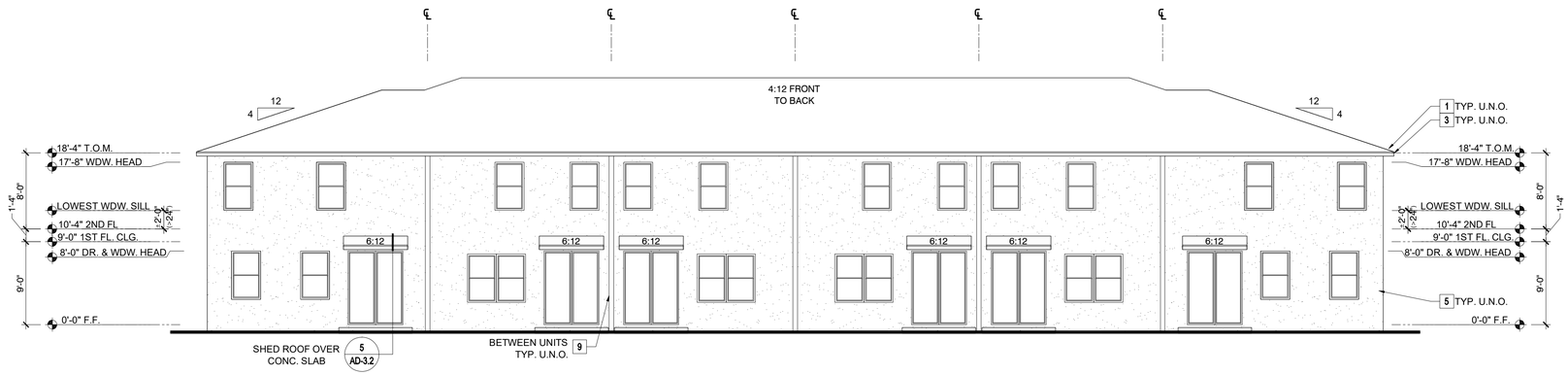
11x17 SCALE: 1/16" =1'-0"
Contemporary Elevation



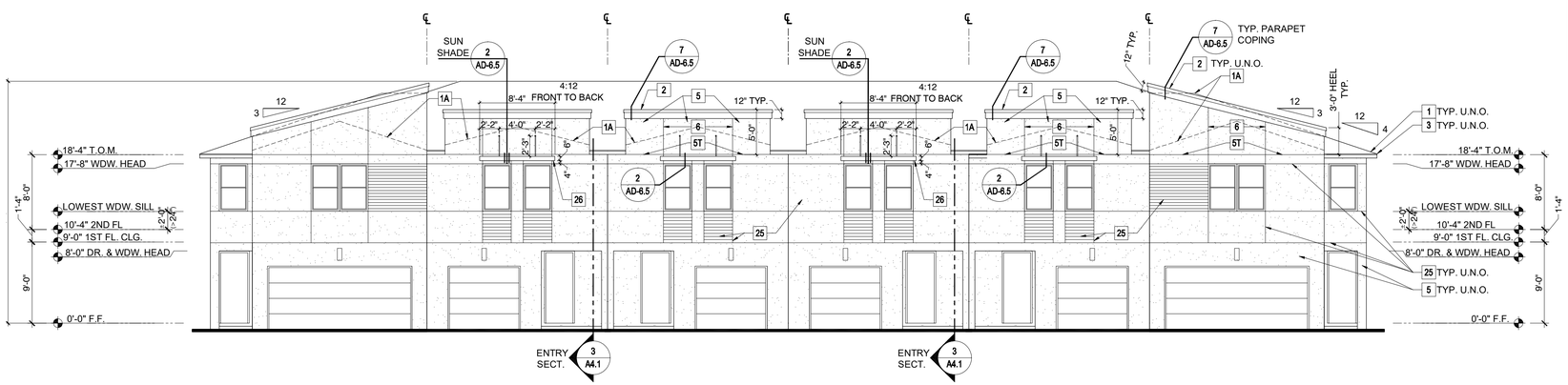
1 Car-T148-Pompano

2 A3.1 6-UNIT BUILDING - ENTRY ELEVATION
22x34 SCALE: 1/8" =1'-0"
11x17 SCALE: 1/16" =1'-0"



2 Car-T179-Sandpiper (GARAGE LEFT) | 1 Car-T148-Pompano (GARAGE RIGHT) | 1 Car-T148-Pompano (GARAGE LEFT) | 1 Car-T148-Pompano (GARAGE RIGHT) | 1 Car-T148-Pompano (GARAGE LEFT) | 2 Car-T179-Sandpiper (GARAGE RIGHT)

6-UNIT BUILDING - REAR ELEVATION
22x34 SCALE: 1/8" =1'-0"
11x17 SCALE: 1/16" =1'-0"
Contemporary Elevation



2 Car-T179-Sandpiper (GARAGE RIGHT) | 1 Car-T148-Pompano (GARAGE LEFT) | 1 Car-T148-Pompano (GARAGE RIGHT) | 1 Car-T148-Pompano (GARAGE LEFT) | 1 Car-T148-Pompano (GARAGE RIGHT) | 2 Car-T179-Sandpiper (GARAGE LEFT)

4-UNIT BUILDING - FRONT ELEVATION
22x34 SCALE: 1/8" =1'-0"
11x17 SCALE: 1/16" =1'-0"
Contemporary Elevation

ELEVATION KEY NOTES:

THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS:

1. ROOFING PER BUILDER SPEC.
1A. LINE OF ROOF BEYOND
2. CONTINUOUS METAL COPING PER BLDR. SPEC.
3. DRIP EDGE & FASCIA - PER BUILDERS SPEC.
4. CEMENT BOARD RAKE.
5. CEMENT PLASTER FINISH - ASTM C-926.
5T. STUCCO TRANSITION, PER DETAIL 4/AD-6.5
6. CONTROL JOINT
7. 2" X 1" TRIM.
8. 4" X 1" TRIM.
9. 6" X 1" TRIM.
10. 8" X 1" TRIM.
11. 10" X 1" TRIM.
12. 12" X 1" TRIM.
13. 6" FRIEZE.
14. SHAKE SIDING.
15. 6" FIBER/CEMENT SIDING - PER BUILDER SPEC.
16. SIMULATED STONE VENEER - PER BUILDER SPEC.
17. SIMULATED STONE SILL CAP - PER BUILDER SPEC.
18. THIN SET BRICK SOLDIER HEADER.
19. DECORATIVE TRIM - PER PROFILE & BLDR. SPEC.
20. DECORATIVE CORBEL-PER PROFILE & BLDR. SPEC.
21. DECORATIVE BRACKET - PER PROFILE & BLDR. SPEC.
22. 8" SIMULATED WOOD HEADER.
23. DECORATIVE SHUTTER (SIZE AS NOTED).
24. DECORATIVE LOUVER (SIZE AS NOTED).
25. SCORED STUCCO - PER BLDR. SPEC & MOCK-UP
26. ALUMINUM SUN SHADE PER BUILDER SPEC. (PER DELEGATED ENGINEER DRAWING)
27. + 1/2" PAINTED C.M.F. REVEAL.
28. DECORATIVE COLUMN 1/2" HARDI FINISH (FINISHED SIZE AS NOTED, REFERENCE STRUCTURAL PLANS FOR LOAD BEARING COLUMNS).
29. PRE FABRICATED DECORATIVE ROUND COLUMN PER BUILDER SPEC.
30. PLANT SHELF.
31. 8" DIAMETER FAUX CLAY PIPES.
32. PENT ROOF.
33. 6" WOOD PLANK.
34. 2" SCUPPER.
35. BOARD & BATTEN.
36. EXP. JOINT/ WEEP TRANSITION PER DETAILS
37. 2" X 2" TRIM (SLOPE TO DRAIN)

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561-847-7515 Phone

Control Date: 02-21-2021

Date/Issued for:

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Project Title
FRONT LOAD TOWNHOMES

Sheet Title
6-UNIT Bldg Mix Contemporary

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Sheet No.
A3.1

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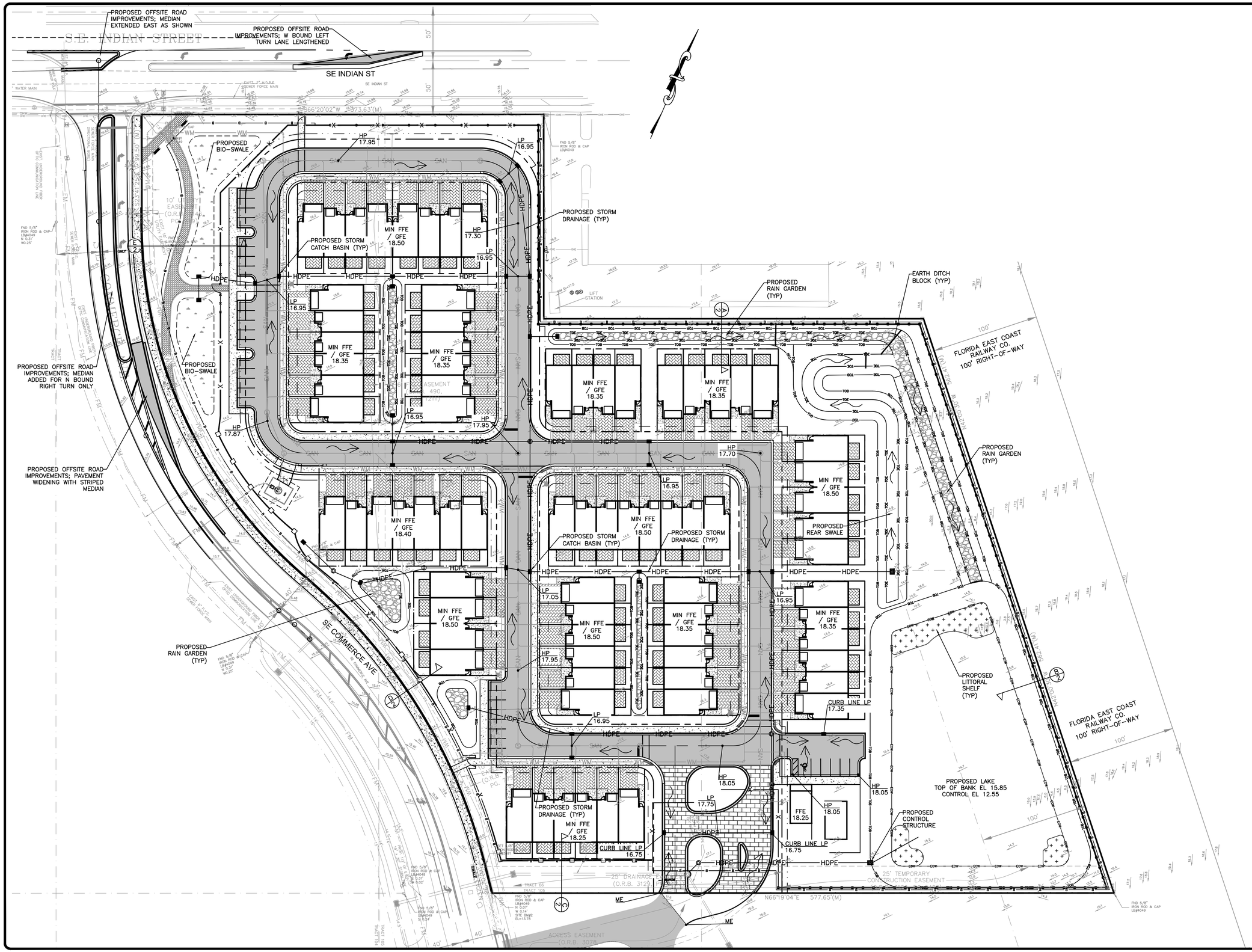

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CIVIL ENGINEERS
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UNIT 104
PORT ST. LUCIE, FL 34984

PH: (772) 223-8850
FAX: (772) 223-8851

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CERTIFICATE OF AUTHORIZATION: 28246

MASTER PAVING, GRADING AND DRAINAGE PLAN

SILVERTHORNE

STUART, FLORIDA

KENNETH M. RAU
LICENSE
No. 77738
Mar 10 2022
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SHEET NO.

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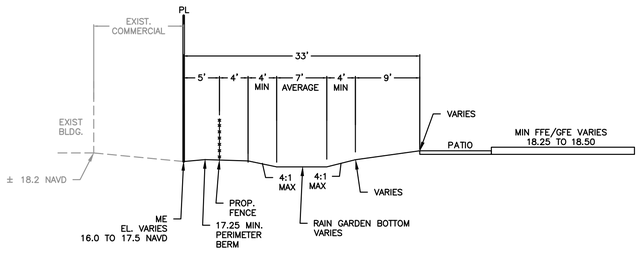

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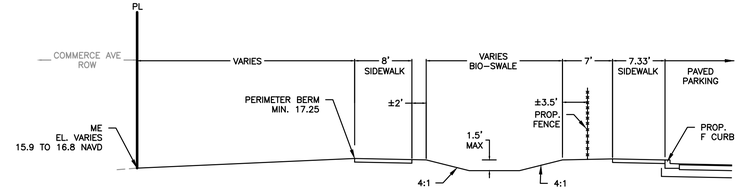

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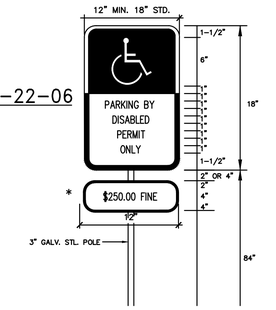
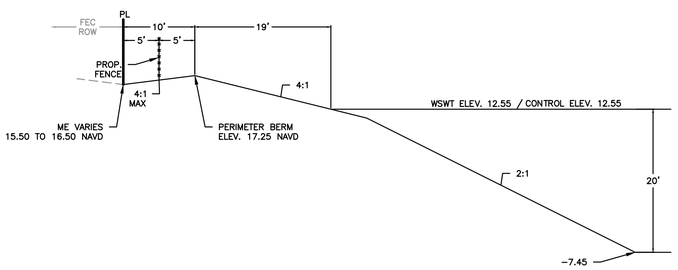


SIGNS FTP-25 SHALL BE IN ACCORDANCE WITH F.D.O.T. INDEX NO. 700-102 AND SHALL MEET THE REQUIREMENTS OF FLORIDA STATUTES 316.1955 AND 316.1956.

SIGNS "$250.00 FINE" PER LOCAL REQUIREMENTS.

ACCESSIBLE SIGN 13



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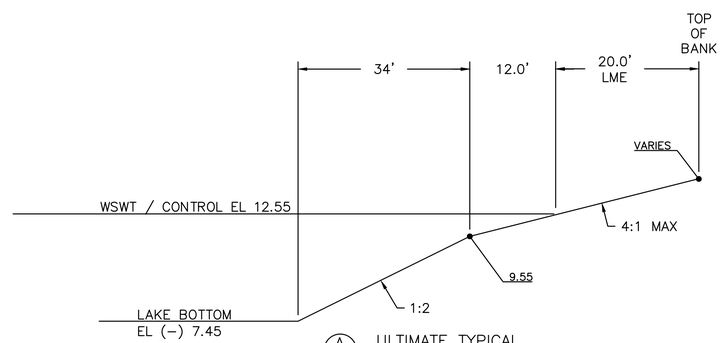
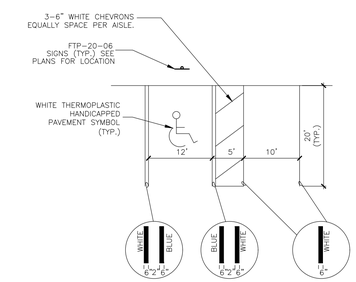


A ULTIMATE TYPICAL LAKE SECTION WITHOUT LITTORALS



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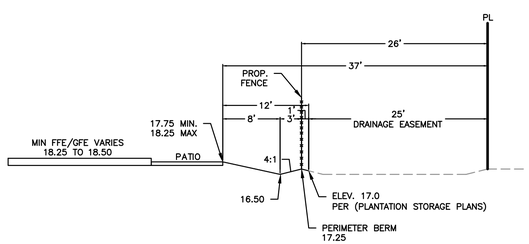
PER FDOT INDEX NO. 711-001



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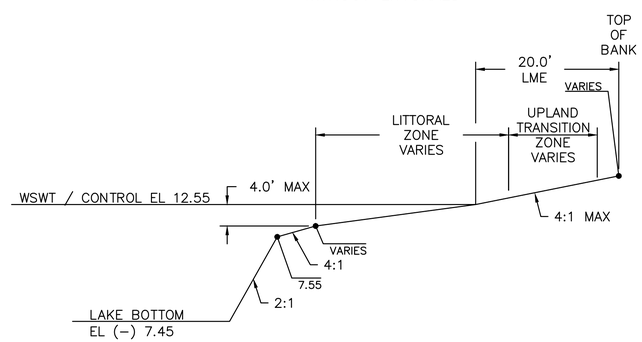
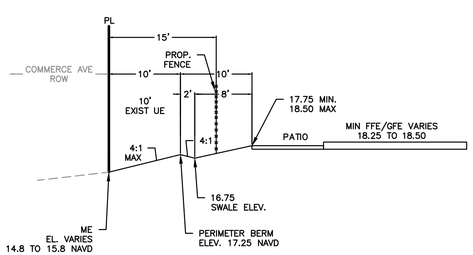


C ULTIMATE TYPICAL LAKE SECTION WITH LITTORALS



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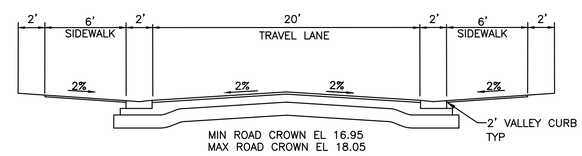

TYPICAL ROAD R/W H

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MASTER PAVING, GRADING AND DRAINAGE DETAILS AND SECTIONS

SILVERTHORNE
STUART, FLORIDA

KENNETH M. RAU LICENSE No. 77718 Mar 10 2022 STATE OF FLORIDA PROFESSIONAL ENGINEER

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2

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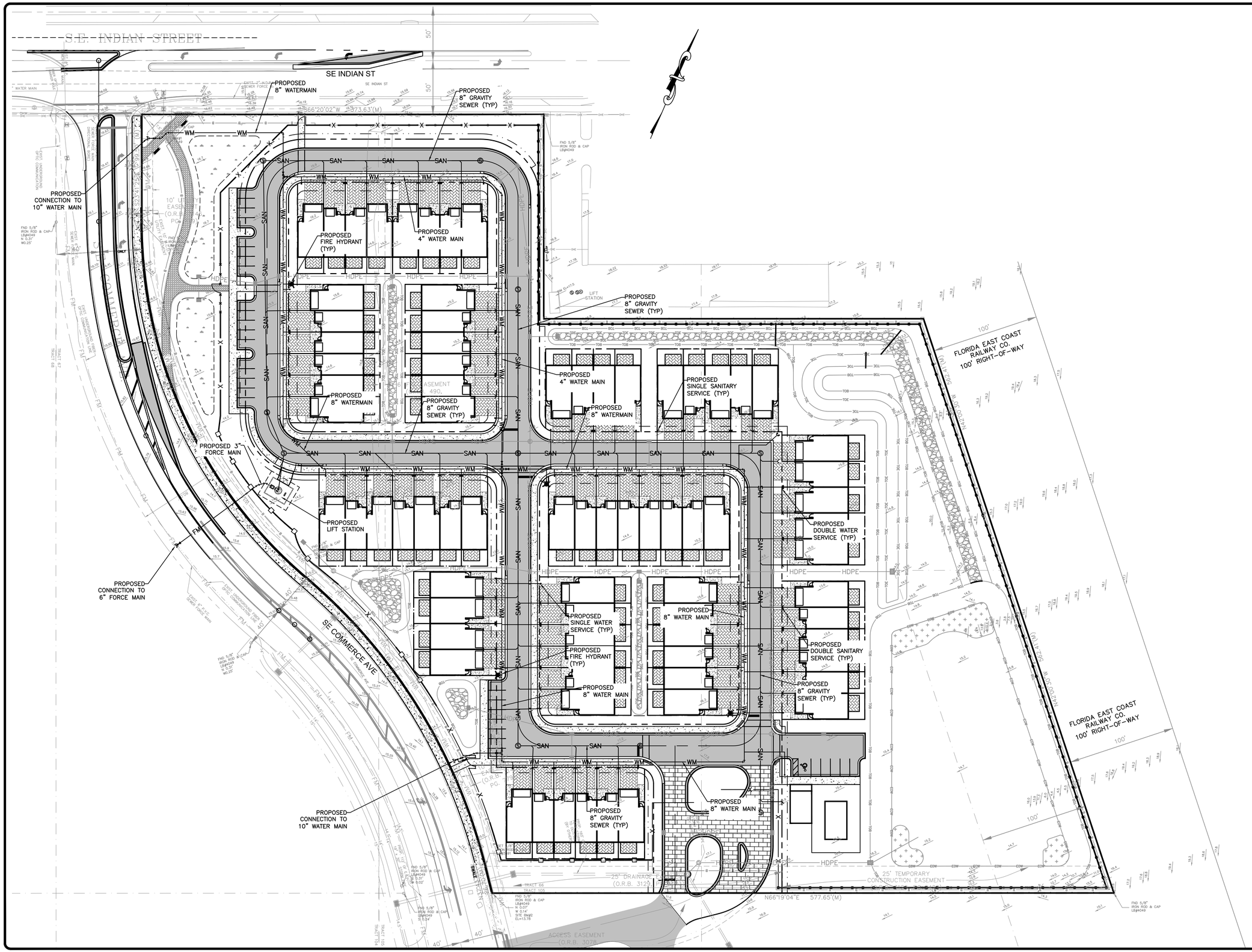

SILVERTHORNE
STUART, FLORIDA

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MASTER WATER AND SEWER PLAN

SILVERTHORNE

STUART, FLORIDA

KENNETH M. RAU
LICENSE
No. 77738
Mar 10 2022
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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City of Stuart

Staff Review

3.17.22

A. Application

Silverthorne RPUD
Rezoning and Small-Scale Land Use Amendment
Application Number: Z210140001

Applicant	Michael DAmelio - Meritage
Property Owner	Ted Glasrud Associates FL, LLC
Agent for Applicant	Doug Fitzwater
Project Manager	Tom Reetz, Senior Planner
Date of Report	March 17, 2022

C. Project Description

Address	Southeast Corner of SE Indian Street and Commerce Avenue
Parcel Number(s)	38-38-41-002-065-00010-3
Existing Zoning	Commercial Planned Unit Development
Future Land Use	Commercial (C)
Site Area (acres)	9.5 Acres
Present Use	Vacant -undeveloped
Subject Property Land Use	Vacant Commercial
Proposed Land Use Designation	Multi-Family
Subject Property Zoning	CPUD
Proposed Zoning District	Residential Planned Unit Development RPUD
Proposed Use	Multi-Family – 77 Townhomes

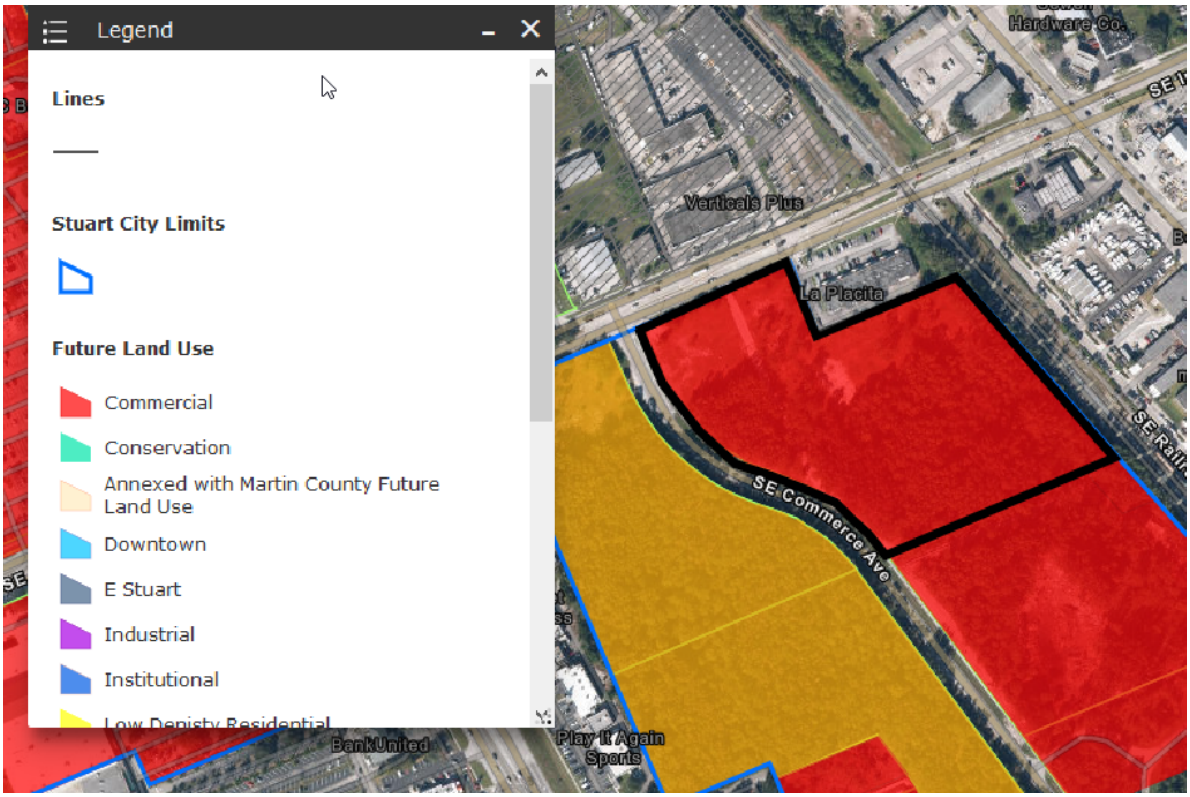
D. Location and site information

City Approvals	Building Department – No comments. Fire Department – See comments and response Public Works – See comments and response Planning and Zoning – See comments and response
Staff Recommendation	Applicant has responded to each of the comments in writing and resubmitted drawings as necessary.

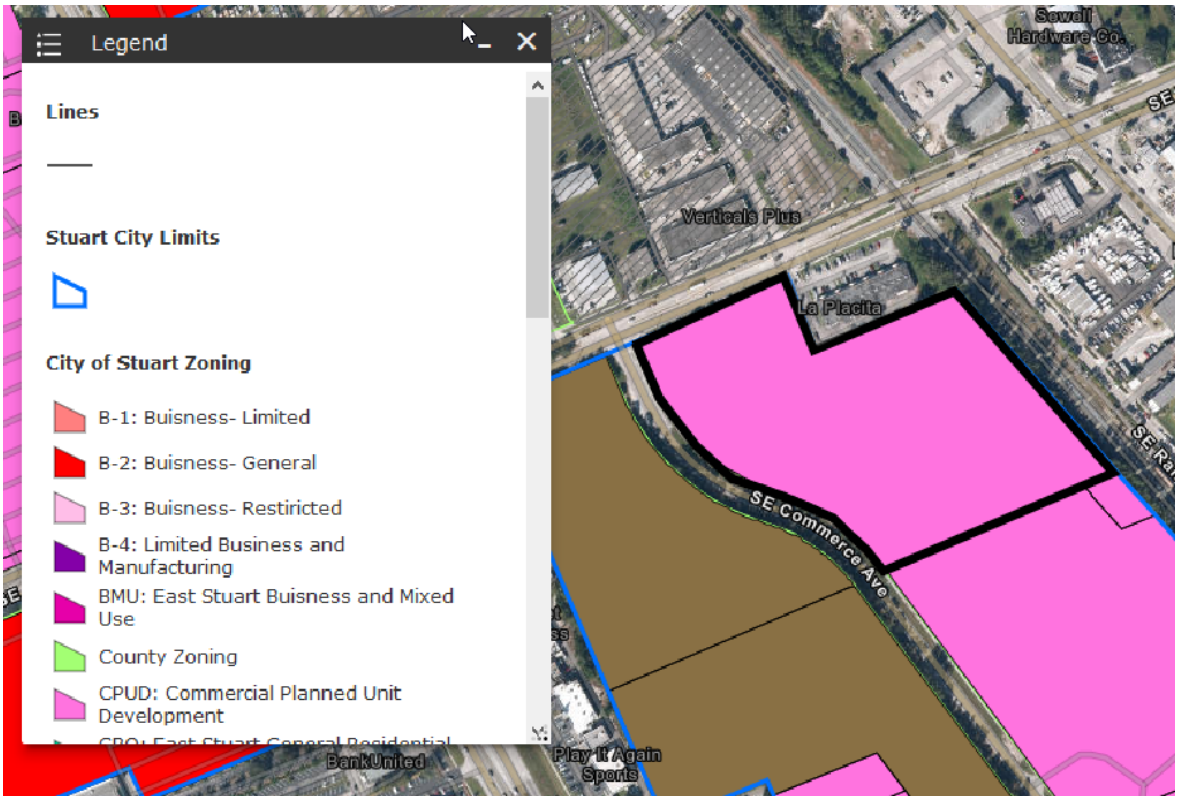
Aerial Map

SE Carnivale CT
SE Indian ST
SE Alamo Ave
SE Birch Ave
SE Federal Hwy
SE Dixie Hwy
SE Commerce Ave
SE Fischer ST

Existing Land Use Map



Existing Zoning Map



E. Determination of compliance with Comprehensive Plan

The Applicant is proposing to modify the existing CPUD zoning to a RPUD zoning district and change the Land use from Commercial to Multi-Family to allow for the construction of seventy-seven townhome units.

The proposed redevelopment of the site is compatible with the following Goals, Objectives, and Policies of the Comprehensive Plan:

Policy 1.A3.2. The City's Future Land Use Map and land development regulations shall direct development to areas where adequate utilities, services schools exist or are planned in order to protect natural resources.

Policy 1.A7.1. The City of Stuart has designated the following land use categories and allowed uses for all land within the City of Stuart: …(B) Multi-Family Residential: One to three or more dwelling units per building. Includes single family detached, duplex, townhomes, patio homes, garden homes, apartments, condominiums, foster homes, group homes of four or fewer unrelated residents, and adult congregate living facilities (ACLF) of five or fewer unrelated residents. A limited amount of Commercial is allowed. Stealth communication towers are allowed. Also, public facilities, churches, day care centers, schools and electric distribution substations are allowed. Staff review requests further information as mentioned in the below review comments to determine compliance with the below Goals, Objectives, and Policies of the Comprehensive Plan:

Policy 1.A7.2. Gross densities, gross intensities and proportional use amounts for each land use category are established in the "Table of Land Use Densities and Intensities" that is adopted as part of this element…

Land Use Category	In/Out CRA	% Residential	General	>2.0 FAR	% Non-residential
Multi-Family	Out	70—100%	<3.0 FAR	<0.5 FAR	0—30%

F. List of changes, additions and amenities by applicant/developer since LPA

<u>Site Plan Modifications Since Local Planning Agency Meeting</u>

- Redesign of the site plan to adopt a low impact development features to enhance stormwater runoff, treatment and to beautify the community;
- Removed rear facing units on the corner of Indian Street and Commerce Avenue to provide an improved elevation and introduction to the project;
- Use of precast walls, decorative aluminum fencing and pedestrian gates on Indian Street and Commerce Avenue to allow greater connectivity of project to the community;

- Innovation District monument sign at Indian Street and Commerce Avenue;
- Lowered project density from 86 to 77 units;
- Reduction of density to 8.1 units per acre;
- Traffic Impact Reduction to 569 Average Daily Trips;
- Enhanced pedestrian park at corner of Indian Street and Commerce Avenue to include meandering walk and plaza;
- Traffic safety and flow improvements to Indian Street and Commerce Avenue as requested by Martin County Public Works.
- Landscape improvements in Martin County right-of-way to be maintained by the Silverthorn HOA.

Project Amenities for Residents exceeding minimum design standards

- Pavers on front and rear patios;
- Vehicular Pavers at community entrance and on all driveways;
- Pool and Cabana;
- Two EV Charging stations at common parking area;
- Additional visitor parking;

Stormwater and Landscape Enhancements

- Water Quality Treatment Volume increased to providing 179% of the City of Stuart's and SFWMD standards;
- Swales rain gardens, and bioswales provide nutrient removal and water quality benefits prior to runoff, providing benefits *in excess* of the requirements set forth by the City of Stuart and SFWMD;
- Bioswales along perimeter of property and between buildings;
- 1 acre lake with lake fountain and four Beesmats at corners of lake;
- Littoral plantings with native vegetation;
- Tree preservation of seventeen existing trees and palms on site;
- Relocation of seventy-three sabal palms on site;
- Providing 636 trees and palms on-site, which yields 389 tree credits, exceeding the 275 minimum tree credits required;
- Exceeding the hardwood tree mitigation requirement by 283 inches;
- Exceeding the softwood tree mitigation requirement by 576 inches;
- Providing 28% of the perimeter of the site planted as native vegetation with no sod areas.

Reviewed By: _____

CITY OF STUART, FLORIDA
DEVELOPMENT DEPARTMENT
SMALL SCALE COMP PLAN AMENDMENT APPLICATION

Application must be legible with all relevant fields completed.

Project ID#_____
(Staff Entry)

Pre-App Conference Date: On file	Application Date: 5-17-2021
Project Name: Silverthorne RPUD	
Parcel ID# 38-38-41-002-065-00010-3	Project Address: Unassigned
Zoning/CRA Sub-district: CPUD	
Subdivision: See Survey	Lot(s): See Survey
Fee: $1792.00 *(this does not include fees that may be charged as a result of application review by the City's consultants or any required recording fees)*	
Submittal Requirements: A completed application form, the payment of fees, one (1) copy of all documents on a PDF formatted disc electronically signed and sealed, and a justification for the proposed change and any other information required by the City Development Director.	
Approving Authority: The Development Director is required to prepare a staff report and recommendation concerning this application. The Local Planning Agency (LPA) is required to hold an advertised public hearing and formulate a recommendation to the City Commission. The City Commission is also required to hold an advertised public hearing after which it may approve, approve with conditions, or deny the application.	
Justification: Please explain the need and justification of the change and the relationship of the proposed change to the goals, objectives and policies of the City of Stuart Comprehensive Plan and Land Development Code *(include additional pages if needed).* See provided land use narrative.	

(over)

General Information
(Please Print or Type)

1. Property Owner, Lessee, Contract Purchaser, or Applicant (circle one):

Name: Mark MacFarland	City/State/Zip Code: West Palm Beach, FL, 33401
Title: Director of Land Development	Telephone Number: 561-847-7520
Company: Meritage Homes	Facsimile Number:
Company Address: 1400 Centrepark Blvd, Suite 100	Email Address (optional):

2. Agent of Record (if any): The following individual is designated as the Agent of Record for the property owner, lessee, or contract purchaser and should receive all correspondence related to the application review.

Name: Doug Fitzwater	City/State/Zip Code: Stuart, FL, 34994
Title: Landscape Architect	Telephone Number: 772-220-2100
Company: Lucido & Associates	Facsimile Number:
Company Address: 701 East Ocean Blvd	Email Address (optional):

3. The Undersigned, as the Property Owner, Lessee, Contract Purchaser, or Applicant (circle one), acknowledges responsibility for all City expenses associated with the referenced application (s) including time spent by the City's consultants and further acknowledges that payment of consultant fees will be made prior to the receipt of the consultant comments.

Name: Doug Fitzwater	City/State/Zip Code: Stuart, FL, 34994
Title: Landscape Architect	Telephone Number: 772-220-2100
Company: Lucido & Associates	Facsimile Number:
Company Address: 701 East Ocean	Email Address (optional):

I hereby certify that all information contained herein is true and correct.

4. Signed this 17 day of May, 2021.

Signature of Property Owner, Lessee, Contract Purchaser or Applicant (circle one) Agent on behalf of Meritage Homes

State of Florida, Martin County The foregoing instrument was acknowledged before me on this 17 day of May 2021 by Doug Fitzwater who is personally known to me, or who has produced _____ as identification and who did/did not take an oath.

Notary Signature

Commission expires

KATHLEEN ANDERSON
MY COMMISSION # GG 173271
EXPIRES: January 31, 2022
Bonded Thru Notary Public Underwriters

Reviewed By: _____

CITY OF STUART, FLORIDA
DEVELOPMENT DEPARTMENT
PLANNED UNIT DEVELOPMENT (PUD) AMENDMENT APPLICATION

Application must be legible with all relevant fields completed.

Pre-App Conference Date: On-File	Application Date: April 1, 2021
Project Name: Silverthorn RPUD	
Parcel ID# 38-38-41-002-065-00010-3	Project Address: No address
Zoning/CRA Sub-district: CPUD to RPUD	
Subdivision: Not applicable	Lot(s): Not applicable

Fees: Major PUD Amendment - $3,072.00; Minor PUD Amendment: $2,048.00; PUD Agreement Amendment (text change only): $1,024.00 *(this does not include fees that may be charged as a result of application review by the City's consultants or any required recording fees)*

A Major Planned Unit Development Amendment is one which shall include any one of the following;

- A change of two (2) percent or more in the area of any land use designations shown on the site plan;
- Any change in the list of proposed uses;
- An increase in residential density of five (5) percent or more;
- An increase in nonresidential Building square footage of ten (10) percent or more;
- A change in the boundary of the PUD district;
- A change in the site plan or approval regarding any area(s) set aside and designated for future development;
- Any other change determined by the City Development Director to have a potentially significant impact on City services or the surrounding neighborhood;
- An amendment of greater than twelve (12) months to an originally approved timetable of development. Such an amendment may only be approved upon good cause shown to the City Commission. Any contributions conditioned as part of the original PUD agreement shall be revisited upon application for timetable extension. A timetable extension greater than twelve (12) months will require a full concurrency review.

(A Minor Planned Unit Development Amendment is any amendment that is not a Major Amendment.)

Submittal Requirements: A completed application form, the payment of fees, a site plan, one (1) copy of all documents on a PDF formatted disc electronically signed and sealed, and any other information as may be required by the City Development Director in order to do a thorough review of the request. (Note: A concept plan may, at the discretion of the applicant, be submitted instead of a site plan if a site plan has not previously been approved. However, in doing so the applicant acknowledges that a site plan will need to be submitted for City Commission approval prior to making application for a development permit.) *(The data requirements for a site plan and a concept plan are available at the Development Department)*

Approving Authority: The Development Director is required to prepare a staff report and recommendation concerning this application. For a Major PUD amendment, the Local Planning Agency (LPA) is required to hold an advertised public hearing and formulate a recommendation to the City Commission. For both types of applications, the City Commission is required to hold an advertised public hearing after which it may approve, approve with conditions, or deny the application.

Justification: Written justification supporting the application and demonstrating how the application remains: (a) consistent with the relevant components of the City of Stuart Comprehensive Plan including concurrency with adopted levels-of-service for utilities/facilities and compatibility with existing/planned uses and (b) complies with the relevant development standards of the City of Stuart Land Development Code.

(over)

General Information
(Please Print or Type)

1. Property Owner, Lessee, Contract Purchaser, or Applicant (circle one):

Name: Theodore G. Glasrud, President of Glasrud Management, Inc	City/State/Zip Code: Stuart, FL 34994
Title: Manager	Telephone Number:
Company: Ted Glasrud Associates FL, LLC	Facsimile Number:
Company Address: 759 SW Federal Highway, Suite 217	Email Address (optional):

2. Agent of Record (if any): The following individual is designated as the Agent of Record for the property owner, lessee, or contract purchaser and should receive all correspondence related to the application review.

Name: Doug Fitzwater	City/State/Zip Code: Stuart, FL 34994
Title: Landscape Architect	Telephone Number: 772-220-2100
Company: Lucido & Associates	Facsimile Number:
Company Address: 701 SE Ocean Boulevard	Email Address (optional): dfitzwater@lucidodesign.com

3. The Undersigned, as the Property Owner, Lessee, Contract Purchaser, or Applicant (circle one), acknowledges responsibility for all City expenses associated with the referenced application (s) including time spent by the City's consultants and further acknowledges that payment of consultant fees will be made prior to the receipt of the consultant comments.

Name: Dante Fraiegari	City/State/Zip Code: Orlando, FL 32839
Title: Vice President of Land, South Florida Division	Telephone Number: 561-847-7517
Company: Meritage Homes	Facsimile Number:
Company Address: 5337 Millenia Lakes Boulevard, Suite 410	Email Address (optional): dante.fraiegari@meritagehomes.com

I hereby certify that all information contained herein is true and correct.

4. Signed this 1st day of April, 20____.

Signature of Property Owner, Lessee, Contract Purchaser or Applicant (circle one)

State of Florida, Martin County The foregoing instrument was acknowledged before me on this 1 day of April, 2021 by Doug Fitzwater who is personally known to me, or who has produced _____ as identification and who did/did not take an oath.

Notary Signature

Commission expires:

KATHLEEN ANDERSON
MY COMMISSION # GG 173271
EXPIRES: January 31, 2022
Bonded Thru Notary Public Underwriters

lucido&associates
Land Planning / Landscape Architecture

August 2, 2021

via email: treetz@ci.stuart.fl.us
Consider this to be the original

Mr. Tom Reetz
Senior Planner/Development
City of Stuart
121 SW Flagler Avenue
Stuart, Florida 34994

RE: Silverthorne (aka Glasrud 2) – Response to Comments
(LA REF NO. 21-605)

Dear Mr. Reetz:

Please accept this correspondence as our formal response to the staff comments received for the review of the June 29, 2021 submittal of the RPUD Amendment application and associated documents for the proposed Silverthorn Townhomes development in Stuart, Florida.

Review Comments

Zoning and Site Design

1. Please submit a photometric site lighting plan for review and include the proposed light pole locations on the site and landscape plans.
   A lighting plan has been prepared and is included with this resubmittal/response package.

2. Show in the legend 'Open Space', 'Preserve-upland' (same as pervious and impervious- just needs to be included in the legend) and 'Parking with total Required and Provided numbers and percentages.
   AGREED. Please refer to revised Master Site Plan with items added as requested.

3. Provide EV Charging stations per Sec.2.06.22 of the Land Development Code below.

   - B. *EV Charging Station (EVCS) requirement:* All new commercial development of gross floorspace greater than 5,000 square feet and all new residential development greater than 50 dwelling units are required to provide EVCI to accommodate the future installation of EVCS(s).
   - 1. A minimum of two or ten percent, whichever is the greater, of the required non-EV parking spaces (excluding required ADA spaces) shall be EVCI equipped spaces.
   - 2. A minimum of two or ten percent, whichever is the greater, of required EVCI equipped spaces shall be provided at a level 2 EVCR.
   - 3. At minimum one required EVCI equipped space shall be ADA accessible and shall be installed and marked in compliance with the current version of the City of Stuart Guide for Accessible Electric Vehicle Charging Station (EVCS).

701 SE Ocean Boulevard Stuart, Florida 34994
tel: 772.220.2100 fax: 772.223.0220 web: www.lucidodesign.com

Definitions:

Electric Vehicle (EV) means a vehicle that operates exclusively on electrical energy from an off-board source that is stored in the vehicle's batteries, and which produces zero tailpipe emissions or pollution when stationary or operating.

Electric Vehicle Charging Station (EVCS) means a parking space that is equipped to allow an EV to re-charge.

Electric Vehicle Charging Infrastructure (EVCI) means equipment provided to support future electric vehicle charging. This shall include, but not be limited to; the design of electrical panels and service equipment to support the additional electrical demand, the panel capacity to support additional feeder/branch circuits, the installation of raceways, both underground and surface mounted, to support the electrical vehicle supply equipment.

Electric Vehicle Charging Rate (EVCR) means the rate at which an electric vehicle is charged:

1. Level-1 is considered slow charging. Voltage up to 120v.
2. Level-2 is considered medium charging. Voltage is greater than 120v and includes 240v.
3. Level-3 is considered fast or rapid charging. Voltage is greater than 240v.

Please refer to the attached Revised Master Site Plan which denotes/designates (3) EV spaces at the clubhouse.

Architectural Design

1. Vary Blocks of units (5-8) from another block of units by applying architectural features, window treatments, light fixtures and paint colors to individualize units.
   AGREED. Please refer to provided architectural elevations. The product proposed consists of 4,5,6, 7 and 8 unit buildings all of which have consistent yet varied architectural features meeting the design intent and requirements of the City.

2. Add bike racks per City's Land Development code to the Pool Clubhouse area.
   AGREED. Please refer to revised master site plan for the addition of bike racks at the pool clubhouse area.

3. Provide electrical vehicle charging capabilities per code above.
   Please refer to the attached Revised Master Site Plan which denotes/designates (3) EV spaces at the clubhouse.

4. Provide a phasing plan that indicates the order of blocks of units will be built and the amenities that will be included with each, i.e., clubhouse and pool, common areas entrance landscaping, completion of the preserve planting, etc.
   Phasing plan will be provided at site construction permit review and issuance process.

Landscaping

1. Per Sec. 6.04.02A.2, Not less than 50 percent of all trees used to meet landscaping shall be shade or canopy trees with a minimum height of 12 feet and a minimum spread of six feet at planting. (Show min. six feet of spread on plant legend.)
   AGREED. Refer to amended landscape plan.

2. Revise the Master Site Plan and Landscape plans to show the landscaping islands at the street frontages directly in front of the townhouse entrances and in between garages as depicted on the Architectural rendering provided with submittal.
   AGREED. Refer to the revised master site and landscape plans.

3. Provide a photometric plan.
   A lighting plan has been prepared and is included with this resubmittal/response package.

4. Provide location of lighting fixtures on the Landscape plans and a typical lighting pole detail.
   A lighting plan has been prepared and is included with this resubmittal/response package.

5. On the Plant Schedule provide spacing for Shrubs with a minimum of 30" OC spacing.
   AGREED. Refer to amended landscape plan.

6. Provide a xeriscape chart per code 6.04.05.C showing how you are meeting the required 50 points.
   AGREED. Refer to amended landscape plan.

Engineering

Master Site Plan

1. Verify the building area shown in the site data table. 3.42ac is higher than the stormwater report values and appears to be potentially including the second-floor areas.
   AGREED. Refer to amended master plan data which is now consistent with stormwater report and plan.

2. Provide information about the material type and height of the proposed perimeter fence.
   Please refer to the attached revised Master site plan and the denoted 6' white vinyl privacy fence around the perimeter of the project. Given the specific location of the project, adjacent uses and the existing road frontage and the fact that this is a 'for sale' neighborhood with buyers expecting a sense of privacy and added security – the proposed fence is the best option.

3. The offsite shared drive near the south property line appears to extend outside of the shared access easement – refer to the plan excerpt below. It is also different than the last plan I saw for Plantation Storage which showed a 2 lane access. Please verify this configuration has been coordinated with the owners of plantation storage and provide an updated shared access easement.

Refer to revised master site plan which has adjusted the driveway configuration.

Master Drainage and Utility Plans

1. Sheet 3 – revise silt fence to account for the offsite commercial property that discharges on to the site at the NE corner.
   Acknowledged, the silt fence around a portion of the commercial area has been removed to allow runoff to continue to enter the site. Please see the revised plans.

2. Sheet 4 – Provide a cross section along the NE property adjacent to the west side of the commercial property. It appears this area flows on to the site as well but is not clear how the inflow is being routed.
   Acknowledged, Section J has been added. Existing elevations near the rear of the Commercial area are higher than the proposed Silverthorne berm, flow in these areas will continue to flow onto the Silverthorne site. Runoff further north where elevations drop will remain on the Commercial area property. Please note, per the Stuart Business Park master drainage plan and Environmental Resource Permit, the commercial parcel is not permitted to discharge to the SBP master drainage system. Please see the revised plans, the enclosed SBP Environmental Resource Permit, and the enclosed SBP Master Drainage Map.

3. Sheet 4 – In this same area where cross section B/7 is provided, the perimeter berm will extend into the commercial property. What is the elevation of their lift station and does the rim of it need to be adjusted?
   The rim is at elevation 17.50 NAVD, above the proposed perimeter berm elevation. Please see the revised survey.

4. Describe the interaction between the dry pond and the lake. We typically would see the dry pond being used for first flush, but all storm pipes are being routed to the lake on the is site. It appears the dry pond I sonly picking up the pervious areas from the NE corner of the site.
   Acknowledged. The area has relabeled to Dry Shelf to more accurately convey its function. The area consists of a lower pervious/green space that is directly connected to the lake. Please note that no credit was taken more Dry Detention in the water quality calculations, therefore no changes to the water quality elevation are proposed.

5. Sheet 5 – change the control structure Rim to 17.25
   Acknowledged.

6. Sheet 10 – sanitary sewer services from MH 2 to MH 4 should be flipped to face MH 4
7. Acknowledged.

8. Sheet 11 – sanitary sewer services from MH 19 north should be flipped to face north
9. Acknowledged.

10. Sheet 12 – the bottom of storm elevations at conflicts 12 and 14 are slightly off from structure tables, but still meet the 12” clearance.
    Acknowledged.

Stormwater Report

1. Please coordinate the building areas with the comment on the site plan above. The building areas in each document should be consistent.
   AGREED. Refer to amended master plan data which is now consistent with stormwater report and plan.

2. Please provide backup for the percent impervious, percent DCIA and percent direct fields for the ICPR model on the site basin.
   Acknowledged. The weighted post-development CN number was used in the ICPR basin input – the number is calculated in Attachment 4.8 of the Drainage Report. The impervious, percent DCIA, and percent direct fields were mistakenly populated in and used in addition to the weighted post development CN. The percent impervious, percent DCIA, and percent direct fields have been removed. No changes are proposed to the design elevation or weir. Please see the revised Stormwater Management report.

Traffic Impact Analysis

1. Based on the City of Stuarts Land Development Code Section 4.05.02, an analysis of all project driveways into the project shall be performed which includes at a minimum, projected turning movements in and out of the project during the AM and PM peak hours. Please provide an intersection analysis of the shared access driveway along SE Commerce Avenue.
   Response: See attached revised Traffic Impact Analysis which includes the turn lane warrant analysis.

2. It is understood that a southbound left-turn lane will be provided at the shared access driveway along SE Commerce Avenue. Please analyze the need for a northbound right-turn lane based upon NCHRP Report 457.
   Response: See attached revised Traffic Impact Analysis which includes the turn lane warrant analysis.

3. It is unclear how background traffic growth was calculated. Please include background traffic growth rate calculations as an attachment.
   Response: The formula utilized is shown under Figure 5, the Future Calculations.

4. Please provide the latest Martin County Roadway Level of Service inventory report as an attachment.
   Response: The 2019 (latest report available) is attached.

5. Figure 5 is labeled "Exhibit 5" within the provided attachments. Please revise.
   Response: The label has been revised.

Environmental

1. ***Section 5.01.00*** – Complete. Avoidance and Minimization and Other Environmental Impacts – An Environmental Assessment Report (EA) prepared by Aquatic Research Monitoring Equipment, & Deployment, LLC (Aquatic Research) dated October 2020 was provided with the application. The report states that no wetlands or native habitat occur on-site, therefore, no avoidance and minimization efforts regarding wetlands and environmental impacts will be required.

AGREED.

2. ***Section 5.02.00*** – Complete. Environmental Assessment Report - The EA provided discusses all required topics including site description, on-site land use types, coordination with South Florida Water Management District (SFWMD) stating no wetlands were found on-site, wildlife evaluation and methodology, and coordination with US Fish and Wildlife Service (USFWS).
   AGREED.

3. ***Section 5.03.00*** – Not applicable. Wetlands – No wetlands present.
   AGREED.

4. ***Section 5.04.00*** – Not applicable. Environmentally Sensitive Lands – The EA describes the on-site habitats and includes photographs of site conditions; no native vegetative areas are present within the project site.
   AGREED.

5. ***Section 5.05.00*** – Trees – Please see landscape plan review.
   ACKNOWLEDGED.

6. ***Section 5.06.00*** – Not applicable. Mangrove and Shoreline Protection – The project site does not have mangroves or shorelines.
   AGREED.

7. ***Section 5.07.00*** – Not applicable. Floodplains and Flood Damage Prevention - According to the boundary survey and stormwater report, the site is located in Flood Zone X, outside the 100-year floodplain.
   AGREED.

8. ***Section 5.09.00*** – Not applicable. Historic Preservation – Based on review of the provided aerial photograph, there do not appear to be any structures on the site. Review of the aerial photograph does not indicate the presence of any historic structures.
   AGREED.

9. ***Section 5.10.00*** – Not applicable. Clustering of development – No native vegetative areas are present within the project site.
   AGREED.

Public Works

In reviewing the above referenced project, this Department does approve the proposed PUD application only. Please address the following comments:

1. This review is not for construction.
   Acknowledged.

2. Sanitation- The developer shall pay for initial bins (one trash bin and one recycle bin) for each unit including the clubhouse at the time of permitting. City of Stuart waste receptacles, including recycle shall be stored in garages only. The receptacles at the amenity areas shall be stored inside the clubhouse or outside in an approved enclosure.

Acknowledged.

3. The developer shall provide both a transponder and individual gate access codes for Public Works sanitation pickup before the first certificate of occupancy is issued.
   Acknowledged.

4. Water and Sanitary sewer service to be provided by Martin County.
   Acknowledged.

Police – Brian Bossio

1. Landscape Plans approved by PD.
   Acknowledged.

2. Please submit a photo metric light plan for review.
   A lighting plan has been prepared and is included with this resubmittal/response package.

Fire Department Review

1. Autoturn shows fire truck bumper crossing into a driveway.
   Please refer to revised autoturn exhibits. No driveway conflicts exist.

2. Show distance between fire hydrants.
   A separate exhibit has been prepared showing the requested distances between fire hydrants.

Please feel free to contact me if you have any questions or need any additional materials.

Respectfully,

Steven D Garrett, RLA
Copy to team

SG/kpa

701 SE Ocean Boulevard Stuart, Florida 34994
tel: 772.220.2100 fax: 772.223.0220 web: www.lucidodesign.com

Environmental Assessment

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67,
Unassigned SE Indian Street
City of Stuart, Martin County, Florida

Parcel Identification Number:
38-38-41-002-065-00010-3 (±9.43 acres)

Prepared For:

Meritage Homes

City of Stuart

Prepared By:

Jennifer Acevedo

Jennifer Acevedo

ENVIRONMENTAL CONSULTING DEPARTMENT
Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

October 2020

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Appendix A
Figure 1: Location Map
Figure 2: Site Map
Figure 3: Historic Aerial (1986)
Figure 4: Agency Reported Land Use Map
Figure 5: Existing Habitat Map
Figure 6: Wildlife Survey Transect Map
Figure 7: Soils(s) Map

Appendix B
Gopher Tortoise 15% Burrow Survey

Appendix C
SFWMD IWD Letter

Appendix D
Site Photographs

Appendix E
Information for Planning and Consultation (IPAC)

Introduction

An environmental site assessment was conducted by the qualified biologists with Aquatic Research Monitoring Equipment, & Deployment, LLC (Aquatic Research) on October 14th, 2020. The site was reviewed in accordance with City of Stuart Land Development Regulations Section 5.02.00. – Environmental Assessment Report for Site Greater Than One Acre. As required in the LDR for properties of greater than one acre, an application for site plan approval or plat approval shall include an environmental assessment report prepared by a qualified environmental professional. The assessment must include a site description, vegetative description, wetland information, a wildlife evaluation, and preserve area and upland buffer calculations.

Site Description

The property is ±9.43 acres and is located at the southeast corner of SE Indian St. and SE Commerce Ave., Lots 65, 66 & 67 in the Sewall's Point Land Development Company Subdivision, within the City of Stuart, Martin County, Florida. Please see Appendix A, Figure 1 for the site location map. The parcel is further by identified by the Martin County Property Appraisers office as 38-38-41-002-065-00010-3.

The property is a mixture of lands that have experienced partial development via construction of an access road, associated clearing and undeveloped disturbed lands that have been impact by human activity (dumping and transient encampments) as well as intrusion of invasive exotic vegetation. The parcel is bordered on the west and southwest by SE Commerce Avenue, SE Indian Street and a commercial strip mall complex to the north, Florida East Coast Railway (FEC) to the east, and an undeveloped lot undergoing active site clearing adjacent to the perimeter ditch to the south (Appendix A Figure 2). The immediate surrounding area generally consists of a mixture of commercial, industrial, low-density residential development, and undeveloped lands. The onsite habitat is best classified as inactive lands with street patterns without structures and disturbed lands. The inactive open land area consists of a partially constructed asphalt access road the traverses the property in a northwest to southeast direction, interspersed with weedy grasses and vegetation due to the cessation of further development and a lack of active maintenance. The disturbed lands are heavily impacted from the presence of transients and are dominated by invasive exotic vegetation.

Conveyance ditches border the east and south perimeters. A review of historic aerials shows the on-site conveyance ditches and the site almost entirely cleared in 1966 (Appendix A, Figure 3). The conveyance ditches appear to have been associated with

development within the surrounding area. Plat records of the Sewall's Land Development Company indicates a 50ft easement that includes the ditch along the eastern border. Additionally, there is a 25ft easement along the southern border of which also encompasses half of the southern perimeter ditch. The remnants of an historic interior located ditch still partially remain as well and is currently connected to the south ditch as shown in Figure 3.

Prior to the site visit, the property was assessed via a desktop review utilizing aerials as well as reviews of agency databases to estimate potential habitat, reported soil types, documented listed plant or animal species on or adjacent to the property, along with habitat areas that have the potential to support listed species. Information gathered during the desktop review was then used to create transects throughout the property. The transects were designed to allow for sufficient ground truthing covering all potential representative habitat areas as well as focusing on areas that may support listed species.

On October 14th, 2020, Aquatic Research's team of qualified biologists conducted a site assessment on the property for the purposes of collecting data for an environmental site assessment, wildlife survey, and a 15% minimum habitat survey for gopher tortoise (*Gopherus Polyphemus*) burrows. Results of the gopher tortoise survey indicated no utilization by gopher tortoises, nor any gopher tortoise burrows on the property.

Based on the Florida Fish and Wildlife Conservation Commission (FFWCC) formula for estimating gopher tortoise population during a partial habitat survey, the site is estimated to contain 0 gopher tortoises (0 burrows). No further state or Federal listed species burrows, nests, dens, or roosting areas were observed on site. See Appendix B for the 15% minimum Gopher Tortoise Survey Report.

No native upland habitat was observed on the property. Additionally, the South Florida Water Management District (SFWMD) has conducted an informal wetland jurisdictional determination on the subject property in February 2019. No jurisdictional wetlands were determined to exist on the subject property. The enclosed SFWMD letter references several parcels, the subject property is indicated as Site #2 (See Appendix C).

Vegetation and Habitat Description

As part of the assessment conducted on the subject property vegetation and habitat types were reviewed. This was accomplished utilizing a multi-faceted approach, first reviewing recent and historic aerials and comparing visible topographic signatures to available agency recorded data. Agency reported data such as Florida Land Use Cover Classification System (FLUCCS)/Habitat assigned classifications as well as reported soil types were researched.

For depictions of state and Federal reported FLUCCS classifications and soil types see Appendix A, Figures 4 and 7. After a comprehensive review of the above mentioned data and aerials, transects were established based on expected variations in habitats. Locations and sizes of habitat types as indicated in this report are approximate, based on a combination of desktop review and field truthing. See Appendix D for site photographs.

Upland Habitat

The upland portions of the property consist of Inactive Land with Street Patterns Devoid of Structures and Disturbed Lands. See Appendix A, Figure 5 for observed upland habitat types and approximate location and acreage.

Existing Upland Habitat FLUCCS Classifications Observed are as Follows:

Upland Habitat 1920: Inactive Lands with Street Patterns (±3.47 acres)
This category includes undeveloped land within urban areas and inactive land with street patterns but without structures. Open Land normally does not exhibit any structures or any indication of intended use. Often, urban inactive land may be in a transitional state and ultimately will be developed into one of the typical urban land uses.

The inactive open land area mainly includes lands located within the north - northwest quadrant. It includes a partially constructed asphalt access road that traverses through the property in a general north – south direction emanating from SE Indian St. and terminating near Commerce Ave. This area is mainly cleared as a result of the construction of the entrance road. Vegetation within these areas consists mainly weedy vegetation and non-descript grasses. A small cluster of native vegetation is present along the northern perimeter.

Representative Vegetation:
Non-descript grasses
Wedelia (*Wedelia trilobata*)
Slash pines (*Pinus elliotti*)
Oak trees (*Quercus spp.*)
Cabbage palms (*Sabal palmetto*)

Upland Habitat 7400: Disturbed Lands (±5.50 acres)
Remaining upland areas on the property consist of disturbed lands. The lands identified as disturbed consist of 90% exotic vegetation with 10% native vegetation interspersed. No significant native vegetative associations were observed within the

southern portion of this habitat type are scattered abandoned and active transient encampments. Large quantities of human related trash and debris were also observed in association with the onsite transient populations. The onsite uplands classified as disturbed lack in maintenance and natural fire regime and are heavily impacted by the transient population, and intrusion of invasive exotic vegetation. This has resulted in a fragmented or disturbed habitat lacking in the vegetative associations seen in native Florida upland habitats.

Representative Vegetation:
Earleaf acacia (*Acacia auriculiformis*)
Australian pines (*Casuarina equisetifolia*)
Brazilian pepper (*Schinus terebinthifolia*)
Melaleuca trees (*Melaleuca quinquenervia*)
Slash pines (*Pinus elliotti*)
Cabbage palms (*Sabal palmetto*)
Oak trees (*Quercus spp.*)
Tuberous sword Fern (*Nephrolepis cordifolia*)
Inch plant (*Tradescantia zebrina*)
Snake plant (*Sansevierias spp.*)

Preserve area and upland buffer evaluation

No native upland habitat is present on the subject property. No upland preserve area will be required.

Tree Preservation

As required in the City of Stuart Land Development Regulations all sites over one (1) acre in size are required to conduct a survey for specimen and champion trees. All specimen and champion trees must be identified and mapped. During site planning avoidance and minimization of impacts to protected trees and native vegetation must be demonstrated to the greatest extents possible. Per the City of Stuart LDR a specimen tree means a slash pine tree which has achieved a DBH of ten inches; or any other tree as referenced in chapter V of the City of Stuart LDR which has achieved a DBH of 4.5 inches. This also includes any other tree which has achieved a DBH of 6 inches which is listed on the City of Stuart flowering tree list; or any other tree which has achieved a DBH of ten inches or at least 25 percent of the DBH of a species identified in the Florida Champion Trees of Florida database, maintained by the Forest Service.

As part of the site plan approval process a protected tree survey for specimen and protected trees will need to be conducted. Trees that must be impacted as a part of site development will require mitigation in accordance with the City LDR. Specimen trees, excluding slash pine trees, for which relocation is not possible or is not expected to be successful, must be replaced with like species on site. Replacement trees shall have a combined diameter at breast height (DBH) of two and one-half times the DBH of the trees replaced. The minimum size for replacement trees is four and one-half inches DBH. Slash pines, for which relocation is not possible or is not expected to be successful, must also be replaced with like species on site. Replacement trees shall have a combined DBH of one and one-half times the DBH of the trees replaced. The minimum size for replacement trees in slash pine mitigation is two and one-half inches DBH. Total number of trees required for replacement is calculated in accordance with the following table. 50% of tree mitigation may also be done via payment into the City's Tree Fund.

Tree Replacement Formula—Slash Pine:														
Total # inches to remove	×	1.5	=	Total # inches to be replaced	/	Minimum size to replace 2.5"	=	Total # trees to plant	×	50% mitigation to pay into city tree fund	×	175% of plant finder wholesale	=	Total $ amount to pay into city tree fund
Tree Replacement Formula—All Trees Less Slash Pine:														
Total # inches to remove	×	2.5	=	Total # inches to be replaced	/	Minimum size to replace 4.5"	=	Total # trees to plant	×	50% mitigation to pay into city tree fund	×	175% of plant finder wholesale	=	Total $ amount to pay into city tree fund

Table1: City of Stuart Tree Mitigation Calculation Formula.

Wetland Habitat

To classify an area as a wetland two of the following three criteria must be met: 1. 80 percent or more dominate coverage of wetland plants. 2. Indicators of hydrology 3. Presence of hydric soil. The South Florida Water Management District (SFWMD) conducted an informal wetland jurisdictional determination on the subject property in February 2019. No jurisdictional wetlands were determined to exist on the subject property. See the enclosed SFWMD letter and associated exhibits (See Appendix C). The wetland jurisdictional was conducted on several properties, the subject property is referenced as Site #2.

Other Habitat Areas

Other Surface Waters 5100: Artificial Ditches (±0.60 acre)

There are artificial ditches on the east and south perimeter. A review of historic aerials shows the existence of the artificial ditches with the site almost entirely cleared in 1966 (Appendix A, Figure 3). The artificial ditches appear to have been associated with development within the surrounding area. Plat records of the Sewall's Land Development Company indicates a 50ft easement including the ditch on the eastern border and a 25ft easement including ½ of the ditch on the southern border. Remnants of an interior ditch remain on site and is currently connected to the existing southern ditch.

Wildlife Evaluation

As was done with regards to analysis of vegetation and habitat types, a similar approach was taken with regards to evaluation of onsite wildlife, with the focus being the presence of listed species. Prior to conducting the site field work regulatory databases such as U.S. Fish and Wildlife Information Planning, and Conservation System (IPAC), Florida Natural Areas Inventory (FNAI), and Florida Department of Environmental Protection (FDEP) maps direct, were consulted with regards to any known, documented or likely occurrences of listed species. The IPAC report is located in Appendix E. Special note was taken with regards to listings of lands being within consultation areas for specific species, as well as any recorded documentations of listed species within or directly adjacent to the parcel. Habitat types on, adjacent, and within the general area or region were also closely reviewed to determine potential locations with increased likelihood of the occurrence of listed species.

During the field assessment pedestrian transects were made throughout the subject parcel to observe for the presence of wildlife in general as well as any state or Federal listed plant species, animal dens, burrows, rooting areas, or nests. Please see the Wildlife Transect Map in Appendix A, Figure 6. The wildlife population was documented in the field by visual observation of plants and animals as well as, tracks, scat, dens, foraging and nesting.

Additionally, a 15% minimum habitat survey for gopher tortoise (*Gopherus polyphemus*) burrows was conducted. Survey report is located within Appendix B**.** The wildlife population was documented in the field by visual observation of plants and animals as well as, tracks, scat, dens, foraging and nesting. Thirty-eight percent (38%) of suitable gopher tortoise habitat was surveyed, indicated no utilization by gopher tortoises, or any gopher tortoise burrows on the property. Based on the Florida Fish and Wildlife Conservation Commission (FFWCC) formula for estimating gopher tortoise population during a partial

habitat survey, the site is estimated to contain 0 gopher tortoises (0 burrows). The gopher tortoise is listed as a threatened species in the State of Florida. Gopher tortoise surveys are valid for a period of three (3) months.

Wildlife Observation(s)

The following species were observed during the site visit:

Reptiles: Cuban anoles (*Anolis spp.*)
Amphibians: None Observed
Mammals: Mammal burrows, eastern gray squirrels (*Sciurus carolinensis*), and rabbits (*Sylvilagus spp.*)
Fish: None Observed
Aves: None Observed

Consultation Area(s)

Based on the assessment it was determined that the entire project area lies within the U.S. Fish and Wildlife Service (USFWS) Section 7 Consultation area for the Everglades snail kite (*Rostrhamus sociabilis*), Scrub-jay (*Aphelocoma coerulescens*) and the crested caracara *(Caracara cheriway*). However, based on the field assessment the subject property does not appear to provide suitable foraging or nesting habitat for the Everglades snail kite, Scrub-jay, or the crested caracara.

Soils

Based on a review of the Soil Survey Geographic Database (SSURGO) upland and wetland soil types exist on the site. No soil borings or geotechnical analysis was conducted as part of this assessment. See Appendix A, Figure 7 for depiction of onsite soil mapping units.

Soil types are as follows:

Waveland and Immokalee fine sands (non-hydric) - 04
Waveland and Lawnwood fine sands, depressional (hydric) - 05

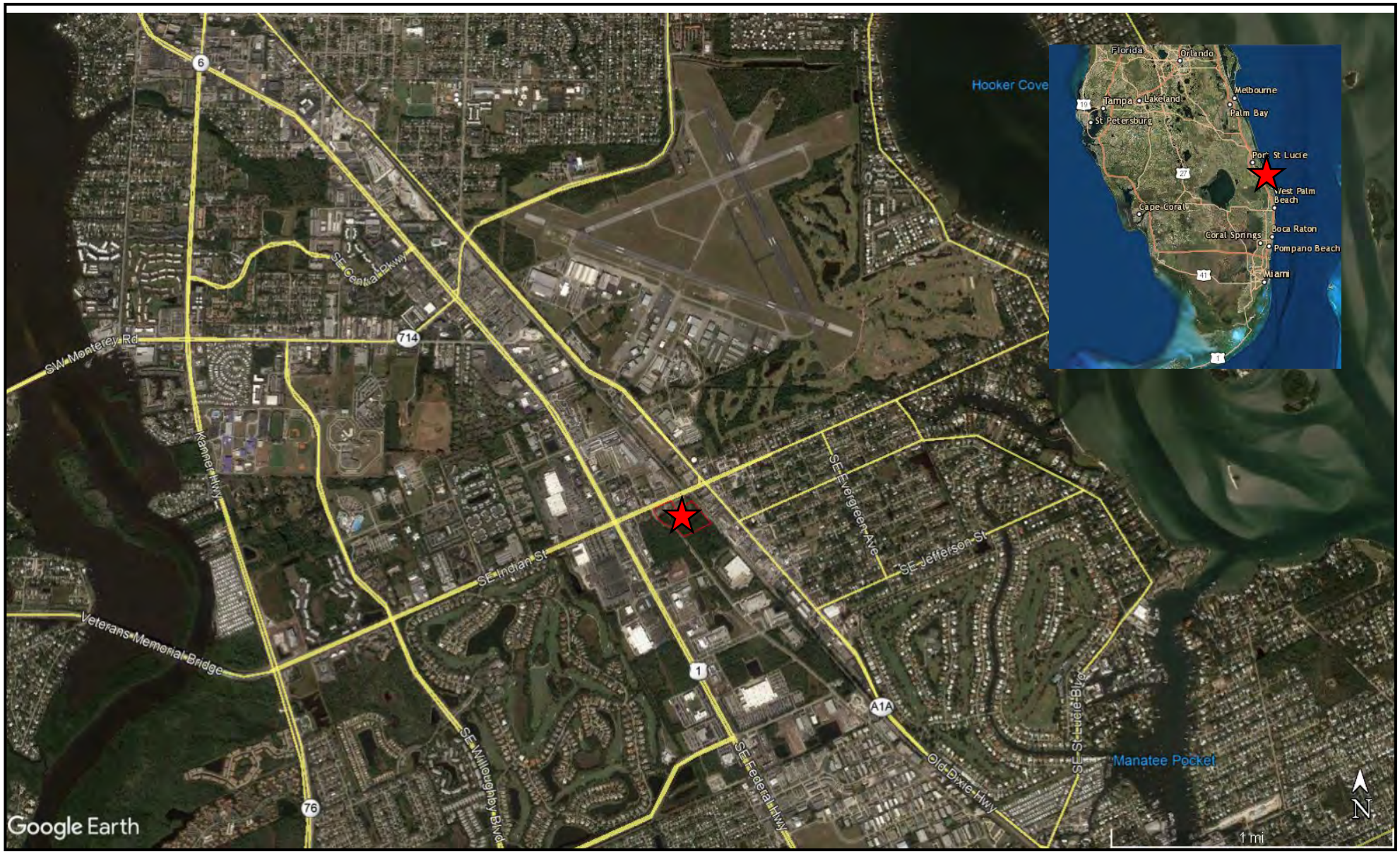
Summary

On October 14th, 2020, an environmental site assessment was conducted by the qualified biologists with Aquatic Research Monitoring and Deployment, LLC (Aquatic Research). The site was reviewed in accordance with the City of Stuart Regulations for environmental assessments. The assessment indicates that a SFWMD informal jurisdictional determination was conducted on the property in February 2019. No wetlands were deemed to exist on the property. Additionally, no native upland habitat is on the property. Based on this no preservation areas will be required. The site does contain trees that will qualify for protection under the City of Stuart LDR. A tree survey and applicable mitigation plan will be required as part of site development.

Results of the wildlife and gopher tortoise survey conducted indicates no state or Federal listed flora or fauna including no gopher tortoise burrows or indications of use by gopher tortoises.

Appendix A
Site Maps

ENVIRONMENTAL CONSULTING DEPARTMENT
Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.



Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

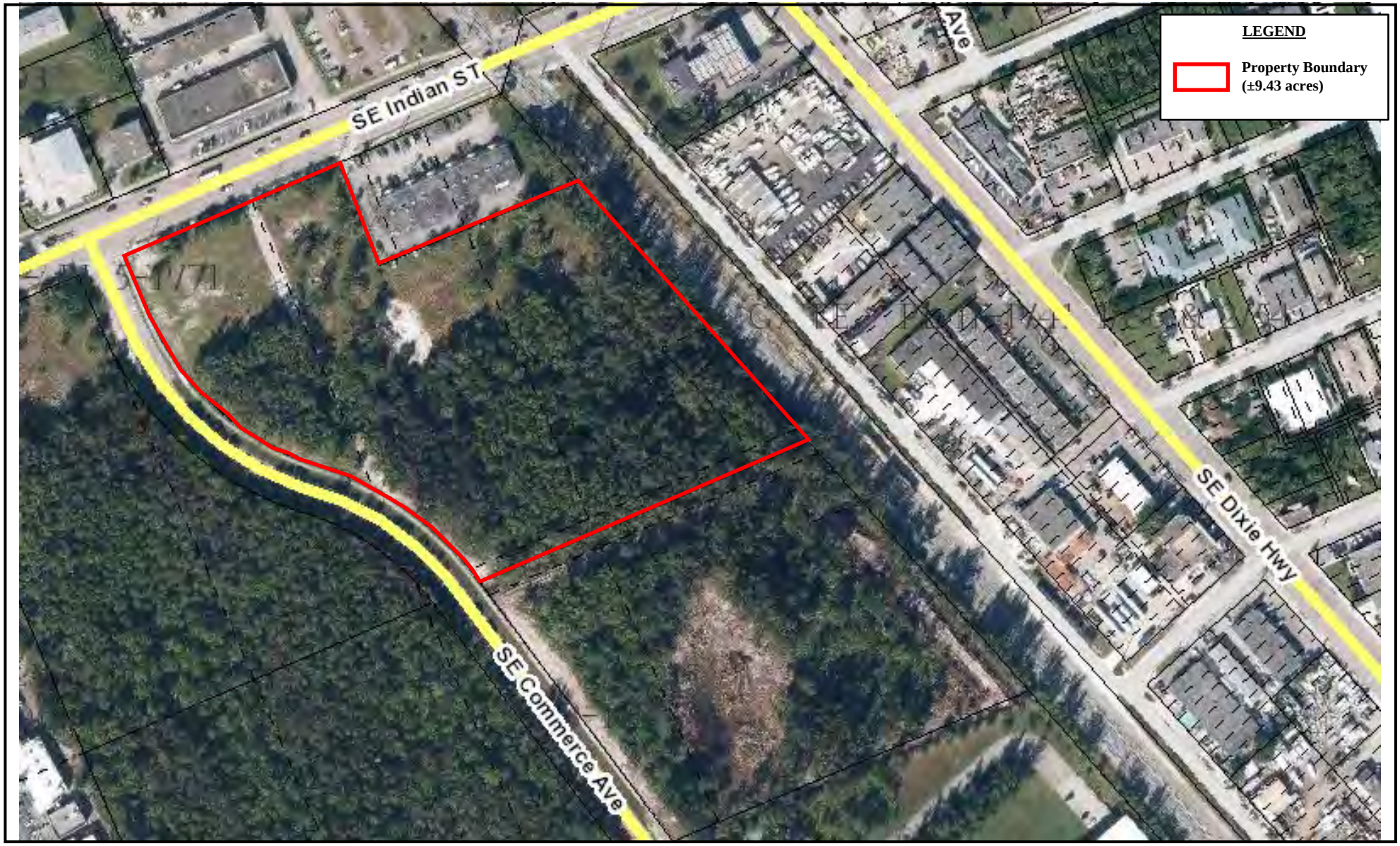
Location Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 1

Image: Google Earth Date 01/03/2018

N



Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

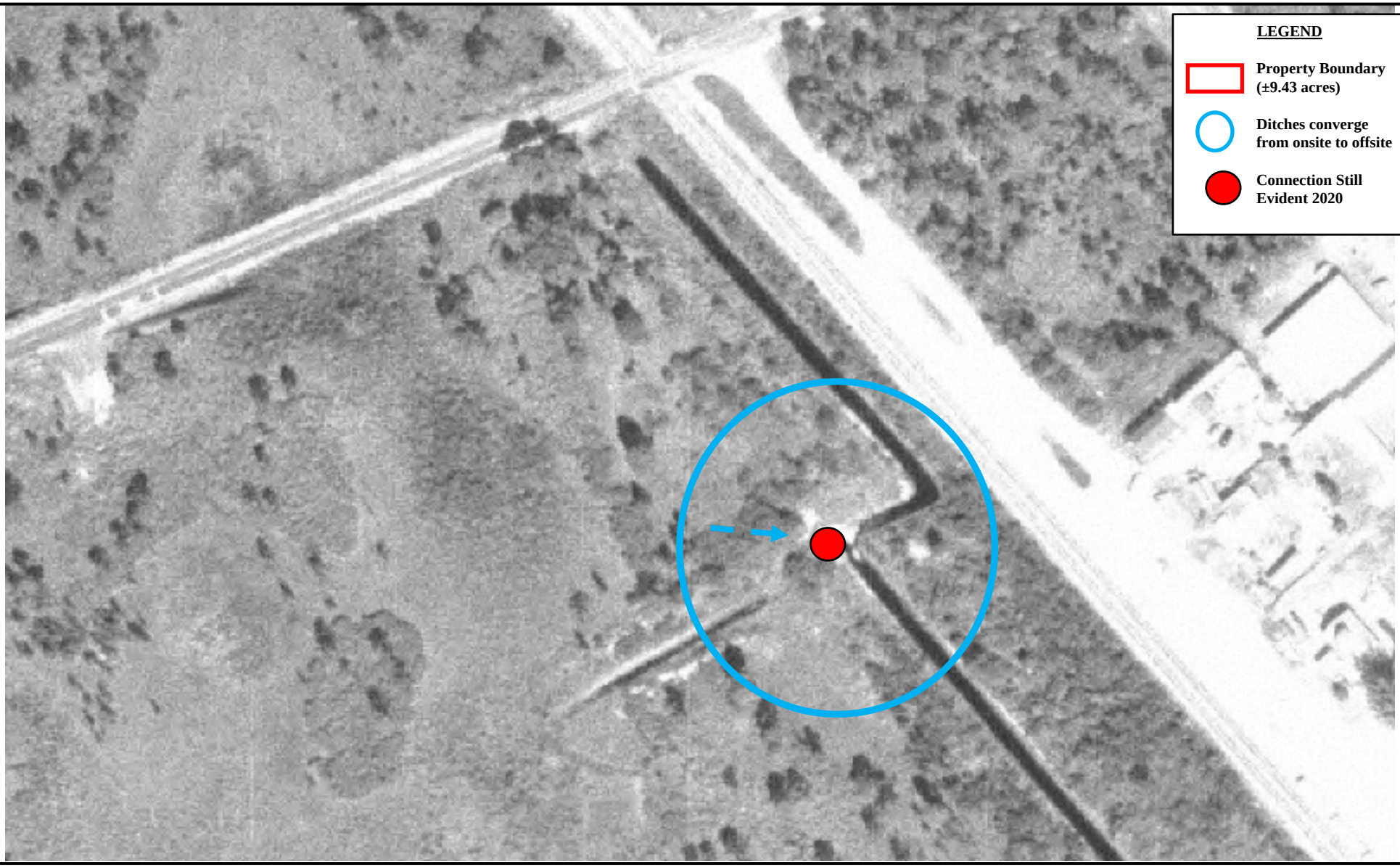
Site Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 2

Image & Data: Martin County Property Appraisers

N



Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

1966 Historic Aerial

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 3

Image: Florida Department of Transportation 1986

N

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Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Agency Reported Land Use Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 4

Image: Florida Department of Environmental Protection
Data: Florida Land Cover Classification System Definitions for the Cooperative Land Cover Map v2.3

N

Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Existing Habitat/FLUCCS Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 5

Image: Google Earth Date 01/03/2018
Data: Aquatic Research Monitoring, Equipment, & Deployment LLC

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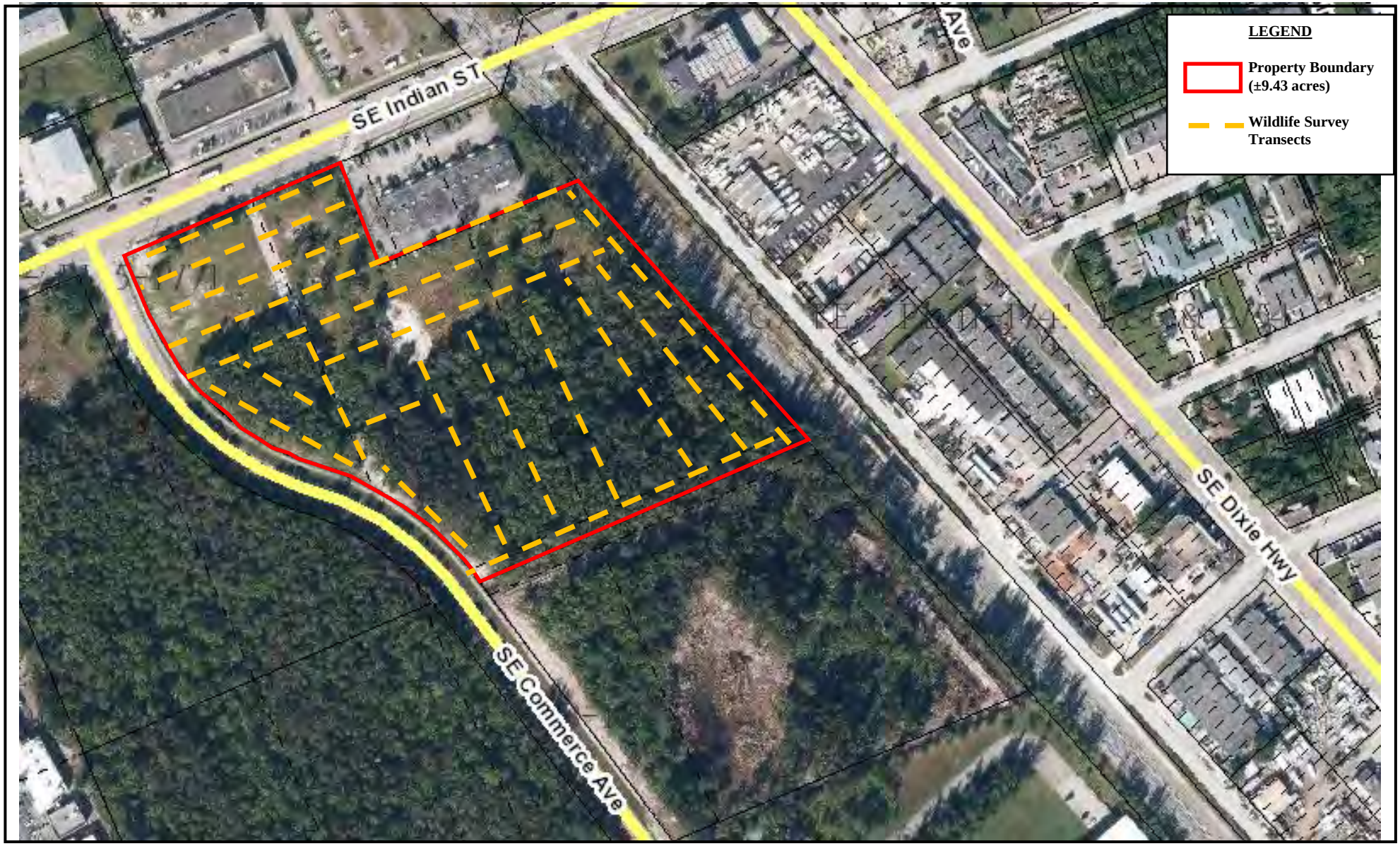

Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Wildlife Survey Transect Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 6

Image: Martin County Property Appraiser
Data: Aquatic Research Monitoring, Equipment, & Deployment LLC

N

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Monitoring, Equipment, & Deployment, LLC
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Environmental Consulting Department

Soil(s) Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 7

Image: Florida Department of Environmental Protection
Data: Soil Survey Staff, Natural Resources Conservation Service

N

Appendix B
15 % Gopher Tortoise Survey

ENVIRONMENTAL CONSULTING DEPARTMENT

Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

Field Survey Report
Gopher Tortoise (*Gopherus polyphemus)*

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67,
Unassigned SE Indian Street
City of Stuart, Martin County, Florida

Parcel Identification Number:
38-38-41-002-065-00010-3 (±9.43 acres)

Prepared For:

Meritage Homes

City of Stuart

Prepared By:

Jennifer Acevedo
Florida Fish and Wildlife Conservation Commission Certified Gopher Tortoise Agent
Number 09-00112E

ENVIRONMENTAL CONSULTING DEPARTMENT
Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

October 2020

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2.0 Site Description **3**

3.0 Survey Methodology **4**

4.0 Results and Discussion **5**

Appendix A

Figure 1: Location Map
Figure 2: Site Map
Figure 3: Overview Existing Habitat/FLUCCS Map
Figure 4: Gopher Tortoise Survey Transects Maps
Figure 5: Soil(s) Map

Appendix B

Raw Data Excel Spreadsheet

1.0 Introduction

Jennifer Acevedo Florida Fish and Wildlife Conservation Commission (FWCC) Certified Gopher Tortoise Agent 09-0112E from Aquatic Research Monitoring, Equipment, and Deployment, LLC (Aquatic Research), completed a ±15% minimum upland habitat survey for gopher tortoises, *Gopherus polyphemus*. The property is ±9.43 acres identified as a portion of Lots 65, 66 & 67 in the Sewall's Point Land Development Company Subdivision. The property is located at unassigned SE Indian Street, within the City of Stuart, Martin County, Florida. The parcel is identified by the Martin County Property Appraisers office as 38-38-41-002-065-00010-3 and is further located in Section 38, Township 38 S and Range 41 East. Please see Appendix A, Figure 1 for the site location map.

The survey was conducted on October 14th, 2020 throughout 38% (3.42 acres) of representative suitable gopher tortoise habitat on the subject property. This survey was executed according to the burrow survey methodology from the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines, April 2008, Revised January 2017, Appendix 4 Burrow Survey Methods (Minimum of 15%). Please see enclosed Wildlife Survey Transect Map for depiction of transects conducted (Figure 4).

Total Acreage of Suitable Habitat	8.97
Total Acreage Surveyed	3.42
Total Percent of Suitable Habitat Surveyed	38%

2.0 Site Description

The property is a mixture of lands that have experienced partial development via construction of an access road and associated clearing and undeveloped disturbed lands that have been impact by human activity (dumping and transient encampments) as well as intrusion of invasive exotic vegetation. The parcel is bordered on the west and southwest by SE Commerce Avenue, SE Indian Street and a commercial strip mall complex to the north, Florida East Coast Railway (FEC) to the east, and an undeveloped lot undergoing active site clearing adjacent to the perimeter ditch to the south (Appendix A Figure 2). The immediate surrounding area generally consists of a mixture of commercial, industrial, low-density residential development, and undeveloped lands. The onsite habitat is best classified as inactive lands with street patterns without structures and disturbed lands. The inactive open land area consists of a partially constructed asphalt access road the traverses the property in a northwest to southeast direction, interspersed with weedy grasses and vegetation due to the cessation of further development and a lack of active maintenance.

The disturbed lands are heavily impacted from the presence of transients and are dominated by invasive exotic vegetation.

See the enclosed FLUCCS/existing habitat map (Figure 3). Habitat as follows:

Identified uplands are classified as FLUCCS categories:
#1920 Inactive Lands (±3.47 acres) **Suitable Habitat**
#7400 Disturbed Lands (±5.50 acres) **Suitable Habitat**

3.0 Survey Methodology

Survey protocol is based on burrow survey methodology from the Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines, April 2008, Revised January 2017, Appendix 4 Burrow Survey Methods (Minimum of 15%). The project area is initially evaluated to determine the total acreage of suitable gopher tortoise habitat. Belt transects are then evenly distributed across all suitable gopher tortoise habitat within the project's impact areas, for a minimum of 15% coverage. Transects are then mapped and overlaid on an aerial to create a gopher tortoise transect map. The maximum transect dimensions are not to exceed 250 meters (820 feet) long and 16 meters (52 feet) wide. Survey is then conducted throughout each established transect, covering 100% of the area within these transects. Generally, one (1) or more individuals are utilized during the field survey as recommended by the protocol stated above. The width between each observer ranges from one (1) meter to no more than ten (10) meters apart, depending in the density of the habitat. When using more than one (1) individual each observer is stationed parallel to each other, spaced so that 100% of the area between each individual can be observed. When using two (2) people, one (1) person serves as the navigator who uses a compass and a GPS to navigate and record all burrows observed within the transect. When using three (3) people, the middle person serves as the navigator and records all burrows found by the observation team. The edges of each transect are marked with flagging tape to ensure complete coverage.

Any burrows noted during the survey are recorded with a hand-held GPS and are also flagged in the field with high visibility flagging tape. Field notes are taken depicting the status of each burrow (i.e. potentially occupied or abandoned). According to the Gopher Tortoise Permitting Guidelines a potentially occupied burrow classification "combines the active and inactive categories, and therefore includes burrows with obvious sign of use and those with minimal or no obvious sign of use." An abandoned burrow "appears unused and dilapidated." The classification of potentially occupied and abandoned burrows along with GPS locations of each burrow are depicted on an enclosed aerial. Additionally, for each belt transect raw data is reported in tabular format indicating transect dimensions, number of burrows and activity class, as well as total number of tortoises per acre.

Tortoises per acre is calculated as follows:

Total Potentially Occupied Burrows
Total Acres within Survey Area X 0.50 = Tortoises per Acre

Tortoise population is then estimated as follows:

Tortoises per Acre X Number of Acres of
Potential Gopher Tortoise Habitat = Estimated Tortoise Population

4.0 Results and Discussion

Seventeen (17) transects were established, resulting in a total survey area of 38% of suitable gopher tortoise habitat. Upon completion of the gopher tortoise survey no burrows were found. Utilizing the FFWCC estimations:

- Tortoises per acre – 0 potentially occupied burrows/3.42 acres surveyed X 0.50 = 0 Tortoises per Acre.
- Estimated Tortoise Population – 0 Tortoises per Acre X 8.97 Acres of Suitable Gopher Tortoise Habitat = Estimated Gopher Tortoise Population of 0

Estimated Total Gopher Tortoise Population = 0 Gopher Tortoises or 0 Burrows

In conclusion, a 15% minimum gopher tortoise survey was conducted on the ±9.43 acres property located at unassigned SE Indian Street, within the City of Stuart, Martin County, Florida. Survey was conducted by Jennifer Acevedo Florida Fish and Wildlife Conservation Commission (FWCC) Certified Gopher Tortoise Agent 09-0112E from Aquatic Research Monitoring, Equipment, and Deployment, LLC (Aquatic Research), on October 14th, 2020. Total area of survey was 38% of suitable gopher tortoise habitat.

No potentially occupied burrows were found across 38% of the site's suitable gopher tortoise habitat. Utilizing the FFWCC estimation formulas for partial surveys, the site contains no gopher tortoise burrows.

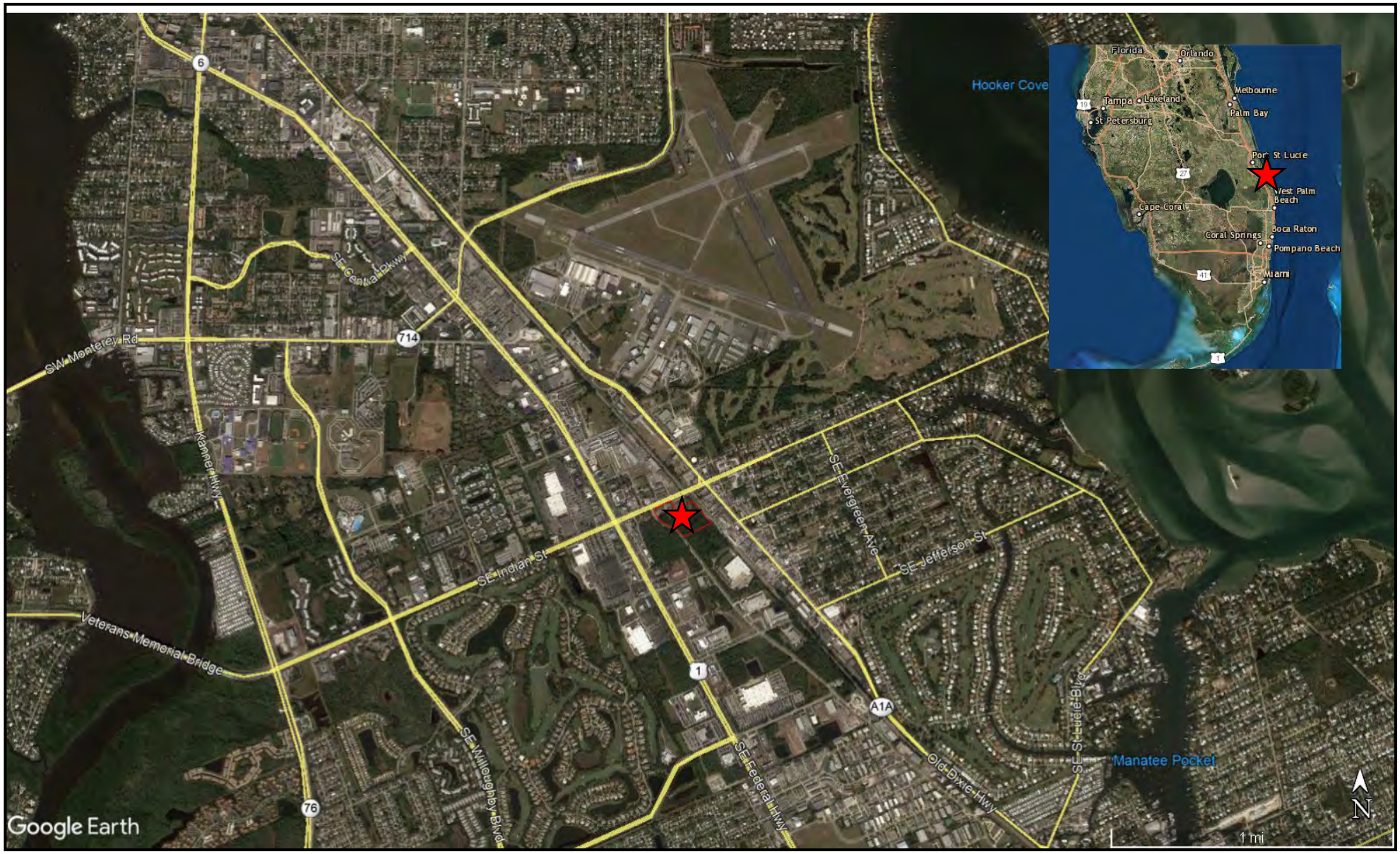
Respectfully submitted,

Jennifer Acevedo

Jennifer Acevedo, Biologist
Florida Fish and Wildlife Conservation Commission Certified Gopher Tortoise Agent Number 09-00112E

Appendix A
Site Maps

ENVIRONMENTAL CONSULTING DEPARTMENT
Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.



Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

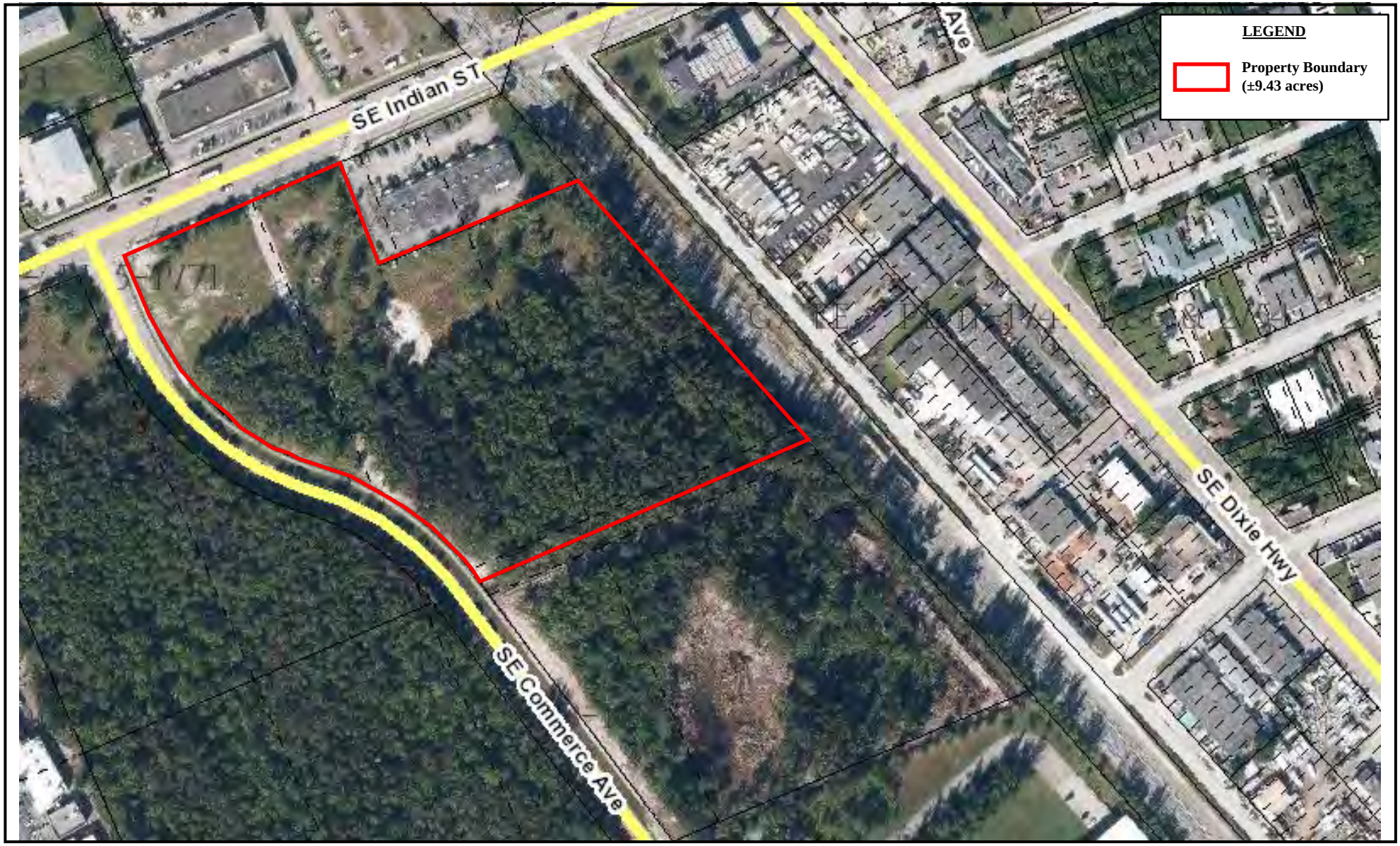
Location Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 1

Image: Google Earth Date 01/03/2018

N



Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Site Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 2

Image & Data: Martin County Property Appraisers

N

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AquaticResearchFl.com
Environmental Consulting Department

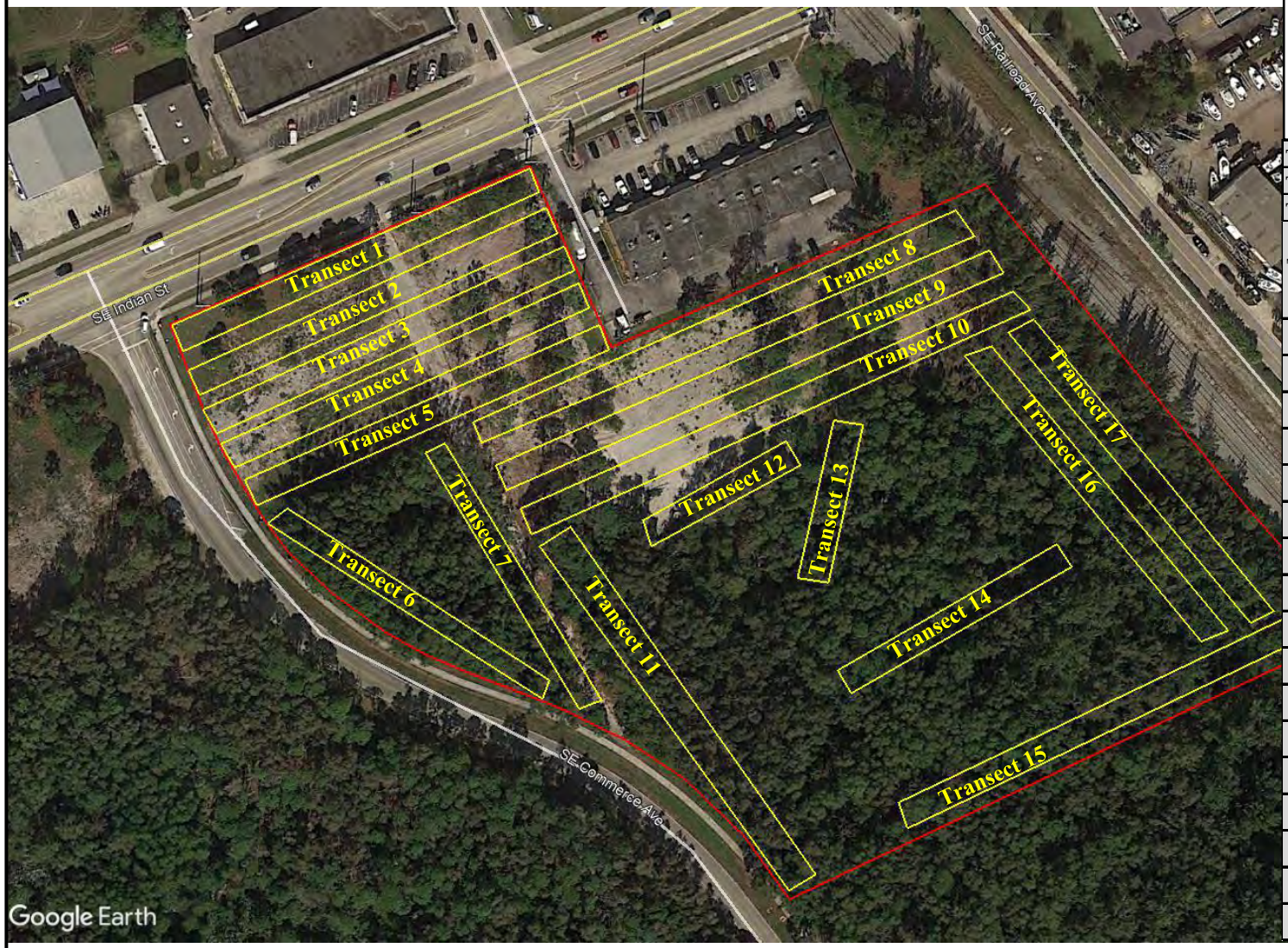
Existing Habitat/FLUCCS Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 3

Image: Google Earth Date 01/03/2018
Data: Aquatic Research Monitoring, Equipment, & Deployment LLC

N



LEGEND

Property Boundary (±9.43 acres)

Gopher Tortoise Survey Belt Transects (±2.65 acres)

Total Acreage of Suitable Habitat	8.97
Total Acreage Surveyed	3.42
Total Percent of Suitable Habitat Surveyed	38%

Belt Transect ID#	Width (ft)	Length (ft)	Survey Acreage	Gopher Tortoise Burrow ID #	Latitude (DMS)	Longitude (DMS)
1	25	360	0.21	N/A	N/A	N/A
2	25	360	0.21	N/A	N/A	N/A
3	25	360	0.21	N/A	N/A	N/A
4	25	360	0.21	N/A	N/A	N/A
5	25	360	0.21	N/A	N/A	N/A
6	25	235	0.13	N/A	N/A	N/A
7	25	235	0.13	N/A	N/A	N/A
8	25	485	0.28	N/A	N/A	N/A
9	25	485	0.28	N/A	N/A	N/A
10	25	485	0.28	N/A	N/A	N/A
11	25	485	0.28	N/A	N/A	N/A
12	25	155	0.09	N/A	N/A	N/A
13	25	155	0.09	N/A	N/A	N/A
14	25	235	0.13	N/A	N/A	N/A
15	25	485	0.28	N/A	N/A	N/A
16	25	340	0.20	N/A	N/A	N/A
17	25	340	0.20	N/A	N/A	N/A

Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Wildlife Survey Transect Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 4

Image: Google Earth
Data: Aquatic Research Monitoring, Equipment, & Deployment LLC

N

Aquatic RESEARCH
Monitoring, Equipment, & Deployment, LLC
AquaticResearchFl.com
Environmental Consulting Department

Soil(s) Map

Sewall's Point Land Company – Subdivision
A Portion of LOTS 65, 66 & 67, Unassigned SE Indian Street
City of Stuart, Martin County, Florida
PIN: 38-38-41-002-065-00010-3

Figure 5

Image: Florida Department of Environmental Protection
Data: Soil Survey Staff, Natural Resources Conservation Service

N

Appendix B
Gopher Tortoise Survey
Raw Data

ENVIRONMENTAL CONSULTING DEPARTMENT

Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

Belt Transect ID#	Width (ft)	Length (ft)	Survey Acreage	Gopher Tortoise Burrow ID #	Latitude (DMS)	Longitude (DMS)
1	25	360	0.21	N/A	N/A	N/A
2	25	360	0.21	N/A	N/A	N/A
3	25	360	0.21	N/A	N/A	N/A
4	25	360	0.21	N/A	N/A	N/A
5	25	360	0.21	N/A	N/A	N/A
6	25	235	0.13	N/A	N/A	N/A
7	25	235	0.13	N/A	N/A	N/A
8	25	485	0.28	N/A	N/A	N/A
9	25	485	0.28	N/A	N/A	N/A
10	25	485	0.28	N/A	N/A	N/A
11	25	485	0.28	N/A	N/A	N/A
12	25	155	0.09	N/A	N/A	N/A
13	25	155	0.09	N/A	N/A	N/A
14	25	235	0.13	N/A	N/A	N/A
15	25	485	0.28	N/A	N/A	N/A
16	25	340	0.20	N/A	N/A	N/A
17	25	340	0.20	N/A	N/A	N/A

Total Acreage of Suitable Habitat	7.18
Total Acreage Surveyed	3.42
Total Percent of Suitable Habitat Surveyed	47.50%

Aquatic RESEARCH Monitoring, Equipment, & Deployment, Llc.
CUSTOM DESIGNED RESEARCH EQUIPMENT AND CREATIVE RESEARCH SOLUTIONS

Appendix C
South Florida Water Management District (SFWMD)
Informal Wetland Delineation (IWD)

ENVIRONMENTAL CONSULTING DEPARTMENT

Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

February 11, 2019

** Delivered via email*

Paul Kuehn
Ted Glasrud Associates Fl LLC
1700 W Highway 36 #650
Roseville, MN 55113

Subject: Ted Glasrud Associates FL LLC
Application No. 181226-1080
Informal Wetland Determination No. 43-100937-P
Martin County

Dear Mr. Kuehn:

The District reviewed your request for an informal determination of the jurisdictional wetland and other surface water boundaries within the five subject properties, which are located as shown on the attached Exhibit 1. Joint site inspections were conducted on January 8, 2019 and February 5, 2019.

Based on the information provided and the results of the site inspections, jurisdictional wetlands as defined in Chapter 62-340, Florida Administrative Code, exist on one of the properties, Site No. 5. Exhibit 2, attached, identifies the boundaries of each property inspected and the approximate landward limits of the wetlands on Site No. 5.

This correspondence is an informal jurisdictional wetland determination pursuant to Section 373.421(6), Florida Statutes, and Section 7.3 of Environmental Resource Permit Applicant's Handbook Volume I. It does not bind the District, its agents or employees, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal jurisdictional determination are not entitled to rely upon it for purposes of compliance with provision of law or District rules.

Sincerely,

Barbara Conmy
Section Leader

c: Daniel Saskowsky, Daniel M Saskowsky Environmental Consultant *
Ted Glasrud Associates Fl, LLC
Paul Kuehn, Ted Glasrud Associates Fl LLC

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 181226-1080.

Exhibit No. 1.0 Location Map

Exhibit No. 2.0 Wetland Map

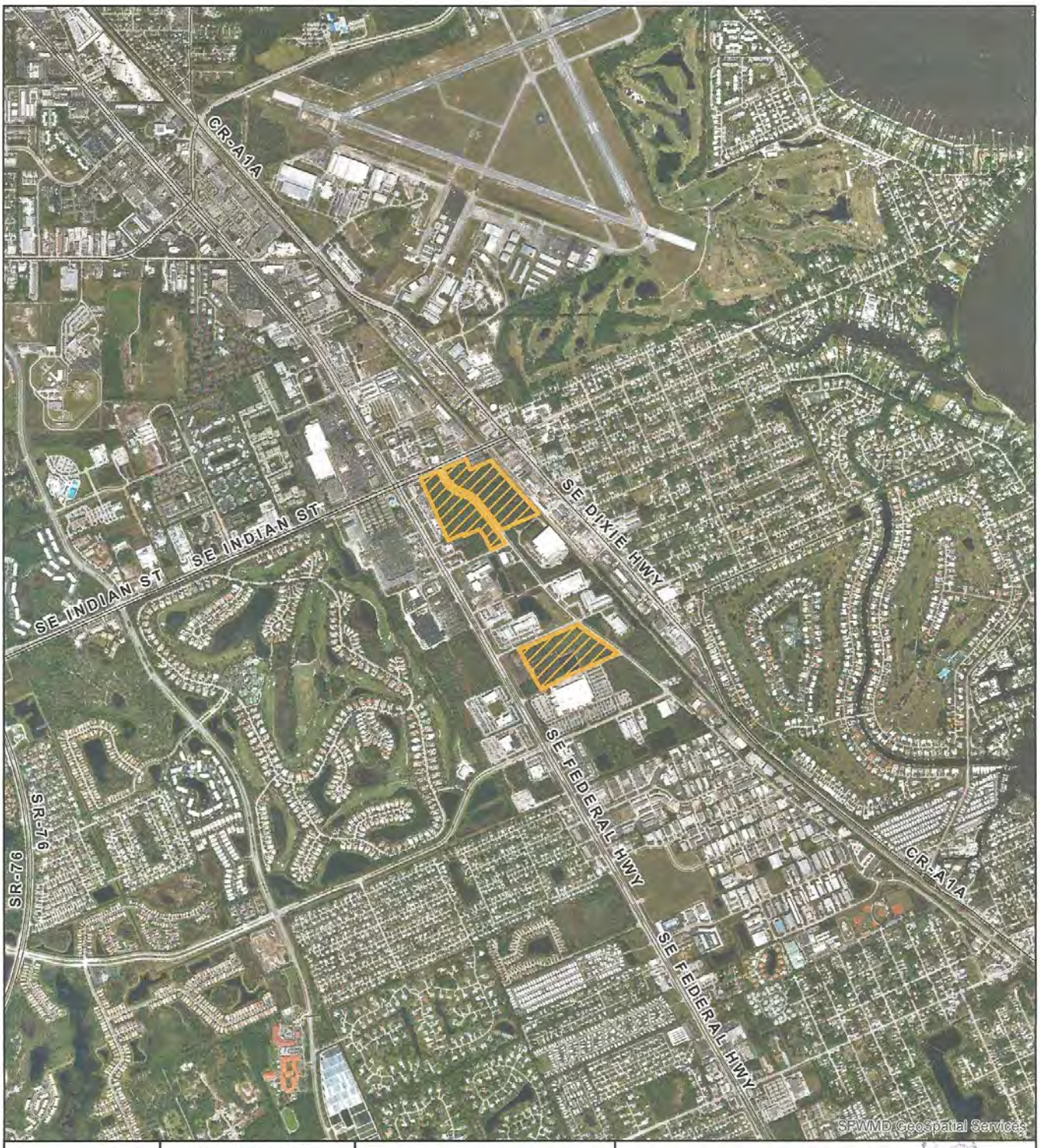


Exhibit No: 1	Exhibit Created On: 2019-02-08	MARTIN COUNTY, FL

REGULATION DIVISION

Project Name: Ted Glasrud Associates FL LLC

0 0.325 0.65 Miles

N

Application

Application Number: 181226-1080

South Florida Water Management District

SITE #1
SE Commerce Ave

SITE #2
SE Railroad Ave
SE Commerce Ave

SITE #3
© 2016 Google

mmerce Ave
SITE #4

SE Miami Ave
SE Commerce Ave
SITE #5
W
W
OSW
© 2016 Google
Google Earth
378 ft
1995
Imagery Date: 1/23/2016 27°09'31.05" N 80°13'08.37" W elev 12 ft eye alt 1658 ft

Appendix D Site Photographs

ENVIRONMENTAL CONSULTING DEPARTMENT

Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

Representative Site Photos

Western perimeter of property facing north.

Eastern perimeter of property, facing northwest.

North perimeter of property, facing south.

On-site access road, facing south.

On-site access road, facing south.

South perimeter of property, facing east.

South perimeter ditch, facing south.

South perimeter exotic vegetation earleaf acacia, Australian pine, sword fern and native cabbage palm, facing north.

Southern portion of property, facing north.

Interior areas of property.

Interior areas of property.

Cleared portion of property facing west.

Eastern perimeter ditch, facing southeast.

Eastern portion of property, Australian pine and Brazilian pepper tree.

Appendix E
IPAC Report

ENVIRONMENTAL CONSULTING DEPARTMENT

Aquatic RESEARCH Monitoring, Equipment, & Deployment, LLC.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Martin County, Florida

Map of project location

Local office

South Florida Ecological Services Field Office

(772) 562-3909
(772) 562-4288

1339 20th Street
Vero Beach, FL 32960-3559

http://fws.gov/verobeach

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

NOT FOR CONSULTATION

Florida Bonneted Bat Eumops floridanus — Endangered
There is **proposed** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8630

Florida Panther Puma (=Felis) concolor coryi — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1763

Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi) — SAT
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6049

Southeastern Beach Mouse Peromyscus polionotus niveiventris — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3951

West Indian Manatee Trichechus manatus — Threatened
Marine mammal
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4469

NOT FOR CONSULTATION

Birds

NAME	STATUS
Audubon's Crested Caracara Polyborus plancus audubonii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Scrub-jay Aphelocoma coerulescens No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8230	Endangered
Red-cockaded Woodpecker Picoides borealis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7614	Endangered

Whooping Crane Grus americana — EXPN
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/758

Wood Stork Mycteria americana — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8477

Reptiles

NAME	STATUS
American Alligator Alligator mississippiensis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/776	SAT
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened
Hawksbill Sea Turtle Eretmochelys imbricata There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3656	Endangered
Leatherback Sea Turtle Dermochelys coriacea There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle Caretta caretta There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1110	Threatened

Insects

NAME	STATUS
Florida Leafwing Butterfly Anaea troglodyta floridalis There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6652	Endangered
Miami Blue Butterfly Cyclargus (=Hemiargus) thomasi bethunebakeri No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3797	Endangered

NOT FOR CONSULTATION

Flowering Plants

NAME	STATUS
Beach Jacquemontia Jacquemontia reclinata No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1277	Endangered
Four-petal Pawpaw Asimina tetramera No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3461	Endangered
Lakela's Mint Dicerandra immaculata No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6390	Endangered
Tiny Polygala Polygala smallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/996	Endangered

Lichens

NAME	STATUS
Florida Perforate Cladonia Cladonia perforata No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7516	Endangered

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NOT FOR CONSULTATION

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 1 to Aug 31
American Oystercatcher *Haematopus palliatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31

Bald Eagle Haliaeetus leucocephalus — Breeds Sep 1 to Jul 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Common Ground-dove Columbina passerina exigua — Breeds Feb 1 to Dec 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Least Tern Sterna antillarum — Breeds Apr 20 to Sep 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Limpkin Aramus guarauna — Breeds Jan 15 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Magnificent Frigatebird Fregata magnificens — Breeds Oct 1 to Apr 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Ruddy Turnstone Arenaria interpres morinella — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

NOT FOR CONSULTATION

Semipalmated Sandpiper Calidris pusilla This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Swallow-tailed Kite Elanoides forficatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Yellow Warbler Dendroica petechia gundlachi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 20 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

NOT FOR CONSULTATION

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

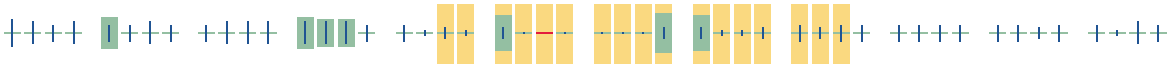
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

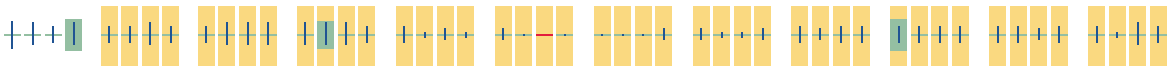
Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

NOT FOR CONSULTATION

Black Skimmer
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

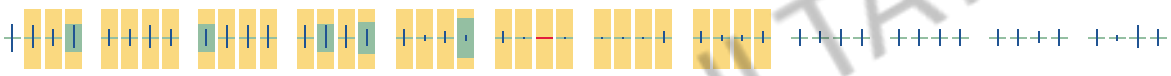


Common Ground-dove
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

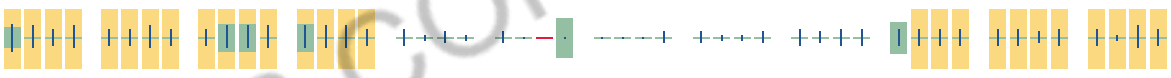


Least Tern
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

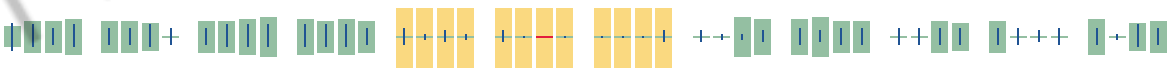
Limpkin
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



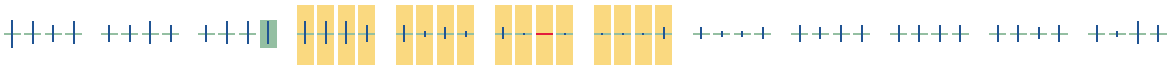
Magnificent Frigatebird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



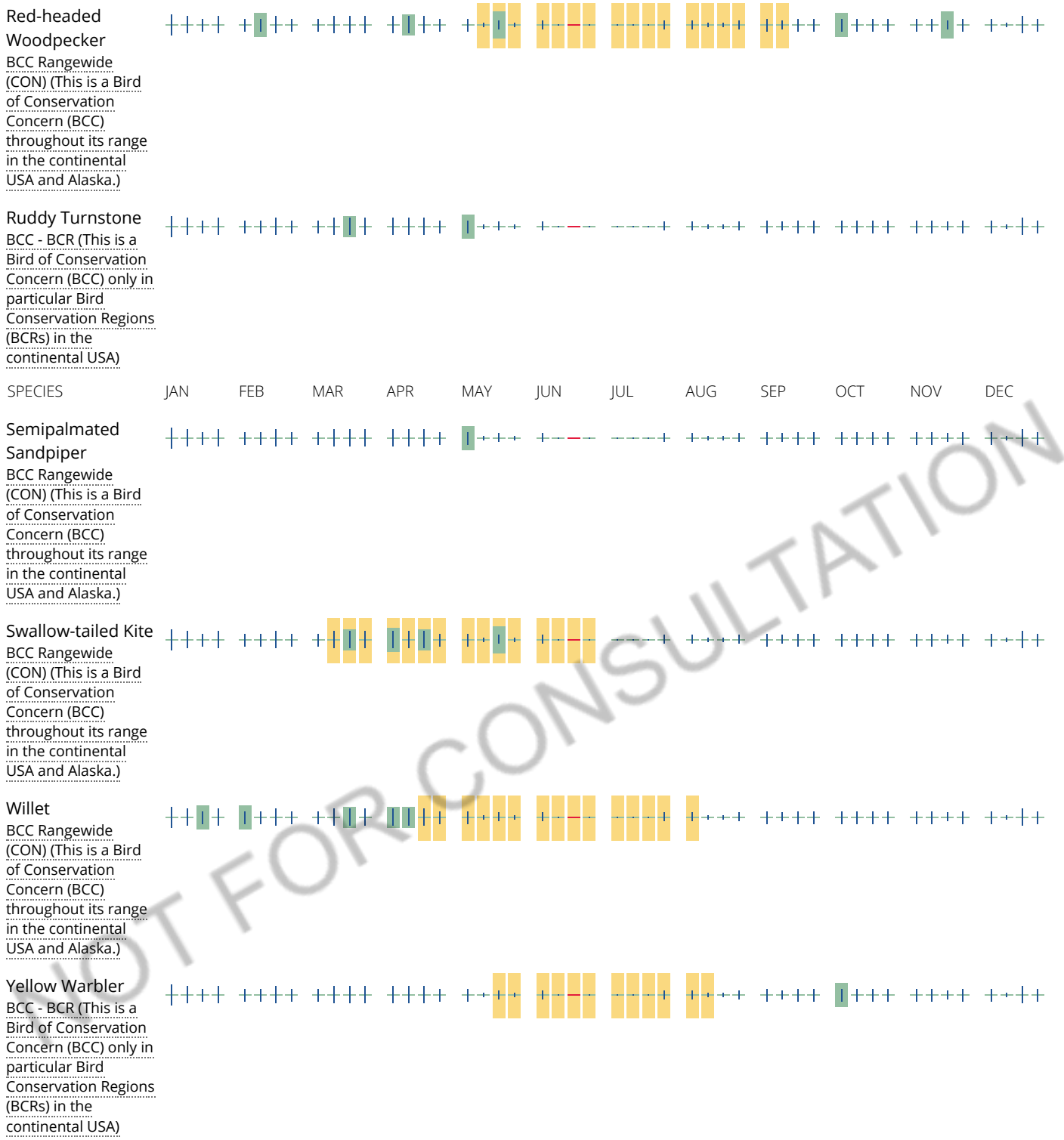
Prairie Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Prothonotary Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION



NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

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Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME
West Indian Manatee *Trichechus manatus* https://ecos.fws.gov/ecp/species/4469

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

- R5UBFx

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

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Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Martin County

Economic Development Action Plan

COVID-19 Economic Recovery Strategies 2021-2026

August 2021

BUSINESS FLARE®

Economic Development Solutions
Maximixe Your Marketplace

2021-2026 Martin County Economic Development Action Plan

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Acknowledgements

Martin County Board of Commissioners

District 1: Commissioner / Vice Chair Doug Smith
District 2: Commissioner / Chair Stacey Hetherington
District 3: Commissioner Harold Jenkins
District 4: Commissioner Sarah Heard
District 5: Commissioner Edward V. Ciampi

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Economic Recovery

This economic assessment and action plan have been developed to position Martin County for a fast and full economic recovery after the initial impacts of the COVID-19 pandemic. The fundamental purpose of this plan is to identify priorities and catalytic strategies to help leverage targeted growth and maximize economic return, including public and private investments. The **Action Plan** will also provide tangible recommendations to help guide Martin County's future.

County leaders have set clear objectives for this effort, including:

1. **Measuring the impacts COVID-19** has had on Martin County's economy and what steps are necessary for the County to undertake to recover the lost revenue from the economic losses; and
2. **Developing guidelines and recommendations** in such areas related to economic development, including but not limited to business retention, business attraction, workforce development, the development of infrastructure necessary to support economic growth, redevelopment, and business development; and
3. **Restoring and maintaining** an equitable and diverse tax base, encouraging and promoting desirable economic development within the County that is consistent with supporting ordinances and policies; and
4. **Undertaking and supporting activities** aimed at recovering the economic well-being of the community by the promotion of a sustainable economy post COVID-19, which will retain and create quality employment opportunities and result in a broadened tax base for the County and its residents; and
5. **Working with other public and private entities** and staff to promote the economic well-being of the community and perform such other functions as may be appropriate to achieve such goals.

The post-COVID-19 analysis included a review of current market research, stakeholder interviews, reputation and brand assessments, and field observations. Multiple meetings with key partner organizations and feedback from select staff members provided strong collaboration. Based on statistical data, supporting information, trends, consistent core values, and physical assets, an overall strategic theme for countywide economic development was identified.

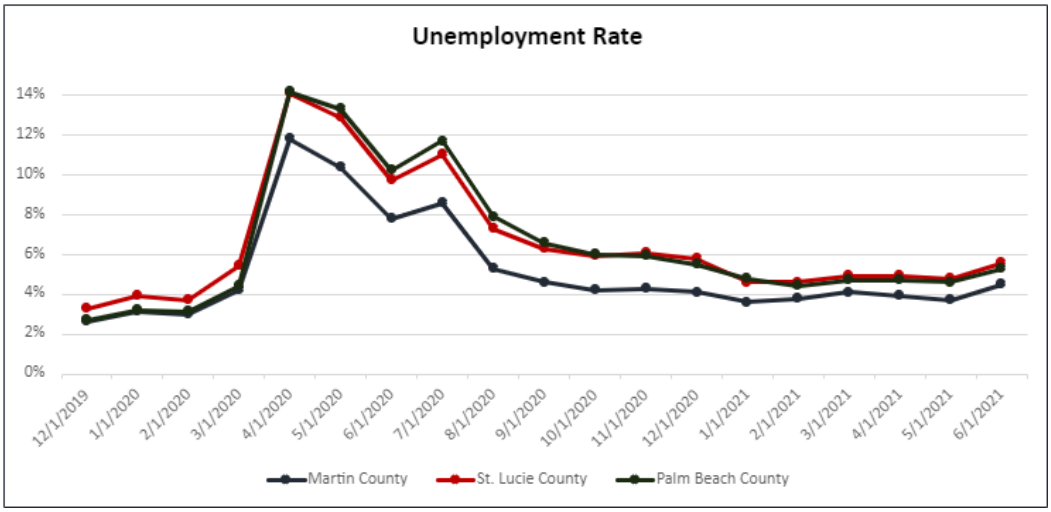
This countywide strategic theme, along with new opportunities, goals, and action items consistent with previously approved plans, provides the foundation for a comprehensive Action Plan that fits easily into existing frameworks.

Key Findings:

1. COVID-19 Pandemic conditions and policies resulted in significant negative impacts to retail, arts and culture, and targeted industry sectors.
2. Logistics, financial services, and marine/boating sectors actually continued their growth.
3. Remote work protocols created opportunities for more people to live in Martin County and work from home.
4. Electric mobility sectors emerged as having strong potential for future growth consistent with sustainability, quality of life, and workforce skill sets.

The impact of the COVID-19 pandemic on Martin County has been significant. This impact can be defined as the "COVID Curve," which is evident in the various economic metrics that are used to understand the county's economic health. The curve is evident in business revenues, consumer spending, local tax receipts, and as visible in the following chart, on employment and the job market.

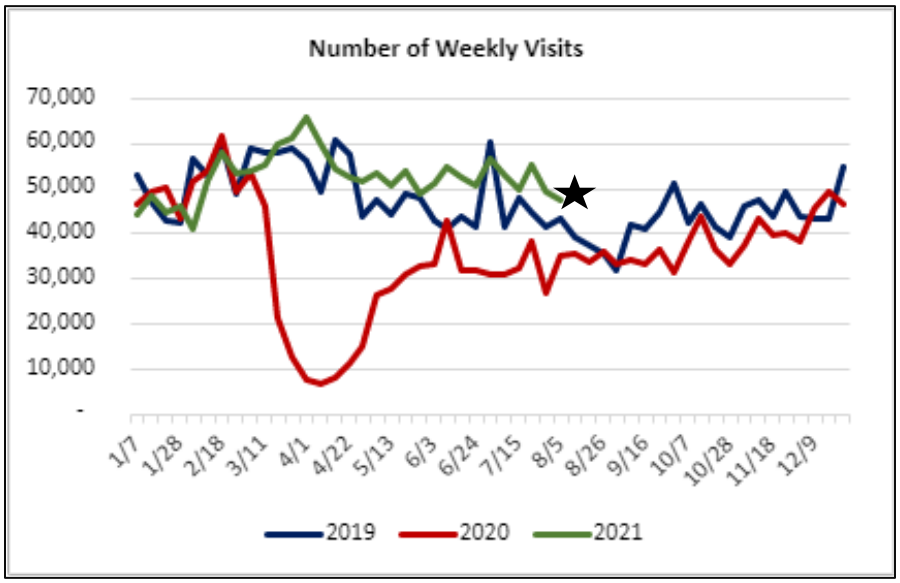
Figure 1. Unemployment Rate (The "COVID Curve")



Source: Florida Department of Economic Opportunity

The chart below utilizes Placer.ai data to assess foot traffic and the effects of COVID-19 on select shopping and dining areas in Martin County. While significant drops in foot traffic occurred during lockdowns, the downtown areas are recovering to near pre-COVID levels.

Figure 2. Downtown Stuart – Weekly Foot Traffic Curve



★ August 2021

Source: Placer AI

There are many initiatives that Martin County can undertake to recover from COVID-19 and continue to grow the county's economy in a resilient and sustainable manner. Out of these initiatives, there are five (5) key themes that rise to the top which support the county's continued economic growth while also respecting Martin County's authentic culture and unique character.

More specific action items and strategy rationale follow this summary section, and extensive market analytics can be found in the appendix.

Together, these Action Plan components provide a path to solid recovery, a sustainable economic development approach, and an overall philosophy that supports the County's **strong commitment to sustainability and quality of life.**

Key Themes:

- Expand Martin County's reputation as a center of **innovation** through initiatives that include creation of an Innovation District in the existing Fairgrounds, Golden Gate, Commerce Park, and the Martin County Airport areas. Focusing on innovation around Martin County's existing industry strengths and complementary trade sectors provides an authentic, sustainable path to continued economic growth.
- Improve recreational assets and access to recreation that enhance **quality of life** which positively influences the ability to retain and attract a high-skill workforce. One of the main drivers of talent location decisions is an area's quality of life and the marketing around that quality of life.
- Invest in **infrastructure** enhancements that include septic to sewer in Martin County's industrial areas. Investment, job creation, and job retention in industrial areas rely on infrastructure availability.
- Implement programs and investments to maintain the Martin County's market position in the **Marine** industry, which is a key economic development and quality of life driver for the county. Martin County's economy relies on access to a quality marine environment.
- Capitalize on Martin County's opportunities in the less visible but defining **Agribusiness and Equestrian** sectors. Expanding awareness and identifying opportunities for growth of these sectors, including supply chain advantages and technological improvements, will improve not only industry productivity but also quality of life and economic diversification.

ECONOMIC DEVELOPMENT

1. ECONOMIC DEVELOPMENT

1A. GOAL: Martin County will pursue and adopt innovative approaches to grow and expand its existing business sectors throughout the County, by focusing on the County's existing resources and competitive advantages.

Strategy: Create an Innovation District that anchors an ecosystem to support, retain, and expand the existing cluster of marine and aerospace sectors.

Action Steps:

Phase I:

- Analyze the business mix and collaborate with stakeholders to define Innovation District boundaries, purpose, and benefits to the community.
- Contact property owners as it relates to the creation of the Innovation District.
- Finalize Innovation District boundaries for County and City approval of an overlay district to allow for targeted efforts, initiatives, and investments.
- Masterplan the Innovation District with "walkable" design elements that attract new emerging technology start-ups.
- Provide a centralized stormwater system and on-street public parking to encourage affordable private investment in a downtown campus-like setting for research and development firms.
- Create a program to eliminate septic systems within the Innovation District.
- Create an "Innovation" overlay zoning district that is form based and provides for internal and external connectivity, shared parking, and utilizes LSTAR regulations to expedite development and repurpose existing buildings.
- Extend regulatory allowances to surrounding areas to attract compatible housing for employees, neighborhood services, and connectivity.
- Fully utilize the Industrial Development Authority, and the powers granted through its legislation, to further the creation and development of the Innovation District.
- Identify key sites within and outside of the Innovation District for expansion and preservation for marine non-water-dependent office-based operations.
- Repurpose the existing fairgrounds in furtherance of the Innovation District masterplan.

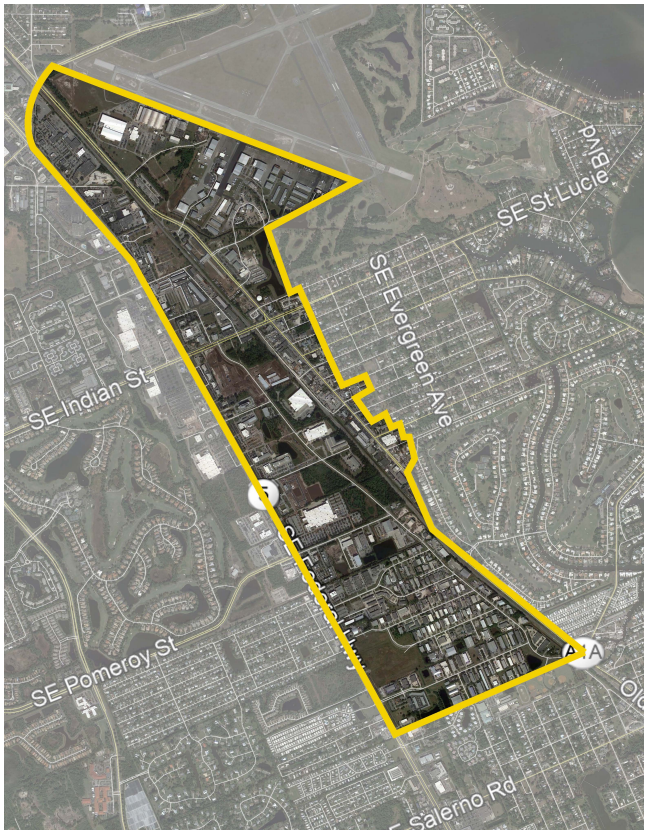


Photo of Conceptual Innovation District.

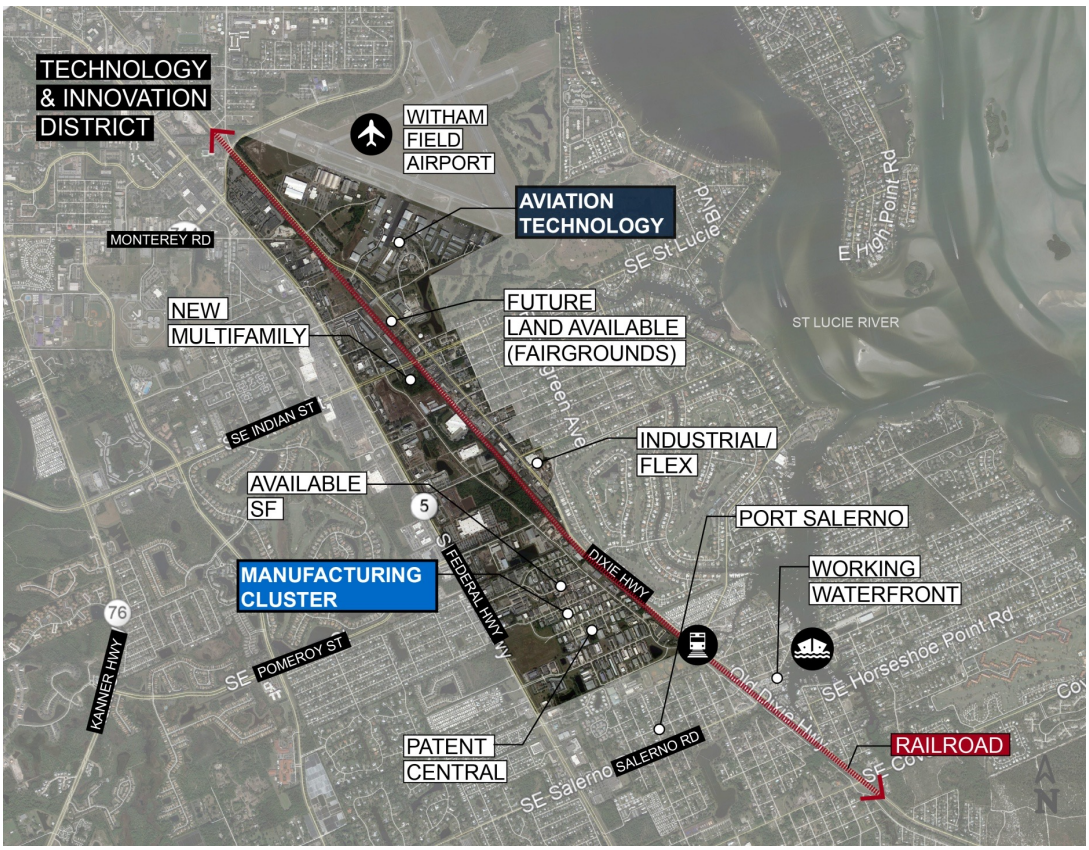
Phase II:

- Actively promote the Innovation District and its cluster of job and business opportunities through direct marketing and prospecting compatible businesses.
- Engage appropriate nonprofit stakeholders near the Innovation District.
- Educate financial institutions, stakeholders, and brokers regarding the proposed district and efforts to retain, fund, and recruit applicable businesses.
- Create a Business Retention, Attraction and Recruitment program specifically tailored for the Innovation District to further the recruitment of targeted businesses into existing vacant commercial and office space in the Innovation District.
- Identify and attract marine industry segments with non-water-dependent office-based operations.
- Create a concierge program for onboarding technology-related, fast-growing startups, relocations, and expansions within the Innovation District.
- Create an extensive marketing campaign with regards to the Innovation District.

Phase III:

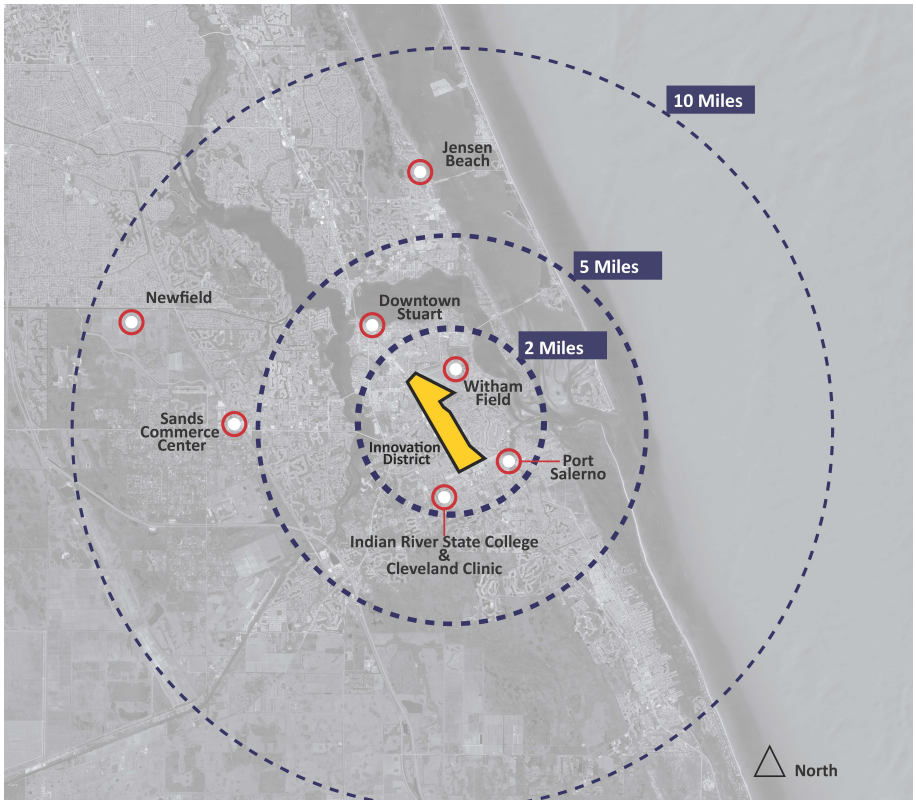
- Reserve a designated area to establish an Innovation Incubator center to encourage startup relocations and project collaborations.
- Identify an organization to run Innovation Incubator Center.
- Create a pool of mentors.
- Design and construct or repurpose an Innovation Incubator Center to include shared workspace, common areas, centralized facility management, and any support services to be provided to growing businesses.
- Develop an Innovation Incubator Center contract for prospective users.
- Market incubator for recruitment to include startups and fast-growing companies.
- Ensure private broadband and communication providers will make available reliable services at the highest possible broadband speeds.

Figure 3. Innovation District Conceptual Plan



Source: BusinessFlare Design

Figure 4. Innovation District Concentric Map



Strategy: Identify, prioritize, and acquire strategic properties and/or parcels countywide for disposition within and around the Innovation District and Community Redevelopment Areas to direct job creation and capital investment into areas of most need.

Action Steps:

- Inventory all publicly owned assets the in the targeted areas within this strategy and identify those that could be appropriate for disposition or redevelopment.
- Identify privately owned sites and parcels adjacent to publicly owned real estate for acquisition and property assembly to further the Innovation District.
- Identify key sites for retention and preservation.
- Fully utilize the Industrial Development Authority, and the powers granted through its legislation, to further the growth and expansion of targeted industries business sectors throughout the County.

Strategy: Attract electric boat technology and complementary marine technology industries, with a focus on locations in the Innovation District.

Action Steps:

- Hire a consultant to create an industry recruitment plan.
- Research component parts designers, fabricators, and supply chain network.
- Identify complementary industries.
- Identify and map locations of the associated manufacturing, sales, and distribution hubs.
- Determine applicable skillsets, training, and certification programs.
- Collaborate with state and local economic development organizations to initiate targeted recruitment efforts.

Strategy: Capitalize on aviation assets through development of sites throughout the county and diversification of revenue at the Martin County Airport.

Action Steps:

- Complete airport masterplan process.
- Target aviation firms and aviation-related businesses for expansions and relocations.

1B. GOAL: Grow supportive entrepreneur ecosystems, focused on technology companies to provide the physical environment, local contacts, and capital for existing, relocating, and start-up tech entrepreneurs.

Strategy: Collaborate with existing technology businesses, agencies that provide resources for entrepreneurs, and other partners to further innovation initiatives.

Action Steps:

- Contact and establish a relationship with Florida Venture Forum to identify existing and future sources of venture capital.
- Take a more active role in Space Florida supply chain initiatives, for networking and access to capital.
- Identify and support entrepreneur-led micro-technology areas throughout the county, particularly clusters in Jensen Beach, Port Salerno, and Hobe Sound.

Strategy: Build and grow Life Science, Technology, and Research (LSTAR) industries.

Action Steps:

- Engage the healthcare industry to collaborate on development of medical devices and grow medical manufacturing in Martin County.
- Identify and assist LSTAR and LSTAR-related companies for enhanced workforce training and assistance from the Business Development Board.
- Create a marketing campaign for LSTAR, LSTAR-related businesses, medical manufacturing, and Targeted Industries to highlight the business advantages of locating in Martin County, including the flexibility and advantages that are location-specific for LSTAR businesses.
- Identify and assist companies that have received funding from the National Institute of Health (NIH) and Small Business Innovation Research (SBIR) grants, for the retention and recruitment of commercialization projects in Martin County.

Strategy: Encourage the development of co-working space for technology firms which includes makerspace for product development and testing.

Action Steps:

- Support the development of multi-use buildings within Community Redevelopment Areas.
- Identify Martin County or city-owned buildings suitable for short-term leases to act as temporary start-up offices to incubate targeted business growth in Martin County.

1C. GOAL: Establish Martin County as a Center of Excellence for Water Quality, Biosolids, and Advanced Ocean Technology to capitalize on existing environmental preservation and water protection efforts.

Strategy: Create a countywide research consortium related to clean stormwater and clean drinking water innovations.

Action Steps:

- Identify land for a facility dedicated to water and marine science.
- Identify existing stakeholders for collaboration and partnership.
- Inventory all related businesses and conduct a survey regarding resources and operations to determine future local needs for wet-lab and dry-lab space.
- Collaborate to increase number of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) applications and awards for clean water.
- Collaborate with state and local economic development organizations to initiate targeted recruitment efforts to attract clean water technology companies.
- Identify opportunities for technology advancements in animal husbandry.
- Identify opportunities for incorporation of advancements in use of pesticides in agriculture and associated runoff.
- Incorporate resiliency and technology related to clean water use and runoff mitigation.
- Expand the Ripple Stormwater EcoArt project beyond the initial Palm City Community Redevelopment Area to increase stormwater treatment projects that include artistic and environmental educational.

Strategy: Create a working group related to the study, innovation, and implementation of advancements in the management of biosolids, sewage, and effluent.

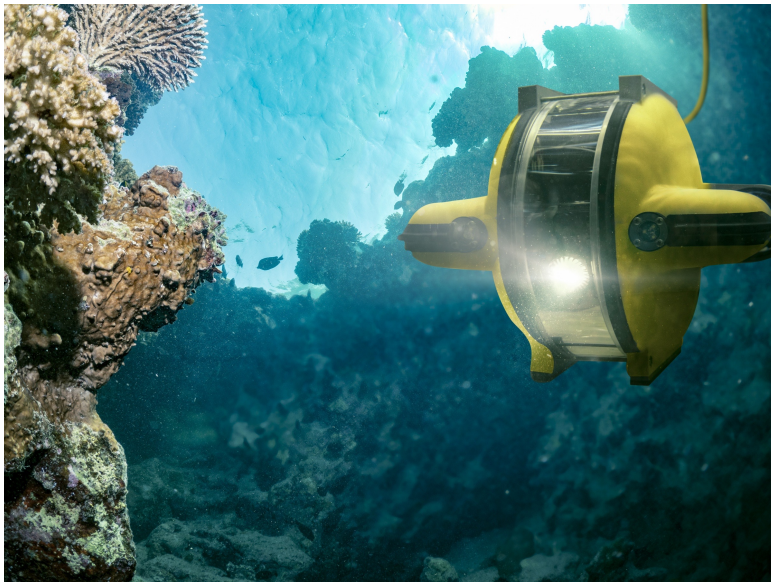
Action Steps:

- Identify land, building, and infrastructure.
- Assemble a team that includes sewage treatment professionals, water quality chemists, hydrologists, and marine biologists to prioritize the efforts needed in Martin County to protect groundwater, natural water bodies, and comply with expanding DEP regulations.
- Focus efforts on steps that can be taken to fight harmful algae blooms that result from natural systems and biosolids.

Strategy: Create a research consortium related to Advanced Ocean Technology.

Action Steps:

- Conduct an asset mapping of existing organizations, physical assets, current federal funding, and applicable patents.
- Take inventory and determine local needs for wet-lab and dry-lab space.
- Work with providers to develop new courses to train in key water-related sectors.
- Train individuals in the areas of oceanography, surveying, and protected species.
- Collaborate to provide professional certifications in geophysical and geotechnical skills, oceanography, surveying, protected species, and marine mammal observers.
- Recruit Autonomous Surface Vehicle companies to the region based upon the availability of talent and coastal testing facilities.
- Create a pool of mentors.



Strategy: Develop a coastal test range for autonomous surface and undersea vehicles and data acquisition systems.

Action Steps:

- Organize a panel of subsea experts including autonomous vehicle developers to define the parameters of a tailored coastal test range facility in waters off Martin County.
- Identify potential site where testing would occur, and landside property needed for parking and administrative/management office.
- Define Martin County-appropriate testing site parameters to include depth, size of test range, and seabed cable connections for power and communications.
- Prepare budget for development of the facility to support customers based on the criteria developed above.
- Identify and seek needed state and federal government permits.
- Identify Martin County agency responsible for administrating the program.
- Develop user applications, selection criteria, and standard operating procedures.
- Prepare marketing strategy and materials needed to promote facility.

1D. GOAL: Embrace all countywide agricultural assets and technologies to encourage opportunities for utilization of the entire agricultural supply chain.

Strategy: Encourage expansion of buy-local grow-local initiatives to better connect the agriculture industry with direct distribution to urban and/or densely populated areas of Martin County.

Action Steps:

- Refresh the countywide "fresh and local" campaign and work with the farm bureau and restaurant association to create a “fresh and local” certification.
- Capitalize on linkages and distributors that can quickly deliver produce and other products to foodbanks.
- Work with organizations to create a centralized database where food banks and others can post needs and farmers can post available products for a quick “match”.
- Encourage farmers markets and have the County’s Community Redevelopment Areas take a more active role in programming, marketing, and soliciting vendors.
- Support growth and expansion of the cottage food industry and include incubators and a shared commercial kitchen at one of the entrepreneur or incubator sites.
- Encourage technology supported farming to include vertical indoor climate-controlled, hydroponic, and aeroponic facilities.

Strategy: Preserve and protect agricultural uses in Martin County.

Action Steps:

- Preserve existing and active agricultural land in Martin County.
- Work with partners to provide the education and tools for agribusiness to implement best management practices in terms of fertilizers and run-off.
- Partner with clean water, energy, autonomous vehicles/machines, logistics, and other technology providers to promote innovative agriculture operations.
- Further promote agritourism opportunities and work with the Martin County Office of Tourism Marketing to position it as a unique attraction for Martin County.
- Find ways to assist farmers seeking access to new technologies.
- MPO to include roads and transportation network planning to improve product distribution.

Strategy: Encourage the expansion of agribusiness and equestrian activities in western Martin County.

Action Steps:

- Identify, create, and market opportunities for farmers to purchase or lease additional land for farming.
- Utilize existing parks to create opportunities to partner with agribusiness and equine industries to recruit regional and national conferences and events.

1E. GOAL: Further Martin County's ability to become a marine, aviation, and aerospace innovation county.

Strategy: Consider acquisition of privately held airport for use in general aviation, aerospace, and Unmanned Aerial Vehicle (UAV) testing or consider other sites for UAV testing.

Action Steps:

- Collaborate with stakeholders and organizations that represent and or support aviation businesses regarding concepts and parameters for redevelopment.
- Seek Federal Aviation Administration authorization as a test site location for Unmanned Aerial Vehicles also known as drones.
- Conduct regional asset mapping to determine businesses and industries currently operating and/or testing drones.
- Collaborate with state and local economic development organizations to initiate targeted recruitment efforts.

Strategy: Analyze and provide for additional marine, recreational, and industrial uses along the St. Lucie Canal, utilizing existing applicable land use and zoning.

Action Steps:

- Repair, replace, or automate weir system to improve access to the Okeechobee Waterway.
- Ensure public access to all waterways.
- Assess existing boardwalks for deferred maintenance and identify opportunities for upgrades and expansions.
- Work with the Village of Indiantown to develop a marina to allow for inland marine industrial activity and recreational use.
- Review Phipps Park to determine opportunities for improvements or expansion.
- Coordinate with the Army Corps of Engineers on permanent public access easements.
- Utilize the north side of the canal for recreation, primitive camping, and small-craft motorboat fishing.
- Conduct a feasibility study to evaluate the potential for acquiring privately held islands in waterways for preservation and public use.
- Preserve existing commercial and industrial waterfront uses.
- Consider rerouting of roads within the Community Redevelopment Areas to allow for more commercial activity and public space along the waterways.
- Identify projects and include recreation related and "access" infrastructure in the Capital Improvement Plan.

1F. GOAL: Redevelop retail centers into mixed use centers that provide amenities for talent recruitment and boost Martin County's brand.

Strategy: Work with owners and the community to identify prospects and establish priorities for redevelopment.

Action Steps:

- Conduct a windshield study of all retail centers in Martin County and establish grading criteria to set priorities.
- Change regulations and permitted use standards so there is flexibility in redevelopment of destination and employment centers to encourage residential uses nearby for employees and create mixed use nodes of activity.
- Create an expedited approval process for redevelopment.
- Conduct code enforcement and property maintenance sweeps to keep commercial corridors clean and well maintained.
- Utilize nuisance abatement and establish other regulations to more aggressively target properties that have been on the vacant property registry for multiple years or have not complied the registration requirement.
- Determine barriers for redevelopment.
- Utilize the Planned Unit Development (PUD) zoning category to creatively redevelop infill parcels to create mixed use nodes.

WORKFORCE TALENT

2. WORKFORCE TALENT

2A. GOAL: Align workforce training, recruitment, and retention efforts to support industry in Martin County to be competitive with neighboring counties and states for business retention and attraction.

Strategy: Track and monitor general business retention and workforce needs.

Action Steps:

- Review quarterly Department of Labor and Florida Department of Economic Opportunity (FDEO) industry reports to identify trends and changes in output of Martin County industries and associated employment and occupational wage levels. Report findings and associated follow-up action steps to the assigned county liaison.
- Work with the FDEO to develop custom sub-county industry employment and wage reports.
- Review quarterly Martin County Business Tax Receipts and report to the assigned county liaison any trends, changes, and associated follow-up action steps.
- Identify additional sources of economic, workforce, and demographic information to track the county's economic conditions, especially those related to employment and wages.

Strategy: Invest in a Reimagining Education and Career Help (REACH) training center at the Martin County Airport.

Action Steps:

- Collaborate with stakeholders to identify capital and operational funding sources.
- Utilize American Rescue Plan Act funds to expedite and expand existing plans for vocational and technical training and associated training equipment and facilities.
- Create an advisory council or consortium of nearby business leaders to provide job shadowing, mentorship, internship opportunities, training reimbursement for employees, and technical equipment donations.
- Identify opportunities with higher education institutions to provide postgraduate and certificate courses onsite.
- Collaborate with workforce development providers to map applicable local career pathways in innovation and technology, including associated training requirements for upskilling of existing employees.
- Identify "earn while you learn" funding for trainee recruitment and retention.
- Utilize the training center to expand partnership efforts among educational institutions, and career and technical education providers.
- Expand apprenticeship programs, upskilling of existing talent, and technology talent pipelines.
- Collaborate with the medical industry to determine industry needs for training facilities and talent attraction needs given the aging local population.

Strategy: Further support the Martin County School District in the creation of middle- and high-school training programs in technology, health care, and advanced technology that meet the needs of Martin County business.

Action Step:

- Utilize American Rescue Plan Act funds to implement targeted educational programs designed to close learning gaps created during summer vacations and school breaks.
- Collaborate with the Martin County School District for storytelling through the Targeted Industries Business strategy.

Strategy: Further support the Martin County School District in the creation of middle- and high-school training programs in commercial graphic design, photography, videography, and film making which increase student's critical thinking skills and close the education gap created during the pandemic shutdown.

Action Step:

- Utilize American Rescue Plan Act funds to implement targeted educational programs designed to increase students' use of technology, equipment, and software systems.

Strategy: Coordinate with nonprofits to capitalize on human workforce.

Action Step:

- County should hold annual or hold quarterly meetings to better to ensure alignment of workforce talents with the needs of businesses.
- Coordinate with businesses to identify meaningful job opportunities with career paths in Martin County.
- Collaborate with the Arts Council of Martin County to partner with performing artists on trainings and certifications in art therapy and the neuroscience of art and healing through music therapy and art therapy interventions in healthcare.

Source: Connected. Science, Technology, Engineering, Arts, and Mathematics (STEAM)

2B. GOAL: Improve and invest in the county's recreational offerings for talent attraction and promote lifestyle aspects specific to Martin County.

Strategy: Actively market and promote lifestyle aspects of Martin County to attract and retain talent.

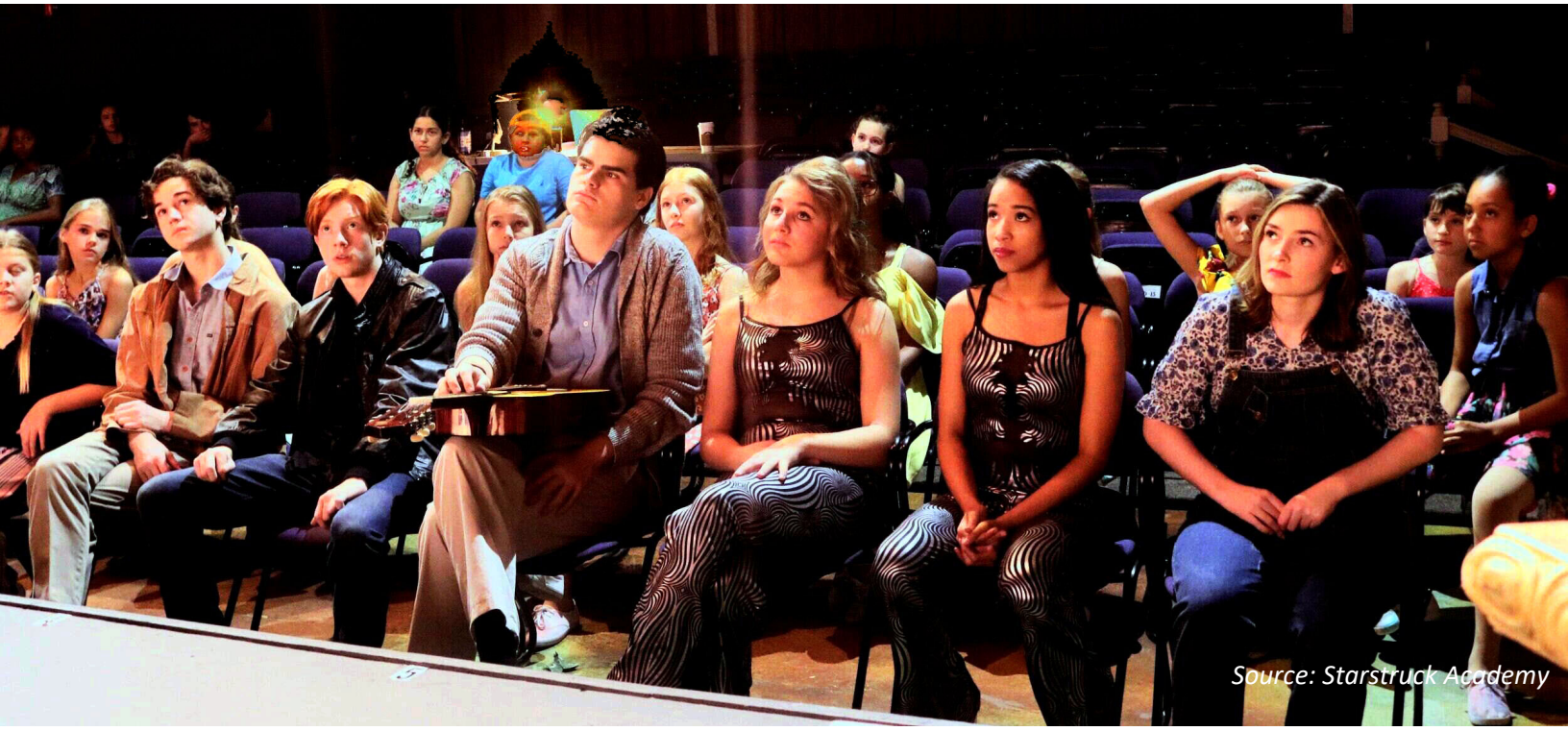
Action Steps:

- Develop and distribute a highly targeted talent recruitment marketing campaign.
- Focus storytelling on recreational and cultural lifestyle amenities – water sports, equestrian assets, natural areas hiking, agricultural experiences, sustainability culture, etc.
- Analyze, prioritize, and advocate for initiatives that produce recreational and entertainment opportunities to retain and attract creative talent pool.
- Further analyze the Parks masterplan to identify amenities that would attract and retain talent, with a focus on amenity locations and offerings in relation to resident and talent pool demographics.
- Collaborate with the Arts Council of Martin County and the Office of Tourism & Marketing to increase the marketing of the Martin County Arts & Culture Trail.
- Coordinate with Art & Culture organizations and the Elizabeth Lahti Public Library in Indiantown to encourage shared spaces and programming to increase access to the arts in western Martin County.
- Evaluate and assess the Indiantown Library partnership model to explore and create similar partnerships in other underserved neighborhoods, such as Golden Gate and Banner Lake.
- Identify and prioritize funding mechanisms that would bolster the competitiveness of Martin County nonprofit organization's when applying for State and Federal grants that require and/or expect match from local governmental sources.
- Work with Florida Department of Environmental Protection Office of Greenways and Trails to extend the MC-20 St. Lucie Canal Trail Corridor and designated priority Paddling Trails.

Strategy: Utilize American Rescue Plan Act funds to further support the Arts and Culture organizations and assets that make Martin County special.

Action Steps:

- Collaborate to support historic Arts venues and Arts-related structures that were slow to recover from pandemic closures due to facility limitations.
- Support facilities and plaza modifications with Americans with Disabilities Act upgrades and accessibility projects, including courthouse projects.
- Identify opportunities to support and provide shared campus-setting workspace, multipurpose performance venues, and event rental space for professional performing artists impacted through travel restrictions and permanent venue closures.
- Support countywide Arts and Culture ventures, civic associations, and nonprofit service providers to demonstrate solidarity of commitment to the place brand.
- Identify, analyze, and prioritize projects that produce and increase recreational opportunities including plazas, interactive public art, public entertainment venues, and public concert areas.
- Provide funding to support the Arts Council of Martin County's effort to participate in the Arts & Economic Prosperity Study to identify the impact of the arts and cultural sector.



Source: Starstruck Academy

CAPITAL PROJECTS & INFRASTRUCTURE

3. CAPITAL PROJECTS & INFRASTRUCTURE

3A. GOAL: Plan and invest in entrance corridors and gateways throughout Martin County, but more specifically at Bridge Road, Kanner Highway, and southwest Martin Highway to create a sense of place and arrival for Martin County.

Strategy: Create a masterplan for beautification of key gateways into Martin County.

Action Steps:

- Determine available and suitable public right-of-way.
- Design and implement gateway features that are tailored to the area.
- Collaborate with Public Works to determine gateway infrastructure needs related to drainage, landscaping, and maintenance.
- Create financing plan and implementation phases.

Strategy: Invest in wayfinding signage and recreational asset mapping.

Action Steps:

- Develop a countywide wayfinding signage system and plan.
- Invest in countywide installation of signage that directs the public to key locations and facilities using updated graphics and recognizable imagery that supports the "Enjoy our Good Nature" theme.
- Provide prominent signage identifying access to bike trails and other outdoor amenities.

3B. GOAL: Improve connectivity for all modes of transportation throughout the county to improve quality of life.

Strategy: Develop connectivity in all modes of transportation through mapping and integration of pedestrian paths, bike lanes, streets, public parking lots and garages, and transit routes.

Action Steps:

- Identify and inventory existing paths for trails, bicycle facilities, transit routes and transit ridership, peak hours, and locations.
- Design and construct a connected network that is accessible (Americans with Disabilities Act compliant), easy to access from multiple points, safe (buffered), and comfortable (tree canopy).
- Create transfer stations that allow for secure temporary storage of bicycles, kayaks, and other alternative modes of transportation.
- Build rest stop stations and public restrooms at key greenway and blueway connectors.
- Create, adopt, and effectuate a green corridor plan to allow for horses and non-motorized transportation east to west from Phipps Park to Lake Okeechobee and north to south through extension of the Green River Parkway Trail.
- Identify opportunities to create green corridors to link existing government-owned assets along or in close proximity to State Road 76 to create destination points.
- Identify green corridors for existing residents in densely populated neighborhoods.
- Map potential greenways and associated access easement and infrastructure requirements.
- Work within the public right-of-way and accommodate space for a multi-use path in a way that does not interfere with current traffic mobility and future commercial industrial development along the highway.

Photo of Phipps Park

3C. GOAL: Invest in land and park redevelopment efforts that improve the community's mental and physical health.

Strategy: Identify opportunities within existing parks to increase outdoor amenities and improve activity areas relevant to the population.

Action Steps:

- Inventory existing parks, including fitness equipment, walking trails, and water access amenities.
- Determine community needs.
- Construct and/or improve parks and implement improvements based on community input.

Strategy: Identify new opportunities within existing county-owned land to improve public spaces, provide additional open spaces, and improve outdoor activity areas.

Action Steps:

- Invest and construct in open public spaces.
- Establish an initiative to plant and/or increase shade trees in existing parks, trails, and pedestrian paths.
- Identify opportunities to install shade structures and canopies.
- Identify and repair boardwalks, crossovers, and beaches.
- Support the Camino Trail.
- Improve and continue to preserve the Langford Log Cabin Senior Center.

Strategy: Create safe and connected parks to improve quality of life.

Action Steps:

- Increase broadband or free Wi-Fi services in public parks.
- Conduct a safety review of all public parks for lighting installations and security design upgrades.
- Conduct a safety review of all trailways for lighting installations and security design upgrades.

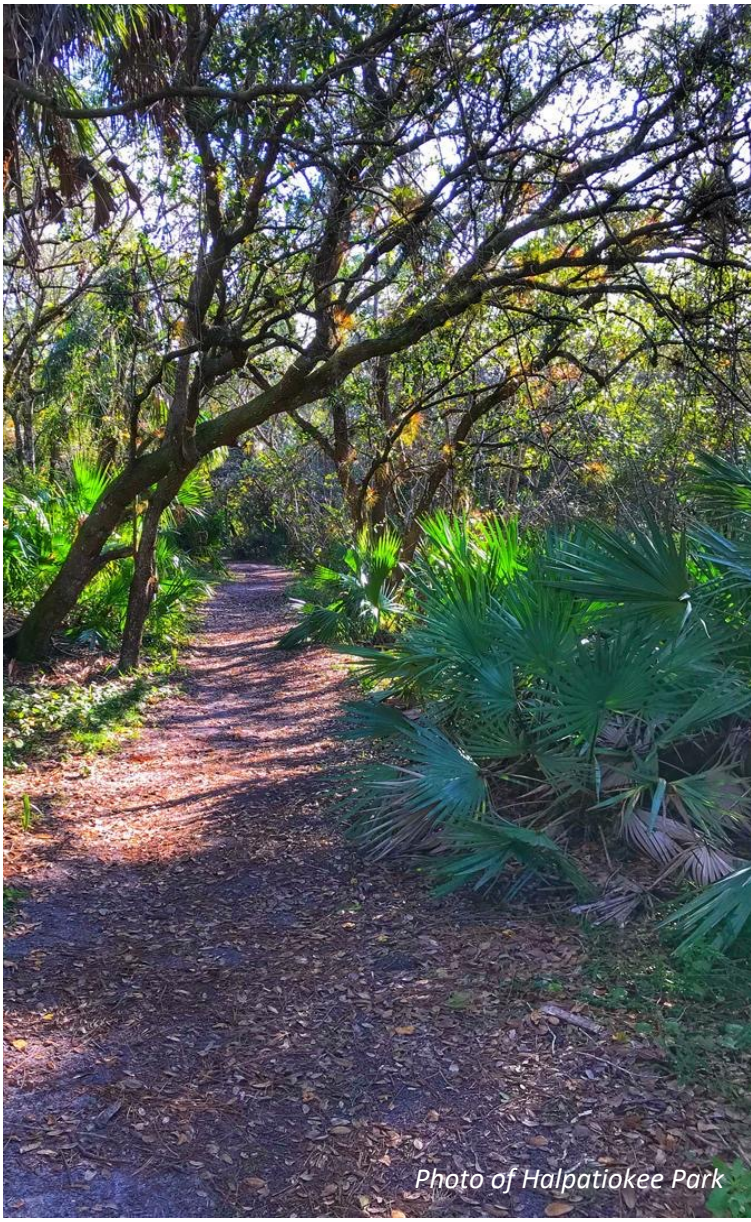


Photo of Halpatiokee Park

3D. GOAL: Develop infrastructure and utilities that meet the needs of industry located in industrial parks as well as underserved areas in Martin County.

Strategy: Prioritize septic to sewer projects to create growth opportunities for industrial areas, given industry does not grow on septic systems.

Action Steps:

- Review current plans to determine if additional funding from State grants could be leveraged as a result of American Rescue Plan Act allocations.
- Incorporate other infrastructure projects such as improvements to roads, lighting, and beautification.

Strategy: Encourage private broadband and communication providers to guarantee reliable and redundant services as future relocations and expansions will demand it.

Action Steps:

- Work closely in all planning and coordination efforts with private sector providers and consider expansion of "dark fiber" network solutions as needed.

Strategy: Forecast and plan for stormwater needs.

Action Steps:

- Take advantage of the state initiatives to develop innovative solutions to address the peril of flood statutory requirements by applying for funds under resiliency grants. These include planning grants as well as matching funds for construction.
- Construct stormwater projects that incorporate multi-purpose functionality as in floodable recreation and regional fast-water rescue training facilities for emergency response professionals that can attract grant funding.

Strategy: Identify opportunities for industrial tax increment financing projects.

Action Steps:

- Determine and itemize industrial infrastructure needs and associated costs.
- Identify suitable sites, potential projects' capacities, and forecast potential tax increment.
- Set aside a certain percentage of future property tax revenue for reinvestment into industrial infrastructure.

3E. GOAL: Enhance the marine infrastructure for public access and recreation in Martin County.

Strategy: Masterplan public access to waterways throughout Martin County.

Action Steps:

- Inventory, review, and assess the use and capacity of existing boat and kayak launches, fishing piers, boardwalks, and other water access amenities.
- Identify immediate opportunities to increase water access and parking facilities through redesign, upgrade, and new construction.

Strategy: Continue to masterplan, dredge, and improve the St. Lucie Canal, St. Lucie Inlet, Okeechobee Waterway, and other waterways to support flood protection efforts and preserve marine ecosystems.

Action Steps:

- Expand water accessible areas and access points along waterways.
- Determine and prioritize dredging needs on established navigable waterways.
- Develop action plan that identifies potential access points and available acreage for dredging and de-watering.
- Protect non-residential development along the proposed green corridor, on both sides of State Road 76 / Southwest Kanner Highway.
- Increase recreational resources for kayaks, canoes boardwalks, mooring fields, fishing piers, etc.

Source: BusinessFlare Drone. St. Lucie Canal

3F. GOAL: Improve transportation options and traffic flow within Martin County to provide alternatives for residents, businesses, and tourists.

Strategy: Enhance opportunities for east-west commuters and cross county transit users to have shorter travel times to work in Martin County and reduce congestion for the benefits of all residents.

Action Steps:

- Provide increased placement of sensors and utilization of enhanced traffic data to improve traffic flow and inform critical improvements in traffic signalization customized to fluctuations in demand and pinpoint needed intersection improvements.
- Develop a commuter services program that provides ride share matching and employer/employee van pool programs through contracts with national entities and other providers.

Source: BusinessFlare, Stuart Tram

Strategy: Improve small scale mobility and "last mile" connections in the County.

- Develop a connectivity plan that could be implemented by the Transportation Management Association, in partnership with Martin County Transit.
- Create local circulator systems in the more populated Community Redevelopment Areas and employment centers, such as "trolleys", on demand transport, or water ferries to improve access to county activity centers and destinations for tourists and residents.
- Work with local employers and hospitality industry to create a Transportation Management Association (TMA) which is a public private partnership to provide a variety of transportation options based on the business communities' needs.

3G. GOAL: Build upon and emphasize Martin County's equestrian assets and opportunities by investing in public facilities that complement the private investments, assets, and infrastructure already in place.

Strategy: Further utilize Timer Powers Park as an equestrian center.

Action Steps:

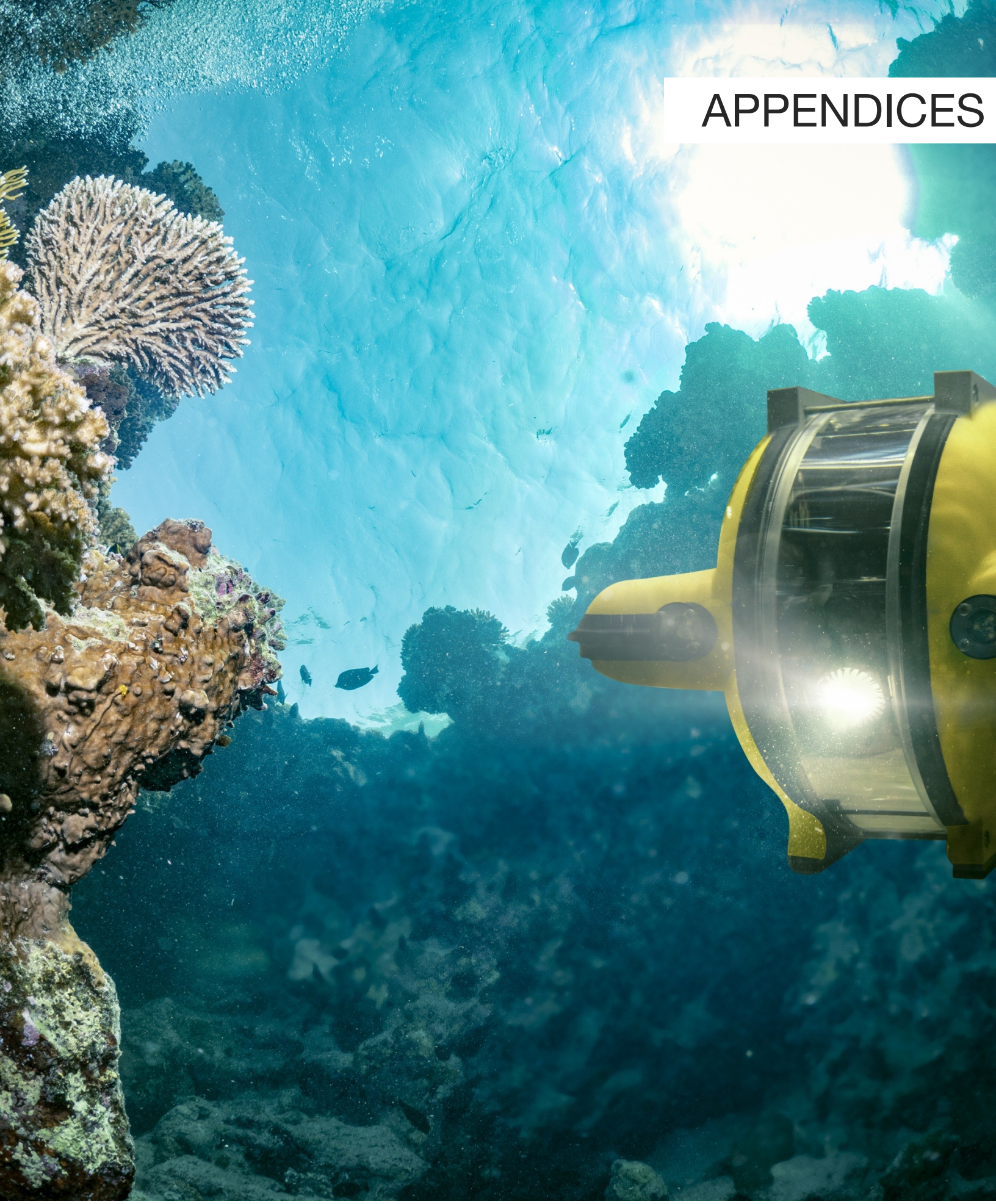
- Collaborate with nonprofits to create educational facilities for equestrians.
- Collaborate with Payson Park Thoroughbred Training Center.

Strategy: Invest in the installation and expansion of horse trails to connect destination points.

Action Steps:

- Identify assets, associated buffer zones, and potential horse trail linkages.
- Foster innovation and events through county partnerships.
- Conduct an equestrian industry study to understand Martin County's potential competitive advantage over more-established Florida equestrian communities.

APPENDICES



BUSINESS FLARE®

Economic Development Solutions
Maximixe Your Marketplace

SILVERTHORNE - COMMERCIAL AND RESIDENTIAL LAND USE DEMAND

Florida Residential Real Estate Market - Key Factors Driving Land Use Demand for Residential Development

- Demographic shifts
- Changes in consumer housing preferences
- Low mortgage rates
- Rapidly rising rental prices.

Further to the above, the primary drivers for homebuyer demand in Florida are demographic shifts, changes in consumer housing preferences — such as location, size, lot size — low mortgage rates, and rapidly rising rental prices. Some analyst's predictions call for 30-year fixed mortgage rates to reach over 4% by the end of the year. The most important factors when it comes to buyer demand are *homebuilding and housing supply*. Florida's housing market had more than 528,000 sales of existing homes, *up 19% from 2020.* (Florida Realtors chief economist Dr. Brad O'Connor)

The primary drivers for homebuyer demand in Florida are demographic shifts, changes in consumer housing preferences — such as location, size, lot size — low mortgage rates, and *rising rental prices – up by 55% in some areas.*

Millennials were cited as being the drivers when it comes to homebuying. Predictably, retirees make up a large constituency of buyers –that together with the millennials, are putting a lot of demand on the market everywhere in Florida. Pressure is on for homebuilders to locate available residentially zoned land suitable for multi-family or single-family development. That was a challenge before, and certainly that challenge has become greater since the inception of the COVID pandemic and the wave of migration to the State of Florida over the past 2 years. As in past years, it comes down to buyer demand and housing supply.

The decline in inventory impacted the housing market statewide over the past year -- 2021 ended with a 1-month's supply in most markets. A housing market under more typical conditions would have 3-6 months of inventory. Traditionally, Florida has had more existing condos than single-family homes, but by the end of 2021, existing condos and townhomes were down to a 1.3-month's supply. In summary, most everything that was built in 2021 was sold. In fact, over 160,000 existing homes in the condo and townhouse category sold in 2021, marking a more than 34% increase over 2020.

This trend has continued into 2022.

Due to national and global events, 30-year fixed mortgage rates may surpass 4% by the end of the year. This, according to some, might influence a market correction that will lessen demand. Even so, at 4%, interest rates would still be historically low. That, in combination with the sheer number of potential buyers – especially first time move-up buyers and retirees bringing in cash to purchase -- will keep the market very active, very competitive, and at low inventory.

Meritage Homes Market Research -- Summary

Estimated Available Commercial Space for lease or for sale in the City of Stuart

- Available commercial space (retail, commercial, office and warehouse) listed for lease or for sale in the City of Stuart totals approximately 345,000 square feet. This is commercial space available *after* Silverthorne would be developed

Estimated Available Commercial Land in the City of Stuart

- There are approximately 136 acres of unlisted, undeveloped land zoned "Vacant Commercial" in the City of Stuart, south of the St. Lucie River. If developed, this represents adding at least 1 million square feet of new commercial building to the existing commercial building inventory. This data is even more significant because it does not consider the available vacant/developable land north of the river and within the City's boundary.

- There are approximately 80 acres of undeveloped or partially developed land currently listed for sale within the City of Stuart.

These figures reveal substantial depth in the market in terms of available commercial land, and available commercial land uses in the City of Stuart.

Breakdown: Estimated Commercially Zoned Vacant Land |Corridor Specific Analysis

Corridor: Commerce Avenue, south of Indian Street (not including the Silverthorne/Glasrud parcel)	50.65 acres
Corridor: Between Indian Boulevard and Monterey Street (not including the Costco and adjoining apartment site)	86.16 acres
Total Estimated Acreage: Commercial Zoned Parcels	136.81 acres

Residential Land Available

There is very little available Multi-Family ("MF") Residential Future Land Use (FLU) in Stuart. According to the City's GIS Zoning Map, the parcels designated MF Residential FLU are currently developed with multi-family uses already in place. The city is largely built out from a residential perspective, with in-fill residential development the only option for homebuilders. Commercial, county, public use and agricultural land uses comprise the balance of the properties in the city, preventing in most cases, new residential development. Such is the reason why many residential developers seek to change FLU from commercial to residential land use. The inventory of commercial space and commercial land in the City of Stuart, especially when compared to the inventory of land available on which to build attainable housing, speaks for itself.

SILVERTHORNE TRAFFIC IMPROVEMENTS

Design of Indian Street and Commerce Avenue

Meritage Homes will work with the City of Stuart and with Martin County to modify the intersection of Commerce Ave. and Indian Street to eliminate the northbound left turn lane onto Indian Street such that Commerce Avenue will be right turn only onto Indian Street.

Meritage understands that the scope of work will include a landscaped median on Commerce Avenue and the extension of the existing right turn lane. There will also be an extension of the median on Indian Street which Meritage will landscape. The landscaping on both medians – (Commerce Avenue and on Indian Street) -- will be maintained by the Silverthorne Homeowners Association.

This scope of work will follow what was approved by the Martin County Commissioners at its February 22, 2022 hearing. The scope will also include extending the westbound left-turn lane on Indian Street and adding a northbound left-turn lane at Fischer Street. These improvements will also include the installation of STOP signs on Commerce Avenue when the northbound left-turn lane on at Fischer Street is installed.

County Staff estimated the cost of the improvements at $275,000, funded through developer contributions and transportation impact fees collected by the City of Stuart. Meritage Homes made a commitment, which was placed in the record at said Martin County Commissioners Hearing to pay the entire cost of these improvements. Doing so will relieve the citizens of the City of Stuart and of Martin County from making any contribution toward these improvements. These improvements are intended to enhance traffic safety, reduce the number of accidents, and improve the flow of traffic to accommodate new and future development in this area of the City of Stuart.

March 11. 2022

References and Notes:

All data is as of March 11, 2022; Sources: Business Development Board of Martin County, City of Stuart GIS Zoning and Land Use Map, CRES, Move.org; National Mortgage Professional, Katie Jensen, January 28, 2022; CBS-12, March 11, 2022; Florida Realtors.

The MilCor Group Inc.

Engineering a Value-Driven Sustainable Environment

Silverthorne Townhomes

TRAFFIC IMPACT ANALYSIS

Prepared For:
Meritage Homes

For Review By:
City of Stuart

REVISED
March 2022

Office Location & Mailing Address:

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Web www.themilcorgroup.com

Introduction
Site Data
Adjacent Roadways
Project Traffic
    Trip Generation
    Trip Distribution
Future Traffic
Project Driveway Analysis
Scheduled Roadway Improvements
Required Improvements
Phasing

Figure 1: Location Map
Figure 2: Trip Generation
Figure 3: Traffic Assignment
Figure 4: Distribution Calculations
Figure 5: Buildout Calculations
Figure 6: 2019 MC Roadway Level of Service Inventory Report

Melissa G. Corbett, P.E. #59292
C.A. #28246
March 2, 2022

Silverthorne Townhomes

Introduction:
The MilCor Group, Inc. has been retained to conduct an updated traffic analysis for a 13-unit development consisting of 77 individual residences, a reduction from 86, located in the City of Stuart, Martin County, Florida. The purpose of this study is to determine which roadway links are impacted by the proposed development and what, if any, improvements will be required to meet adopted Level of Service standards based on the requirements for the City.

Site Data:
The +/-9.43-acre site is located on the southeast corner of SE Indian Street and SE Commerce Avenue, lying in Section 38, Township 38 South, Range 41 East. The site location is shown on Figure 1. It is proposed for 13 multi-family buildings consisting of 77 individual residences which, according to the ITE Trip Generation Manual, are considered Multifamily Housing (Low-Rise). Access to the proposed development will be via a shared driveway located in an access easement on the parcel south of the subject site to SE Commerce Ave.

Adjacent Roadways:
The site is accessed via SE Commerce Ave., an existing 80-foot right of way. Commerce Ave. is a two-lane highway with no paved shoulders or bike lanes except at the right turn lane onto Indian Street. There is a sidewalk on the east side of the roadway, adjacent to Silverthorne Townhomes. Indian Street is a curb and gutter +/-90-foot right of way. It is two lanes in each direction, with sidewalk on both sides of the road. There is no paved shoulder other than the curb, and no bike lanes.

Project Traffic:

Trip Generation:
Daily, AM, and PM peak hour trip generation rates were calculated based on the ITE Trip Generation Manual, 11th Edition, Section 220: Multifamily Housing (Low-Rise not close to rail transit), and are shown on Figure 2. The AM generation creates the peak of 36 vehicle-trips onto City and County roadways.

Trip Distribution and Assignment:
A directional distribution was developed based on a review of land use patterns and existing travel patterns, and existing peak hour directional volumes and growth rates, as provided in the Martin County 2019 Roadway Level of Service Inventory Report. Figure 3 illustrates the assignment of project traffic to the roadway network serving the site, and Figure 4 provides the calculations carrying the distribution out to a 1/2 mile radius upon which the project has an impact of 2% of the level of service capacity of the roadway, or as a minimum, the first directly accessed road on the network.

Future Traffic Conditions:
Build-out of the infrastructure is projected for Silverthorne Townhomes within one year of approval, or by Year 2023. The housing build-out is proposed within four years of approval, or by Year 2026. The subject project is accessed via Commerce Ave, which has a service capacity of 750 per the Martin County 2019 Roadway Level of Service Inventory Report. 100% of the 36 trips enters Commerce Ave. in the link between Monroe St and Indian Street, with 50% coming from the north and 50% coming from the south direction. 18 directional trips is 2.37% of the Level of Service Capacity of the roadway. Therefore, Build-out conditions have been calculated based on the Build-out year of 2026. There are no concurrency issues as documented in Figure 5.

Project Driveway Analysis:
Typically a threshold of 30 peak hour trips, or more, warrants analysis to determine if a project will require turn lanes. As previously stated, the project is accessed via a shared driveway located in an access easement on the parcel south of the subject site. The driveway location and configuration was approved with the approval of the adjacent parcel, and includes a left turn lane.

In accordance with the FDOT Driveway Information Guide, on roadways with a speed limit of 45 mph or less (Commerce has a posted speed limit of 35 mph), 80-125 right turns per hour are required to warrant a right turn lane. Further, lower threshold of 80 right turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane). The Silverthorne project will generate approximately 17 right turn into the project during the peak hour. No traffic report was provided during the site plan approval for the adjacent warehouse project (per the City of Stuart staff) to which Silverthorne shares its entrance. To add the additional 63 turning movements to reach a total of 80, warranting the right turn lane, the warehouse would need to be approximately 500,000 square feet. From a review of the site plan/ drainage report, the building is under 100,000 sf which only generates 29 peak hour trips. Assuming half are right turn movements, the peak combined right turn movements are 31 trips. The peak hour directional volume of this roadway is only 366 trips. Between the low speed limit, low number of peak hour trips on the roadway and low number of right turns into the site, a right turn lane is not warranted.

To evaluate the currently approved left turn lane, assuming 50% of the traffic will be coming from the north (Indian Street), it results in 18 left turning movements from the Silverthorne project. Utilizing the same assumptions for the adjacent warehouse project, it will generate 29 peak hour trips. Assuming half are left turn movements, the peak combined left turn movements are 32 trips, just over the threshold for warrant of the turn lane. No left turn is proposed.

Scheduled Roadway Improvements:
There are no scheduled improvements on any links on which the project has significant impact.

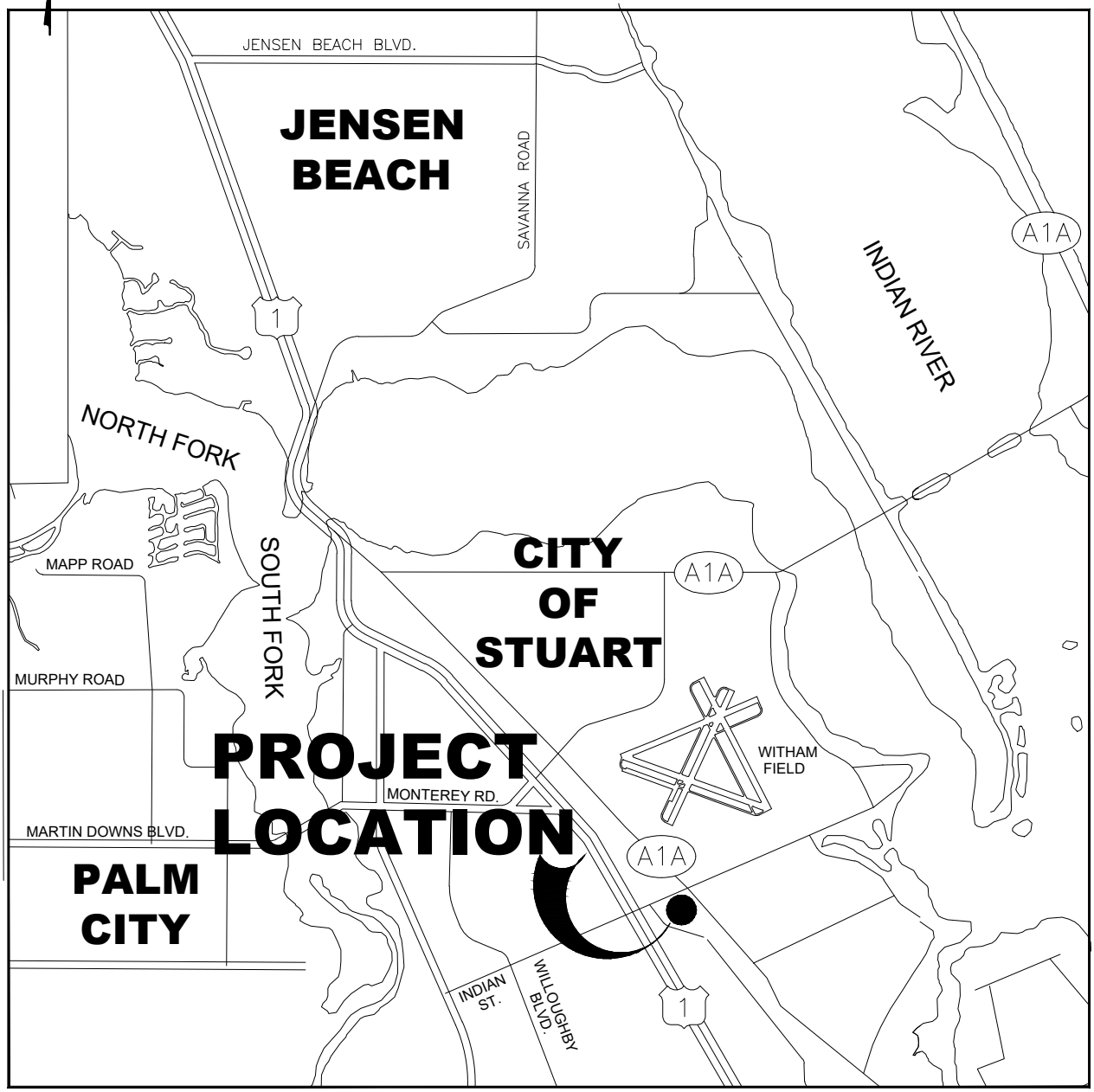
Required Improvements:
Although there are no required off-site roadway improvements, the Applicant is working with Martin County to modify the intersection of Commerce Ave. and Indian Street to eliminate the north bound left turn lane onto Indian St. such that Commerce will be right turn only onto Indian.

Project Phasing:
Construction of the infrastructure for this project will begin in 2022 and will be complete within one year. Construction on the individual lots will begin as the lots are sold. It is anticipated that the development will reach buildout by the Year 2026.

Attachments:

Figure 1 – Location Map
Figure 2 – Traffic Projections
Figure 3 – Traffic Assignment Map
Figure 4 – Peak Hour Directional Volume Distribution
Figure 5 – Build Out Analysis
Figure 6 – 2019 MC Roadway Level of Service Inventory Report

SECTION 38, TOWNSHIP 38 SOUTH, RANGE 41 EAST
PARCEL NUMBER
38-38-41-002-065-00010-3



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DRAWN: DW 1-19-2021
PROJECT: M1810
FILE: Exhibit MAPS.dwg

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CIVIL ENGINEERS
10975 SE FEDERAL HIGHWAY
HOBE SOUND, FL 33455

PH: (772) 223-8850
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WWW.THEMILCORGROUP.COM

CERTIFICATE OF AUTHORIZATION: 28246

LOCATION MAP

SILVERTHORNE TOWNHOMES

STUART, FLORIDA

EXHIBIT

1

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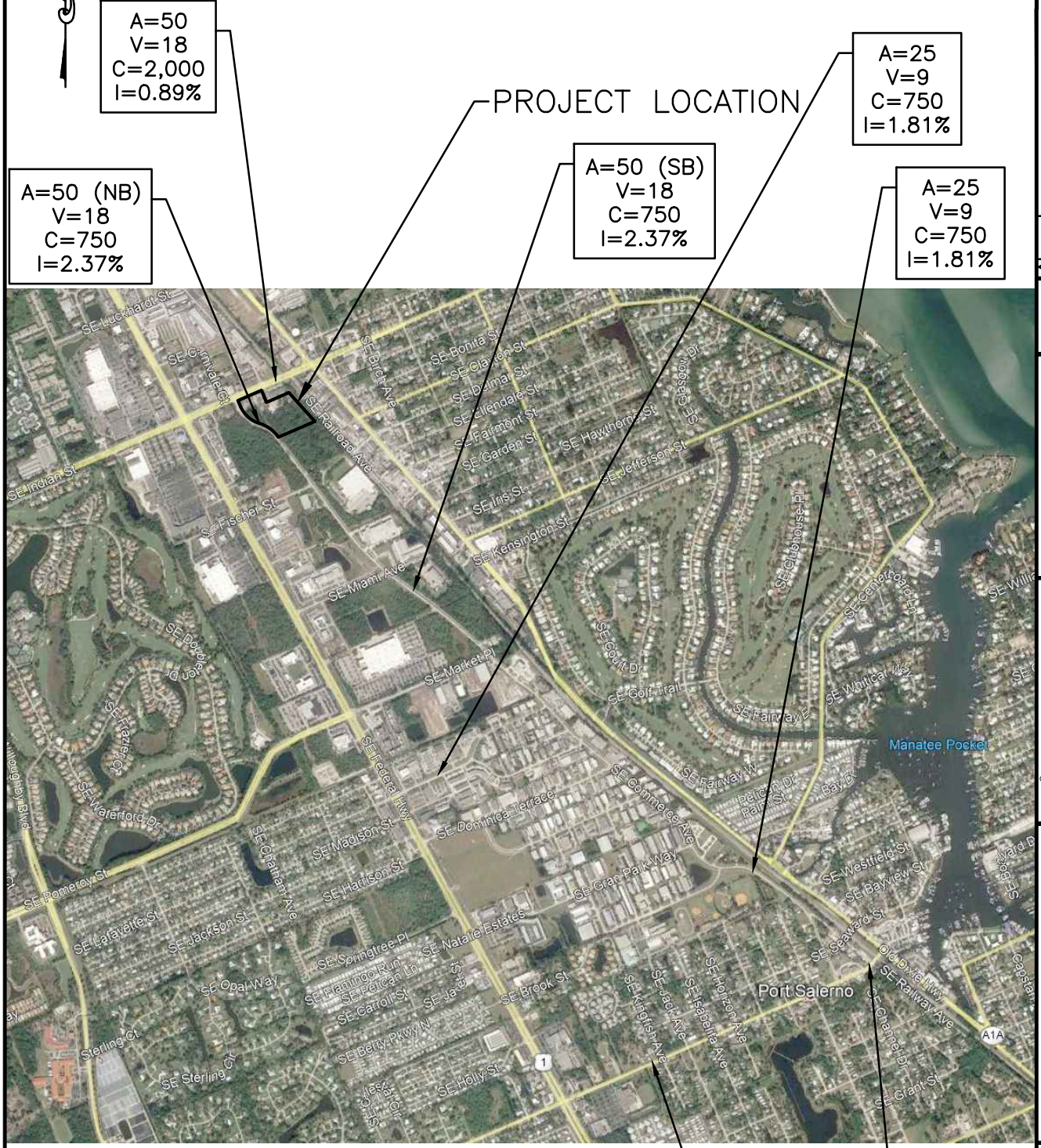
Figure 2
Traffic Projections
Silverthorne

Land Use:	**Multifamily Housing (Low-Rise)**		
ITE Code:	220		
Trip Generation per Dwelling Unit			
X = Number of Residences =	77		
Weekday Daily:	T =	6.41(x) + 75.31	
	T =		569 Total Trips
Weekday, Peak Hour Adj Street	T =	0.31(x) +22.85	
One Hour Between 7 and 9 am	T =		47 Total Trips
Directional Distribution:	24% Entering & 76% Exiting		
	Entering:		11 Trips
	Exiting:		**36 Trips**
Weekday, Peak Hour Adj Street	T =	0.43(x) +20.55	
One Hour Between 4 and 6 pm	T =		54 Total Trips
Directional Distribution:	63% Entering & 37% Exiting		
	Entering:		34 Trips
	Exiting:		20 Trips

SECTION 38, TOWNSHIP 38 SOUTH, RANGE 41 EAST
PARCEL NUMBER
38-38-41-002-065-00010-3



A=PROJECT % ASSIGNED
V=PROJECT VOLUME
C=SERVICE CAPACITY
I=PROJECT IMPACT

A=13
V=5
C=750
I=0.62%

A=12
V=4
C=750
I=0.57%

NO.	DATE:	REVISION:	CBK BY
1	6-29-21	PER MARTIN COUNTY REQUEST	

CALL 48 HOURS BEFORE YOU DIG
811

VERTICAL DATUM NAVD 88

DRAWN:	DW	1-19-2021
PROJECT:		M1810
FILE:	EXHIBIT MAPS.dwg	

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CERTIFICATE OF AUTHORIZATION: 28246

TRAFFIC ASSIGNMENT MAP

SILVERTHORNE TOWNHOMES

STUART, FLORIDA

FIGURE

3

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Figure 4
Silverthorne
Peak Hour Directional Volume Distribution

Project Total Peak Hour Directional Volume = 36 Vehicle Trips

PM Peak Hour Directional Analysis							
				Project		Service	Project
Road	Link		Lanes	% Assign	Volume	Capacity	Impact
Indian Street	1	Commerce to CR-A1A	4L	50%	18	2000	0.89%
Commerce Ave	1	Monroe St to Indian St (SB)	2L	50%	18	750	2.37%
		Monroe St to Indian St (NB)	2L	50%	18	750	2.37%
	2	Salerno to Monroe	2L	25%	9	750	1.18%
Monroe Street	1	SR-5 to Commerce	2L	25%	9	750	1.18%
Salerno Road	1	SR-5 to Commerce	2L	13%	5	750	0.62%
	2	Commerce to CR-A1A	2L	12%	4	750	0.57%

Figure 5
Silverthorne
Year 2026 Peak Hour Directional Volume Analysis

Analysis based on Martin County 2019 Data; therefore, buildout is in 7 years

				PM Peak Hour Directional Analysis							
Road	Link		Lanes	2019 Volume	Growth (2026) Volume	% / Year	Project % Assign	Volume	Total 2019	Service Capacity	Project Impact
Commerce Ave	1	Monroe St to Indian St (SB)	2L	366	18	0.7	50%	18	402	750	2.37%
		Monroe St to Indian St (NB)	2L	366	18	0.7	50%	18	402	750	2.37%

Formula for grow volume = (2019 volume x (1 +% growth) ^growth years) - 2019 volume

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Baker Rd	SR-5	CR-723	Class II: 2-Ln Undivided	750	5,349	243	C	1.8%
Berry Ave	Golden Bear Wy	CR-714	Class II: 2-Ln Undivided	750	3,487	177	C	1.3%
Berry Ave	CR-714	Sunset Tr	Class II: 2-Ln Undivided	750	1,809	97	C	0.5%
Britt Rd	Pine Lake Dr	SR-5	Class II: 2-Ln Undivided	750	4,565	212	C	0.6%
Citrus Blvd.	CR-714 (Martin Hwy)	Port St. Lucie Blvd.	Transitional 2-Ln Uninter /Undivided Flow	1200	5,391	469	C	7.0%
Commerce Ave	Salerno Rd	Monroe St	Class II: 2-Ln Undivided	750	6,156	393	D	3.1%
Commerce Ave	Monroe St	Indian St	Class II: 2-Ln Undivided	750	6,704	366	C	0.7%
Country Club Dr	Palm Beach County	Island Way	Class II: 2-Ln Undivided	750	2,827	134	C	0.5%
Country Club Dr	Island Way	Little Club Dr	Class II: 2-Ln Undivided	750	3,512	159	C	1.9%
County Line Rd	Little Club Dr	SR-5	Class II: 2-Ln Undivided	750	2,703	124	C	2.9%
Cove Rd	SR-76	Willoughby Blvd	Class I: 2-Ln Undivided	880	13,855	749	C	1.5%
Cove Rd	Willoughby Blvd	SR-5	Class I: 2-Ln Undivided	880	15,446	699	C	0.9%
Cove Rd	SR-5	CR-A1A	Class II: 2-Ln Undivided	750	13,161	586	D	2.5%
Cove Rd	CR-A1A	End	2-Ln Undivided Non-State	675	5,739	322	C	1.7%
CR-609 (Allapattah Rd)	SR-710	CR-714	Uninterrupted Rural Hwy: 2-Ln Undivided	740	1,892	109	A/B	3.5%
CR-609 (Allapattah Rd)	CR-714	St Lucie County	Uninterrupted Rural Hwy: 2-Ln Undivided	740	1,786	88	A/B	2.9%
CR-707 (Beach Rd)	Palm Beach County	CR-708	2-Ln Undivided Non-State	675	1,782	116	C	1.4%
CR-707 (Dixie Hwy)	CR-723/CR-707	CR-707 (Indian River Dr)	Class II: 2-Ln Undivided	750	5,383	235	C	0.8%
CR-707 (Indian River Dr)	CR-707 (Dixie Hwy)	CR-707A (Jensen Beach Blvd.)	2-Ln Undivided Non-State	675	10,521	601	D	0.5%
CR-707 (Indian River Dr)	CR-707A	SR-732	Class II: 2-Ln Undivided	750	6,007	336	C	8.0%
CR-707 (Indian River Dr)	SR-732	St. Lucie County	2-Ln Undivided Non-State	675	6,615	351	D	8.0%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
CR-707A (Jensen Beach Blvd)	CR-723	Skyline Dr	Class II: 4-Ln Divided	1630	23,279	1,175	D	4.5%
CR-707A (Jensen Beach Blvd)	Skyline Dr	Pineapple Way	Class II: 4-Ln Divided	1630	19,680	962	D	0.5%
CR-707A (Jensen Beach Blvd)	Pineapple Wy	CR-707	2-Ln Undivided Non-State	675	8,920	448	D	0.5%
CR-708 (Bridge Rd)	SR-76	CR-711	Uninterrupted Rural Hwy: 2-Ln Undivided	740	932	67	A/B	6.7%
CR-708 (Bridge Rd)	CR-711	I-95	Uninterrupted Rural Hwy: 2-Ln Undivided	740	3,899	246	C	8.0%
CR-708 (Bridge Rd)	I-95	Powerline Ave	Transitional 2-Ln Uninter /Undivided Flow	1200	9,172	540	C	4.9%
CR-708 (Bridge Rd)	Powerline Ave	SR-5	Class I: 2-Ln Undivided	880	10,577	588	C	4.2%
CR-708 (Bridge Rd)	SR-5	CR-A1A	2-Ln Undivided Non-State	675	9,373	570	D	0.7%
CR-708 (Bridge Rd)	CR-A1A	Gomez Ave	2-Ln Undivided Non-State	675	8,053	419	D	0.5%
CR-708 (Bridge Rd)	Gomez Ave	CR-707	Class II: 2-Ln Undivided	750	4,739	319	C	1.2%
CR-711 (Pratt Whitney Rd)	Palm Beach County	CR-708	Uninterrupted Rural Hwy: 2-Ln Undivided	740	3,278	294	C	5.5%
CR-711 (Pratt Whitney Rd)	CR-708	South Fork High School	Class I: Transitional 2-Ln Undivided	800	4,582	314	C	2.2%
CR-711 (Pratt Whitney Rd)	South Fork High School	SR-76	Class I: Transitional 2-Ln Undivided	800	6,071	290	C	4.9%
CR-713 (High Meadow Ave)	I-95	CR-714	2-Ln Uninter /Undivided Flow	1190	13,157	1,008	D	1.1%
CR-713 (High Meadow Ave)	CR-714	SR-714	Class I: 2-Ln Undivided	880	10,885	634	C	4.2%
CR-713 (High Meadow Ave)	SR-714	Murphy Rd	2-Ln Uninter /Undivided Flow	1190	12,431	577	C	2.8%
CR-714 (Martin Hwy)	SR-710	Fox Brown Rd	Uninterrupted Rural Hwy: 2-Ln Undivided	740	3,413	202	A/B	7.9%
CR-714 (Martin Hwy)	Fox Brown Rd	CR-609	Uninterrupted Rural Hwy: 2-Ln Undivided	740	3,679	194	A/B	7.4%
CR-714 (Martin Hwy)	CR-609	I-95	Uninterrupted Rural Hwy: 2-Ln Undivided	740	5,747	261	C	6.2%
CR-714 (Martin Hwy)	Florida's Turnpike	CR-713	Class I: 4-Ln Divided	2000	20,783	1,504	C	0.5%
CR-714 (Martin Hwy)	CR-713	Mapp Rd	Class I: 4-Ln Divided	2000	22,656	1,223	C	5.6%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
CR-714 (Veteran's Memorial Bridge)	Mapp Rd	SR-76	Class I: 4-Ln Divided	2000	23,957	1,622	C	6.1%
CR-723 (Savanna Rd)	CR-707	NE 24th St	Class I: 2-Ln Undivided	880	9,135	384	C	0.5%
CR-723 (Savanna Rd)	NE 24th St	CR-707A (Jensen Beach Blvd.)	Class I: 2-Ln Undivided	880	9,631	471	C	1.0%
CR-726 (Citrus Blvd)	SR-710	Greenridge Ln	Uninterrupted Rural Hwy: 2-Ln Undivided	740	2,783	126	A/B	0.5%
CR-726 (Citrus Blvd)	Greenridge Ln	CR-76A	Uninterrupted Rural Hwy: 2-Ln Undivided	740	2,488	137	A/B	0.5%
CR-76A (Citrus Blvd.)	CR-726	SR-714	Transitional 2-Ln Uninter /Undivided Flow	1200	4,269	283	A/B	8.0%
CR-76A (SW 96th St)	CR-726	Pennsylvania Ave	Transitional 2-Ln Uninter /Undivided Flow	1200	3,845	195	A/B	8.0%
CR-76A (SW 96th St)	Pennsylvania Ave	SR-76	Class I: Transitional 2-Ln Undivided	800	8,086	492	C	2.5%
CR-A1A (Dixie Hwy)	SR-5	CR-708	Class II: 2-Ln Undivided	750	3,416	192	C	4.7%
CR-A1A (Dixie Hwy)	CR-708	Osprey St	Class I: 2-Ln Undivided	880	7,552	477	C	3.7%
CR-A1A (Dixie Hwy)	Osprey St	Heritage Blvd	2-Ln Uninter /Undivided Flow	1190	6,595	393	A/B	3.1%
CR-A1A (Dixie Hwy)	Heritage Blvd	Cove Rd	2-Ln Uninter /Undivided Flow	1190	7,147	346	A/B	2.9%
CR-A1A (Dixie Hwy)	Cove Rd	Salerno Rd	Class II: 2-Ln Divided	790	12,131	617	D	3.1%
CR-A1A (Dixie Hwy)	Salerno Rd	St. Lucie Blvd	Class II: 2-Ln Undivided	750	17,261	835	F	3.3%
CR-A1A (Dixie Hwy)	St Lucie Blvd	Jefferson St	Class II: 2-Ln Undivided	750	14,108	748	D	2.9%
CR-A1A (Dixie Hwy)	Jefferson St	Indian St	Class II: 4-Ln Divided	1630	18,389	848	D	2.2%
CR-A1A (Dixie Hwy)	Indian St	SR-714	Class I: 4-Ln Divided	2000	17,161	824	C	3.1%
CR-A1A (Dixie Hwy)	SR-714	SE Fifth St	2-Ln Undivided Non-State	675	6,710	346	D	1.6%
Farm Rd	Dr Martin Luther King Jr Dr	Palm Wy	Class II: 2-Ln Undivided	750	2,817	124	C	3.2%
Fox Brown Rd	SR-710	CR-714	Uninterrupted Rural Hwy: 2-Ln Undivided	740	347	16	A/B	0.0%
Goldenrod Rd	Britt Rd	SR-732	Class II: 4-Ln Divided	1630	4,810	278	A/B	0.5%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Goldenrod Rd	SR-732	SR-5	Class II: 2-Ln Undivided	750	6,877	402	D	1.9%
Goldenrod Rd	SR-5	Westmoreland Blvd	Class II: 2-Ln Undivided	750	4,635	295	C	3.0%
Gomez Ave	CR-708	Crossrip St	Class II: 2-Ln Undivided	750	3,732	199	C	1.4%
Gomez Ave	Crossrip St	Osprey St	Class II: 2-Ln Undivided	750	1,065	61	C	0.5%
Green River Parkway	Dixie Hwy	Baker Rd	Class II: 2-Ln Undivided	750	6,833	351	C	3.1%
Green River Parkway	Baker Rd	SR-732	Class I: 2-Ln Undivided	880	8,341	596	C	4.3%
Green River Parkway	SR-732	St. Lucie County	2-Ln Uninter /Undivided Flow	1190	8,667	576	C	1.8%
Horseshoe Point Rd	CR-A1A	Kubin Ave	2-Ln Undivided Non-State	675	5,647	285	C	0.5%
Indian St	SR-76	Willoughby Blvd	Class I: 4-Ln Divided	2000	29,306	1,729	C	4.7%
Indian St	Willoughby Blvd	SR-5	Class I: 4-Ln Divided	2000	27,852	1,236	C	2.8%
Indian St	SR-5	Commerce Ave	Class I: 4-Ln Divided	2000	22,368	995	C	0.5%
Indian St	Commerce Ave	CR-A1A	Class I: 4-Ln Divided	2000	25,515	1,199	C	2.5%
Indian St	CR-A1A	St Lucie Blvd	2-Ln Undivided Non-State	675	7,051	346	D	1.1%
Indian River Dr	Palmer St	CR-707	Class II: 2-Ln Undivided	750	7,509	374	D	3.7%
Island Way	Palm Beach County	Jupiter Road	Transitional 2-Ln Uninter /Undivided Flow	1200	4,493	302	A/B	3.4%
Island Way	Jupiter Road	Country Club Dr	Class II: 2-Ln Undivided	750	4,855	213	C	0.5%
Jack James Rd	SR-76	Blue Water Wy	Class II: 2-Ln Undivided	750	3,132	294	C	0.5%
Lares St	CR-708	CR-A1A	2-Ln Undivided Non-State	675	3,349	235	C	0.6%
Little Club Wy	Country Club Dr	Wooden Bridge Wy	2-Ln Undivided Non-State	675	2,273	103	C	0.5%
Locks Rd	Canal St	SR-76	2-Ln Undivided Non-State	675	3,667	232	C	2.0%
MacArthur Blvd	Sailfish Point	SR-A1A	2-Ln Undivided Non-State	675	5,989	368	D	6.8%

Segments with shaded LOS require additional analysis.
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Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Mapp Rd	South End	CR-714	Class II: 2-Ln Undivided	750	5,236	249	C	0.5%
Mapp Rd	CR-714	SR-714	Class II: 2-Ln Undivided	750	11,668	557	D	0.5%
Mapp Rd	SR-714	Matheson Ave	Class II: 2-Ln Undivided	750	5,278	301	C	0.5%
Mapp Rd	Matheson Ave	North End	Class II: 2-Ln Undivided	750	7,320	314	C	0.7%
Market Pl	SR-5	Commerce Ave	Class II: 2-Ln Divided	790	4,589	254	C	0.6%
Matheson Ave	SR-714	Mapp Rd	Class II: 2-Ln Undivided	750	5,845	324	C	0.5%
Monroe St	SR-5	Commerce Ave	Class II: 2-Ln Undivided	750	1,874	161	C	3.0%
Murphy Rd	Mapp Rd	High Meadow Ave	Class II: 2-Ln Undivided	750	6,712	375	D	4.5%
Murphy Rd	High Meadow Ave	St Lucie County	Class II: 2-Ln Undivided	750	9,721	908	F	3.3%
Ocean Blvd	Flagler Ave	Palm Beach Rd	Class II: 2-Ln Divided	790	10,107	565	D	0.5%
Ocean Blvd	Palm Beach Rd	SR-714	4-Ln Divided Non-State	1465	12,415	652	C	0.5%
Osprey St	SR-5	CR-A1A	Class II: 2-Ln Undivided	750	5,203	216	C	2.3%
Osprey St	CR-A1A	Gomez Ave	Class II: 2-Ln Undivided	750	1,926	118	C	0.5%
Palm Beach Rd	SR-714	Ocean Blvd	2-Ln Divided Non-State	710	8,894	426	D	0.5%
Palm City Rd	SR-714	SR-5	Class II: 2-Ln Undivided	750	7,832	419	D	3.8%
Palmer St	CR-707	Indian River Dr	Class II: 2-Ln Undivided	750	3,111	213	C	3.8%
Pineapple Wy	CR-707A(Jensen Beach Blvd.)	SR-732	Class II: 2-Ln Undivided	750	11,820	614	D	3.9%
Pomeroy St	SR-76	Willoughby Blvd	Class II: 2-Ln Divided	790	8,781	479	D	0.5%
Pomeroy St	Willoughby Blvd	SR-5	Class II: 2-Ln Divided	790	8,687	466	D	2.3%
Salerno Rd	SR-76	Willoughby Blvd	Class I: 2-Ln Undivided	880	7,831	429	C	1.5%
Salerno Rd	Willoughby Blvd	SR-5	Class II: 2-Ln Divided	790	9,509	524	D	1.1%

Segments with shaded LOS require additional analysis.
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Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Salerno Rd	SR-5	Commerce Ave	Class II: 2-Ln Undivided	750	9,794	440	D	8.0%
Salerno Rd	Commerce Ave	CR-A1A	Class II: 2-Ln Undivided	750	7,955	346	C	0.5%
Seabranch Blvd	Doubletree Dr	SR-5	Class I: 4-Ln Divided	2000	6,693	335	C	0.5%
Sewalls Pt Rd	SR-A1A	Palmer St	2-Ln Undivided Non-State	675	9,496	470	D	3.0%
Skyline Dr	CR-707A	CR-707	2-Ln Undivided Non-State	675	1,634	84	C	0.5%
SR-5 (US-1)	Palm Beach County	CR-A1A	Transitional 4-Ln Uninter /Divided Flow	3110	20,848	1,062	A/B	1.9%
SR-5 (US-1)	CR-A1A	CR-708	Class I: 4-Ln Divided	2000	17,201	1,001	C	3.1%
SR-5 (US-1)	CR-708	Osprey St	Class I: 4-Ln Divided	2000	24,807	1,670	C	2.2%
SR-5 (US-1)	Osprey St	Seabranch Blvd	Class I: 4-Ln Divided	2000	23,579	1,046	C	0.6%
SR-5 (US-1)	Seabranch Blvd	Cove Rd	Class I: 6-Ln Divided	3020	30,507	1,426	C	0.5%
SR-5 (US-1)	Cove Rd	Salerno Rd	Class I: 6-Ln Divided	3020	32,412	1,433	C	0.5%
SR-5 (US-1)	Salerno Rd	Monroe St	Class I: 6-Ln Divided	3020	40,491	1,673	C	0.5%
SR-5 (US-1)	Monroe St	Indian St	Class I: 6-Ln Divided	3020	37,491	1,859	C	0.5%
SR-5 (US-1)	Indian St	SR-714	Class I: 6-Ln Divided	3020	45,498	2,267	C	0.5%
SR-5 (US-1)	SR-714	SR-5A	Class I: 6-Ln Divided	3020	37,271	1,822	C	0.5%
SR-5 (US-1)	SR-5A(Cut-off Rd)	SR-76	Class I: 6-Ln Divided	3020	32,616	1,625	C	0.5%
SR-5 (US-1)	SR-76	Palm City Rd	Class II: 6-Ln Divided	2520	47,483	1,986	D	0.5%
SR-5 (US-1)	Palm City Rd	Joan Jefferson Wy	Class II: 6-Ln Divided	2520	54,897	2,473	D	0.5%
SR-5 (US-1)	Joan Jefferson Wy	Wright Blvd	Class I: 6-Ln Divided	3020	59,873	2,874	C	0.5%
SR-5 (US-1)	Wright Blvd	Baker Rd	Class I: 6-Ln Divided	3020	52,644	2,491	C	0.5%
SR-5 (US-1)	Baker Rd	Britt Rd	Class I: 6-Ln Divided	3020	51,826	2,481	C	0.5%

Segments with shaded LOS require additional analysis.
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Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
SR-5 (US-1)	Britt Rd	SR-732	Class I: 7-Ln Divided	3530	55,878	2,898	C	0.8%
SR-5 (US-1)	SR-732	Westmoreland Blvd	Class I: 8-Ln Divided	4040	64,147	3,522	C	0.5%
SR-5 (US-1)	Westmoreland Blvd	St Lucie County	Class I: 8-Ln Divided	4040	60,343	2,721	C	0.5%
SR-710 (Warfield Blvd)	Okeechobee County	Fox Brown Rd	Uninterrupted Rural Hwy: 2-Ln Undivided	670	6,348	257	C	4.8%
SR-710 (Warfield Blvd)	Fox Brown Rd	CR-609 (Allapattah)	2-Ln Uninter /Undivided Flow	840	7,419	310	A/B	3.0%
SR-710 (Warfield Blvd)	CR-609 (Allapattah)	Van Buren	Class I: 2-Ln Undivided	870	12,335	694	C	4.0%
SR-710 (Warfield Blvd)	Van Buren	CR-726 (Citrus)	Class II: 4-Ln Divided	1710	12,335	694	A/B	4.0%
SR-710 (Warfield Blvd)	CR-726	SR-76 (Kanner)	Transitional 4-Ln Uninter /Divided Flow	2450	11,001	431	A/B	3.4%
SR-710 (Warfield Blvd)	SR-76	Palm Beach County	Transitional 4-Ln Uninter /Divided Flow	2450	6,959	258	A/B	1.4%
SR-714 (Martin Hwy)	I-95	CR-76A (Citrus)	Transitional 2-Ln Uninter /Undivided Flow	1200	13,786	735	C	5.1%
SR-714 (Martin Hwy)	CR-76A (Citrus)	Florida's Turnpike	Class I: 4-Ln Divided	2000	21,291	1,136	C	4.9%
SR-714 (Martin Downs Blvd)	Florida's Turnpike	CR-713	Class I: 4-Ln Divided	2000	20,695	1,038	C	1.7%
SR-714 (Martin Downs Blvd)	CR-713	Matheson Ave	Class I: 4-Ln Divided	2000	27,291	1,267	C	0.5%
SR-714 (Martin Downs Blvd)	Matheson Ave	Mapp Rd	Class I: 4-Ln Divided	2000	32,789	1,738	C	0.5%
SR-714 (Palm City Bridge)	Mapp Rd	SR-76	Class I: 4-Ln Divided	2000	34,751	1,989	D	0.5%
SR-714 (Monterey Rd)	SR-76	Willoughby Blvd	Class I: 4-Ln Divided	2000	22,465	1,274	C	0.5%
SR-714 (Monterey Rd)	Willoughby Blvd	Monterey Extension	Class I: 4-Ln Divided	2000	24,716	1,186	C	0.6%
SR-714 (Monterey Rd)	Monterey Extension	SR-5	Class I: 4-Ln Divided	2000	18,136	926	C	0.8%
SR-714 (Monterey Rd)	SR-5	CR-A1A	Class II: 4-Ln Divided	1630	21,333	1,099	D	0.5%
SR-714 (Monterey Rd)	CR-A1A	SR-A1A	Class I: 4-Ln Divided	1910	19,430	1,031	C	1.1%
SR-732 (Causeway Blvd)	CR-707	SR-A1A	2-Ln Uninter /Undivided Flow	1190	12,645	786	C	0.5%

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Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
SR-732 (Jensen Beach Blvd)	SR-5	Green River Pkwy	Class I: 4-Ln Divided	2000	25,949	1,349	C	0.5%
SR-732 (Jensen Beach Blvd)	Green River Pkwy	CR-723	Class I: 4-Ln Divided	2000	23,804	1,154	C	0.5%
SR-76 (Kanner Hwy)	SR-15	SR-710	Uninterrupted Rural Hwy: 2-Ln Undivided	740	2,134	111	A/B	6.1%
SR-76 (Kanner Hwy)	SR-710	CR-708	Uninterrupted Rural Hwy: 2-Ln Undivided	740	3,412	151	A/B	0.9%
SR-76 (Kanner Hwy)	CR-708	CR-711/CR-76A	Transitional 2-Ln Uninter /Undivided Flow	1200	2,889	168	A/B	0.5%
SR-76 (Kanner Hwy)	CR-711/CR76A	Locks Rd	Class I: 4-Ln Divided	2000	13,401	831	C	1.7%
SR-76 (Kanner Hwy)	Locks Rd	Jack James	Class I: 4-Ln Divided	2000	19,231	920	C	0.5%
SR-76 (Kanner Hwy)	Jack James	Cove Rd	Class I: 6-Ln Divided	3020	43,880	2,372	C	0.6%
SR-76 (Kanner Hwy)	Cove Rd	Salerno Rd	Class I: 6-Ln Divided	3020	34,493	1,495	C	1.0%
SR-76 (Kanner Hwy)	Salerno Rd	Indian St	Class I: 6-Ln Divided	3020	30,912	1,293	C	2.6%
SR-76 (Kanner Hwy)	Indian St	SR-714	Class I: 6-Ln Divided	3020	21,116	993	C	0.5%
SR-76 (Kanner Hwy)	SR-714	SR-5	Class I: 6-Ln Divided	3020	25,158	1,006	C	0.5%
SR-A1A (Ocean Blvd)	SR-714	St Lucie Blvd	Class II: 4-Ln Divided	1630	19,437	1,081	D	0.6%
SR-A1A (Ocean Blvd)	St Lucie Blvd	Sewalls Point Rd	Class I: 4-Ln Divided	2000	23,060	1,127	C	1.0%
SR-A1A (Ocean Blvd)	Sewalls Point Rd	Macarthur Blvd	Class I: 2-Ln Divided	925	13,597	845	C	0.5%
SR-A1A (Ocean Blvd)	MacArthur Blvd	SR-732	2-Ln Uninter /Undivided Flow	1190	8,532	407	A/B	3.1%
SR-A1A (Ocean Blvd)	SR-732	St Lucie County	2-Ln Uninter /Undivided Flow	1190	14,752	870	D	1.8%
St Lucie Blvd	CR-A1A	Indian St	2-Ln Undivided Non-State	675	3,305	172	C	0.5%
St Lucie Blvd	Indian St	SR-A1A	2-Ln Undivided Non-State	675	7,524	429	D	3.3%
Westmoreland Blvd	St Lucie County	SR-5	Class II: 2-Ln Divided	790	12,271	601	D	1.0%
Willoughby Blvd	Cove Rd	Salerno Rd	Class I: 2-Ln Undivided	880	4,332	214	C	8.0%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Willoughby Blvd	Salerno Rd	Pomeroy St	Class I: 2-Ln Undivided	880	9,007	544	C	5.4%
Willoughby Blvd	Pomeroy St	Indian St	Class I: 4-Ln Divided	2000	11,709	597	C	8.0%
Willoughby Blvd	Indian St	SR-714	Class I: 4-Ln Divided	2000	11,100	666	C	3.7%
Wright Blvd	SR-5	Dixie Highway	Class II: 2-Ln Undivided	750	10,460	555	D	4.3%

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Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

The MilCor Group Inc.

Engineering a Value-Driven Sustainable Environment

Silverthorne

Stormwater Overview

Prepared For:
Meritage Homes
City of Stuart

March 10, 2022

Executive Summary

1. Overview
2. How the Stormwater Management System Functions
3. Water Quality Treatment & Nutrient Reductions
4. Stormwater Discharge
5. In Closing

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P:\Projects\M18 - Meritage\M1810 - Silverthorne (Glasrud II)\Design\drainage\Silverthorne - stormwater overview 030922.doc

Silverthorne

The Silverthorne project is a proposed residential townhome developed located on a 9.5 acre parcel at the south-east corner of Indian Street and Commerce Avenue, in the City of Stuart. The project consists of the development of 77 townhome units, a pool & cabana, roads, utilities, and drainage improvements. The project's drainage improvements will consist of roadside inlets, culvert, swales, rain gardens, and a wet detention pond.

Silverthorne

1. Overview

The Silverthorne project will consist of the development of a residential subdivision and will include a stormwater management to provide water quality treatment and attenuation of runoff that may leave the property. The water management system will consist of inlets, culverts, rain gardens, swales, planted bioswales, and a wet pond with littoral shelves. The Silverthorne project's stormwater management system is designed to provide water quality treatment that exceeds the requirements of the City of Stuart and South Florida Water Management District and attenuates stormwater outfall to rates less than allowable.

2. How the Stormwater Management System Functions

Rainfall runoff in the Silverthorne project will enter the site's water management system wherever it falls. From rain that falls on a roof and is directed by downspouts to rain gardens or swales, to runoff that falls in the middle of the roadways and flows to the curbside inlets, all runoff will enter the stormwater management system and receive water quality treatment and attenuation.

Runoff will enter the stormwater management through several different manners: by entering one of the several rain gardens and bioswales located between buildings and adjacent to the parking areas; by falling on the roadways and flowing to a curbside inlet, or by falling directly into the swale system or lake.

Runoff that falls into one of the rain gardens or bioswales will receive the water quality benefits of a reduction in nutrient concentrations from biological uptake and a reduction in total runoff from infiltration in those areas, in addition to providing a more attractive aesthetic for residents and pedestrians. Excess runoff leaves these areas and flows into the project's underground culvert system.

Runoff that falls onto the roadways will flow to the curbside inlets and into the project's underground culvert system where it joins the excess runoff from the rain gardens. This combined runoff is directed to either the headwater of the swale system that is located north of the wet pond or to the headwater of the rain garden located along the northeast of the site. The swale and rain garden area provide a long flow path to aid in the uptake of nutrients, infiltration of runoff, and overall improvement in the water quality of runoff that will enter the wet pond.

The wet pond is the final step in the Silverthorne project's stormwater treatment system. Runoff that leaves the raingarden swale enters the wet pond at the northeast corner. The pond will include plantings in several littoral zones to provide further nutrient uptake, will be dug to a depth of between 15 ft to 20 ft (to provide residence and settling time), and include a control structure in the southwest corner to attenuate discharge.

3. Water Quality Treatment and Nutrient Reductions

As noted above, the various parts of the stormwater management system will provide water quality and nutrient removal benefits for runoff. Specifically, the project is designed to exceed the water quality treatments required by the City of Stuart and South Florida Water Management District, meet or exceed the water quality requirements of Martin County, and reduce the post-development nutrient loading to equal to or less than those of the site in its undeveloped state.

Water Quality Treatment Volumes & Requirements:
The City of Stuart / South Florida Water Management District have different requirements for water quality treatment than Martin County. In general, Martin County has higher water quality requirements and more stringent methods of calculating said requirements. With this in mind, the Silverthorne project requirements were determined and calculated as follows:

<u>To Meet City of Stuart & SFWMD Requirements, provide the more stringent of:</u>

1" x Drainage Area (SFWMD) (+50% for Discharge to OFW / Impaired Waters) = 1.15 ac-ft
or
2.5" x % Imperv. x Drain. Area (COS) (+50% for Disch. to OFW / Imp Waters) = 1.16 ac-ft

<u>To Meet Martin County Requirements, provide:</u>

3" x % Imperviousness x Drain. Area (Martin County) (+50% Wet Det Factor) = 2.04 ac-ft

The Silverthorne site will provide 2.08 ac-ft of water quality treatment volume in the project's wet pond alone, meeting the County Standards and providing 179% of the City and SFWMD standards. Further, the swales, rain gardens, and bioswales that are located upstream of the wet pond, that provide nutrient removal and water quality benefits prior to runoff entering the wet pond have not been considered in this water quality volume calculation, and therefore provide benefits over and above the required volumes of the City, County, and Water Management District.

4. Stormwater Discharge

Like many developments, in larger rainstorms the project may discharge stormwater runoff from the site to larger collection, treatment, and conveyance systems. The Silverthorne project is located in the northern basin of the Stuart Business Park (SBP) master drainage system. The SBP's master drainage system was originally designed to accept runoff at pre-defined rates from the various projects located within the business park, then route this runoff to a central lake (in this case the lake just north of the Walmart), which is then discharged at a controlled rate into the US-1 drainage system.

The Silverthorne project's excess runoff will discharge into the culverts located in the project's southwest corner that are connected to the Commerce Avenue right of way. The SBP's master drainage system was designed to accept 0.123 cubic feet per second per acre of runoff from projects. For the Silverthorne project this works out to:

Allowable Discharge Rate (25-yr 3-day storm)

0.123 cfs/ac x 9.21 Ac drainage Area = 1.13 cfs allowable discharge

Proposed Discharge Rate (25-yr 3-day storm)
= 0.94 cfs

The Silverthorne project's discharge rate will be 17% less than the allowable peak rate, which will help to reduce the chance of flooding in large rainfalls.

5. In Closing

The Silverthorne project's stormwater management system is designed to meet, and will exceed, the requirements set forth by the City of Stuart and South Florida Water Management District: the water quality volumes provided will be greater than required, the peak discharge rate lower than permissible, and the total nutrient loading will be less than the existing conditions.

The MilCor Group Inc.

Engineering a Value-Driven Sustainable Environment

Drainage Report and Calculations

Silverthorne

For Review By
City of Stuart
South Florida Water Management District

March 2022

1 Existing Conditions:
- 1.1 Location
- 1.2 Site Conditions
- 1.3 Soils & Wetlands
- 1.4 Drainage Pattern
- 1.5 FEMA Flood Zone

2 Proposed Development:
- 2.1 Project Description
- 2.2 Wet Season Water Table
- 2.3 Water Quality
- 2.4 Nutrient Analysis
- 2.5 Allowable Discharge Rate
- 2.6 Stormwater Management System

3 Modeling:
- 3.1 Modeling Input
- 3.2 Node Map
- 3.3 Minimum Elevations & Design Storm Model
- 3.4 Discharge Rate
- 3.5 Recovery

4 Attachments:
- 4.1 Soils Map
- 4.2 Informal Wetland Determination
- 4.3 Stuart Business Park ERP Permit #43-00014-S, App. No. 120614-4
- 4.4 Stuart Business Park Ditch Removal/Berm Construction ERP Mod
- 4.5 Pre & Post Development Basin Map
- 4.6 FEMA FIRM Map
- 4.7 Stuart Business Park Master Drainage Report
- 4.8 Stage-Storage & Water Management Calculations
- 4.9 ICPR Model

Kenneth Rau, P.E. #77338
March 9, 2022
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Silverthorne
Project Description

1 Existing Conditions:

1.1 Location

The property is located in the City of Stuart, Martin County, within the Stuart Business Park (SBP). The property consists of a 9.50 acre parcel east of US-1 and is bounded on the north side by SE Indian Street and a commercial parcel, on the west side by SE Commerce Avenue, on the south by the future Plantation Storage development (currently undeveloped land), and on the east side the FEC railroad. The project lies within Hanson Grant, Township 38 South, Range 41 East.

1.2 Site Conditions

The project site is undeveloped, consisting of grassed areas, some areas of bare sand, and vegetated and wooded areas. An existing road bisects the property from south to north.

1.3 Soils & Wetlands

Based on the Martin County Soil Survey, the soils types for the site are Waveland and Immokalee fine sands (Map Unit 4) and Waveland and Lawnwood fine sands, depressional (Map Unit 5). Waveland and Immokalee fine sands are nearly level (0% to 2%) and poorly drained, with the water table at a depth of less than 10 inches for 2 to 4 months of the year and within a depth of 40 inches for 6 months or more during the year. Waveland and Lawnwood fine sands, depressional are nearly level (0% to 2%) and poorly drained, with water ponded for 6 to 9 months of the year. Please refer to the Soils Map in Attachment 4.1.

An Information Wetland Determination (No. 43-100937-P) confirmed there are no wetlands present on the property. See Attachment 4.2.

1.4 Topography & Drainage Patterns

Stuart Business Park Master Drainage System
The site is located within Basin 2 of the SBP master drainage system. The SBP master drainage system collects runoff for projects within it, providing conveyance, attenuation, and water quality treatment prior to discharge from the SBP. The SBP master drainage system report has made assumptions for landuse and grading of future projects and set minimum road, berm, and finished floor elevations. Projects within the SBP that do not utilize the master planned landuses must provide demonstrate that the proposed project will meet the pro-rated discharge rate for that project's acreage.

The SBP (SFWMD ERP No. 43-00014-S, Attachment 4.3) is approximately 230 acres and is divided into two basins. The 9.5 acre Silverthorne site is in Basin 2, at the northeast corner of the basin.

Silverthorne Topography & Drainage Pattern
The site is located in the northeast corner of the SBP Basin 2. Development has occurred all around the site, berming the property lines. Elevations within the property vary, generally

runoff will flow north to south, east to west, towards an existing drainage easement along the south line of the property and into the Commerce Avenue drainage system, a part of the SBP master system.

Previously the southern and eastern lines of the site contained a drainage ditch as part Stuart Business Park master drainage system. The SBP Environmental Resource Permit was modified to fill these ditches, however, the filling was not completed.

North & West Property Lines

Along the north property, adjacent to Indian Street and the existing commercial development, elevations range from 16.0 NAVD to 17.0 NAVD. Along the west property line, adjacent to Commerce Avenue, elevations range from 14.7 NAVD to 16.5 NAVD. Runoff in areas adjacent to these property lines generally flows south and east towards lower elevations in the center of the site. A portion of runoff flows to the existing driveway cut along Indian Street.

East Property Line

The east property line is adjacent to the FEC Railroad. Historically, a ditch ran the length of the SBP east property line adjacent to the Railroad ROW. The ditch was a part of the SBP master drainage system and connected to several east-west conveyances (one of which as located along Silverthorne's south property line). In 1982 the FEC raised concern that runoff from the SBP would enter FEC right of way and wash out the railroad tracks.

Between 1985 and 1987 the SBP ERP was modified to separate the ditch and berm it off from the FEC right of way (See Attachment 4.4, ERP App No. 07157-B). The modifications included filling the north-south conveyance ditch, including along the Silverthorne site, and constructing a berm which was intended to prevent runoff from entering the FEC right of way up to the 25-year 3-day storm event. Review of the present day conditions reveal that the filling of the conveyance ditch and berm construction along the Silverthorne site was not completed. The ditch, or a portion thereof, currently runs along a portion of the east property line and is overgrown. Runoff in the area flows into the ditch and, eventually, towards a low area along the Silverthorne south property line.

South Property Line

As noted above the East Property Line section, one of historic east-west conveyances existed along Silverthorne's south property line. Elevations ranched from 12.0 NAVD at the toe to 17.0 NAVD at the top of the conveyance.

Presently, as part of the development of the parcel directly south of Silverthorne, construction and drainage easements have been granted from Silverthorne to the adjacent parcel to allow grading and drainage conveyance. The grading allowed for the adjacent parcel to construct their perimeter berm (at elevation 17.50 NAVD) up to the Silverthorne property line and grade down to existing elevation on Silverthorne property. The drainage easement portion, in the southwest of the Silverthorne property, will allow installation of culverts and drainage structure to allow conveyance of runoff from the adjacent development to the Commerce Avenue right of way and into the SBP master system.

Center of the Property

Elevations within the center of the project undulate, ranging from 13.5 NAVD to 16.5 NAVD. generally, the site slopes to the west towards Commerce Avenue.

Offsite Inflow

Per the SBP Master Drainage Report, the commercial parcel directly north of the Silverthorne site is design as full on-site retention, however, review of existing conditions topography notes that a portion of the site flows onto the Silverthorne site.

See the pre-development drainage map, Attachment 4.5.

1.5 FEMA Flood Zone

The site lies wholly within FEMA Flood Zone X, which is outside the 0.2% annual chance flood. The site is shown within FEMA FIRM panel with Map Number 12085C016G, which is included under Attachment 4.6.

2 Proposed Development:

2.1 Project Description:

The proposed project will development the entirety of the parcel as a residential subdivision, known as Silverthorne. The Silverthorne project will consist of 77 residential townhomes and will include a cabana and pool area, roadways, drainage improvements, a wet detention pond, swales, raingardens, bioswales, and water and sanitary services.

Other improvements will include extension of the existing driveway on the south adjacent parcel to service as the Silverthorne driveway and construction of a pedestrian plaza connecting the existing Indian Street & Commerce Avenue sidewalks. The pedestrian plaza will consist of a pervious paver sidewalk and two raingarden stormwater collection areas.

	Landuse			
	Existing		Proposed	
Silverthorne Site				
Buildings	0.00 Ac	0.0%	1.83 Ac	19.3%
Impervious	0.24 Ac	2.5%	2.92 Ac	30.7%
Pervious/Green	9.18 Ac	96.6%	3.77 Ac	39.7%
Wet Detention	0.00 Ac	0.0%	0.69 Ac	7.3%
Sub-Total	**9.42 Ac**	**99.1%**	**9.21 Ac**	**96.9%**
Drainage Easement				
Pervious (Plantation Storage)	0.08 Ac	0.8%	0.08 Ac	0.8%
Sub-Total	**0.08 Ac**	**0.8%**	**0.08 Ac**	**0.8%**
Pedestrian Plaza (Outside Drainage Area)				
Impervious	0.00 Ac	0.0%	0.03 Ac	0.3%
Pervious/Green	0.00 Ac	0.0%	0.18 Ac	1.9%

Sub-Total	**0.00 Ac**	**0.0%**	**0.21 Ac**	**2.2%**
Grand-Total	**9.50 Ac**	**100%**	**9.50 Ac**	**100%**

Silverthorne Drainage Area Breakdown

		Proposed
Within Drainage Area		
Buildings	1.83 Ac	18.72%
Driveways/Impervious	0.89 Ac	9.1%
Pavement/Impervious	2.02 Ac	20.6%
Lake/Water Surface	0.69 Ac	7.0%
Swale/Raingarden/Pervious	0.48 Ac	4.9%
Green/Buffers/Other Pervious	3.29 Ac	33.5%
Sub-total	**9.21 Ac**	**93.9%**
Offsite Inflow		
Building	0.27 Ac	2.8%
Pavement/Impervious	0.33 Ac	3.4%
Sub-total	**0.60 Ac**	**6.1%**
Total	**9.81 Ac**	**100.0%**

Offsite Improvements

Offsite improvements will include modification to Commerce Avenue and Indian Street. The improvements will consist of removing the northbound left hand from Commerce onto Indian Street and replacing it with a landscaped median; extending the existing median on Indian Street; and modifying the pavement and striping on Commerce to transition smoothly into the modified area. The work will result in a net reduction in impervious area on both roadways.

2.2 Wet Season Water Table

The site is located within the SBP Master Drainage System Basin 2 (Model Node 1). Per the existing SBP ERP (Attachment 4.5) the wet season water table elevation is 14.0 NGVD. Converting to NAVD, the WSWT is 12.55 NAVD.

2.3 Water Quality

The project is located within the SBP master drainage system. Per the SBP drainage report (See Attachment 4.7), future developments are responsible for providing water quality treatment volume, or dry pre-treatment volumes, that meet the greater of the City of Stuart, South Florida Water Management District, and (when within incorporated areas) Martin County. The Silverthorne site will provide water quality treatment that meets the requirements of the City of Stuart and the South Florida Water Management District.

Silverthorne Site

Runoff from the project drainage area will be directed to inlets within the roadways and perimeter swales behind the buildings, which will convey runoff to the wet detention pond. The detention pond will provide attenuation and water quality treatment volume.

Water quality volume will be provided for the more stringent of requirements of the SFWMD and City of Stuart. Additionally, the projected is proposed to also meet Martin County water quality standards.

1" x Drainage Area (SFWMD) (+50% for Discharge to OFW / Impaired Waters) = 1.15 ac-ft
or
2.5" x % Imperviousness x Drain. Area (COS) (+50% for Disch. to OFW / Imp.) = 1.16 ac-ft
or
3" x % Imperviousness x Drain. Area (Martin County) = 1.36 ac-ft

Note: SFWMD, COS, and Martin County apply different credit factors for dry and wet volumes. The table below describes how the above requirements are met:

	SFWMD / COS		**Martin County**	
Wet Detention	Factor	Equiv. Volume	Factor	Equiv. Volume
2.08 Ac-ft @ from elevation 12.55 NAVD to 14.90 NAVD (Lake)	1.0	2.08 Ac-ft	0.67	1.39 Ac-ft
Total		**2.08 Ac-ft**		**1.39 Ac-ft**

The water quality treatment volume will be provided between the WSWT elevation 12.55 ft NAVD and elevation 14.90 ft NAVD. Please see Attachment 4.8.

2.4 Nutrient Analysis

The project discharges to the Stuart Business Park master system, which has an eventual discharge point within the Saint Lucie Basin. The Saint Lucie Basin has been declared an impaired body, therefore a Pre vs. Post nutrient analysis of the project has been prepared to demonstrate that the project will not exceed TMDL levels. To meet nutrient removal requirements the project proposes a swale + detention treatment train.

The full nutrient analysis report has been prepared under separate cover.

2.5 Allowable Discharge Rate

The allowable discharge rate for this project is 0.123 cfs/ac, based upon the existing SBP Master Drainage System Report (Attachment 4.7). Therefore, the maximum discharge rate for the project will be:

(9.21 Ac On-site Drainage Area) x 0.123 cfs/ac = 1.13 cfs

2.5 Stormwater Management System

The project's water management system will consist of inlets, swales, culverts, a wet detention area, and a control structure. Stormwater runoff will be directed to swales and inlets and will be conveyed to the wet detention area for water quality treatment and attenuation prior to discharge to the SBP Basin 2 drainage system via the Commerce Avenue right of way.

Runoff that is gathered in the eastern raingardens and central linear raingardens will flow into the stormwater management culvert system, joining runoff from the roadways, and be directed to either the headwater of the proposed swale located north of the wet pond or to the headwater of the linear raingarden located in the north-east of the site. Runoff will travel through these swales and raingardens before eventually flowing to the wet detention pond.

The project's control structure is located in the southwest corner of the wet detention pond and consists of a 3" diameter bleeder set at invert elevation 12.55 ft NAVD, the control and water table elevation. The control structure has an additional orifice set at elevation 14.90 ft NAVD, the water quality elevation. The overflow weir has been set at elevation 17.20 ft NAVD.

Please see Attachment 4.5 Pre & Post Development Basin Map.

3 Modeling:

The project is located within Basin 2 of the SBP Master Drainage system. Per the SBP Master System drainage report, new projects must provide modeling to demonstrate that that meet the pro-rated discharge criteria and finished floor elevations.

3.1 Modeling Inputs

Storm Event:	Criteria:	Rainfall Amount (inches):
5-yr, 24 hour	Roads Centerline	6.0 inches
25-yr, 72-hour	Perimeter Berm	11.0 inches
100-yr, 72-hour	Finished Floor	13.6 inches

3.2 Node Map:

See Attachment 4.9 for the Node Map.

3.3 Minimum Elevations & Design Storms (5-year, 24-hour & 25-year, 72-hour models) model

Interconnected Channel Pond Routing (ICPR) models for the project were developed using the stage storage information for the basin. Design elevations and discharge rates must meet the limitations noted in he SBP Master System drainage report. Finished flood elevations are set to meet or exceed the SBP minimum.

The SBP Master Drainage System does not recover to control elevation within 12 days of cessation of the 25-year storm event. Per the Node Time SBP Drainage Report, the SBP Basin 2 Master System's lake (Node 6) recovers to elevation 14.36 ft NAVD. The Silverthorne site recovers to elevation 14.42 NAVD. Therefore a second model run, utilizing 14.42 ft NAVD as starting elevation, was routed to determine minimum elevations. Finished floor and perimeter berm elevations are set based upon this second routed storm. See Attachment 4.7, SBP Master Drainage Report.

1st Storm Routing				
Storm Event	**Criteria**	**SBP Minimum Elevation (Node 1)**	**Modeled Elevation**	**Silverthorne Prop. Min. Elevation**
5-yr, 24-hour	Roads Crown / Edge of Pavement	15.09 NAVD	15.44 NAVD	16.75 NAVD
25-yr, 72-hour	Perimeter Berm	16.19 NAVD	17.06 NAVD	17.25 NAVD

100-yr, 72-hour (zero discharge)	FFE	N/A	17.68 NAVD	18.25 NAVD

2nd Storm Routing				
Storm Event	**Criteria**	**SBP Minimum Elevation (Node 1)**	**Modeled Elevation**	**Silverthorne Prop. Min. Elevation**
25-yr, 72-hour	Perimeter Berm	16.44 NAVD	17.14 NAVD	17.25 NAVD
100-yr, 72-hour (zero discharge)	FFE	17.05 NAVD	17.89 NAVD	18.25 NAVD

Tailwater information for the routings was based upon the SBP Basin 2 Node 6 ICPR Node Time Series.

3.4 Discharge Rate

The project discharge rate will be limited to the rate established in Section 2.5.

Storm Event:	**Criteria:**	**Allowable Rate**	**Modeled Rate**
1st Storm			
25-yr, 72-hour	Allowable Discharge	1.13 cfs	0.94 cfs
2nd Storm			
25-yr, 72-hour	Allowable Discharge	n/a	0.97 cfs

3.5 Recovery

The SBP master drainage system does not recover within 12 days of cessation of the storm event therefore the second storm event was modeled. Within 12 days of cessation of the second storm event the system recovers to within 0.1 feet of the second storm's starting elevation. See Attachments 4.9.

Attachment 4.1

Soil Map—Martin County, Florida
(Silverthorne)

Map Scale: 1:2,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

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 1:20,000.

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: Martin County, Florida
Survey Area Data: Version 19, Jun 9, 2020

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

Date(s) aerial images were photographed: Mar 8, 2019—Mar 28, 2019

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
4	Waveland and Immokalee fine sands	7.5	69.9%
5	Waveland and Lawnwood fine sands, depressional	3.2	30.1%
Totals for Area of Interest		**10.7**	**100.0%**

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description

Martin County, Florida

4—Waveland and Immokalee fine sands

Map Unit Setting

National map unit symbol: 1jq7n
Elevation: 0 to 80 feet

Mean annual precipitation: 56 to 64 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Waveland and similar soils: 41 percent
Immokalee and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waveland

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
Eg - 4 to 43 inches: fine sand
Bh1 - 43 to 47 inches: fine sand
Bh2 - 47 to 77 inches: loamy fine sand
Cg1 - 77 to 91 inches: fine sand
Cg2 - 91 to 99 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 30 to 50 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 1.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)

Hydric soil rating: No

Description of Immokalee

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
E - 6 to 35 inches: fine sand
Bh - 35 to 54 inches: fine sand
BC - 54 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)
Hydric soil rating: No

Minor Components

Lawnwood

Percent of map unit: 4 percent
Landform: Marine terraces on flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)

Hydric soil rating: No

Basinger

Percent of map unit: 4 percent
Landform: Drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), Slough (R156BY011FL)
Hydric soil rating: Yes

Nettles

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)
Hydric soil rating: No

Salerno

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)
Hydric soil rating: No

Placid

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL), Freshwater Marshes and Ponds (R156BY010FL)
Hydric soil rating: Yes

Jonathan

Percent of map unit: 3 percent
Landform: Rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G156BC121FL), South Florida Flatwoods (R156BY003FL)

Hydric soil rating: No

5—Waveland and Lawnwood fine sands, depressional

Map Unit Setting

National map unit symbol: 1jq7p
Elevation: 0 to 80 feet
Mean annual precipitation: 56 to 64 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Waveland and similar soils: 41 percent
Lawnwood and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waveland

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 2 inches: fine sand
Eg - 2 to 43 inches: fine sand
Bh - 43 to 77 inches: fine sand
Cg1 - 77 to 91 inches: loamy fine sand
Cg2 - 91 to 99 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 30 to 50 inches to ortstein
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL), Freshwater Marshes and Ponds (R156BY010FL)
Hydric soil rating: Yes

Description of Lawnwood

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 3 inches: fine sand
E - 3 to 22 inches: fine sand
Bh - 22 to 29 inches: fine sand
Cg - 29 to 80 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 30 inches to ortstein
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 0.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: B/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL), Freshwater Marshes and Ponds (R156BY010FL)
Hydric soil rating: Yes

Minor Components

Oldsmar

Percent of map unit: 7 percent
Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), South Florida Flatwoods (R156BY003FL)
Hydric soil rating: No

Basinger
Percent of map unit: 7 percent
Landform: Drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL), Slough (R156BY011FL)
Hydric soil rating: Yes

Placid
Percent of map unit: 6 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL), Freshwater Marshes and Ponds (R156BY010FL)
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Martin County, Florida
Survey Area Data: Version 19, Jun 9, 2020

Attachment 4.2

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

February 11, 2019

** Delivered via email*

Paul Kuehn
Ted Glasrud Associates Fl LLC
1700 W Highway 36 #650
Roseville, MN 55113

Subject: Ted Glasrud Associates FL LLC
Application No. 181226-1080
Informal Wetland Determination No. 43-100937-P
Martin County

Dear Mr. Kuehn:

The District reviewed your request for an informal determination of the jurisdictional wetland and other surface water boundaries within the five subject properties, which are located as shown on the attached Exhibit 1. Joint site inspections were conducted on January 8, 2019 and February 5, 2019.

Based on the information provided and the results of the site inspections, jurisdictional wetlands as defined in Chapter 62-340, Florida Administrative Code, exist on one of the properties, Site No. 5. Exhibit 2, attached, identifies the boundaries of each property inspected and the approximate landward limits of the wetlands on Site No. 5.

This correspondence is an informal jurisdictional wetland determination pursuant to Section 373.421(6), Florida Statutes, and Section 7.3 of Environmental Resource Permit Applicant's Handbook Volume I. It does not bind the District, its agents or employees, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal jurisdictional determination are not entitled to rely upon it for purposes of compliance with provision of law or District rules.

Sincerely,

Barbara Conmy
Section Leader

c: Daniel Saskowsky, Daniel M Saskowsky Environmental Consultant *
Ted Glasrud Associates Fl, LLC
Paul Kuehn, Ted Glasrud Associates Fl LLC

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 181226-1080.

Exhibit No. 1.0 Location Map

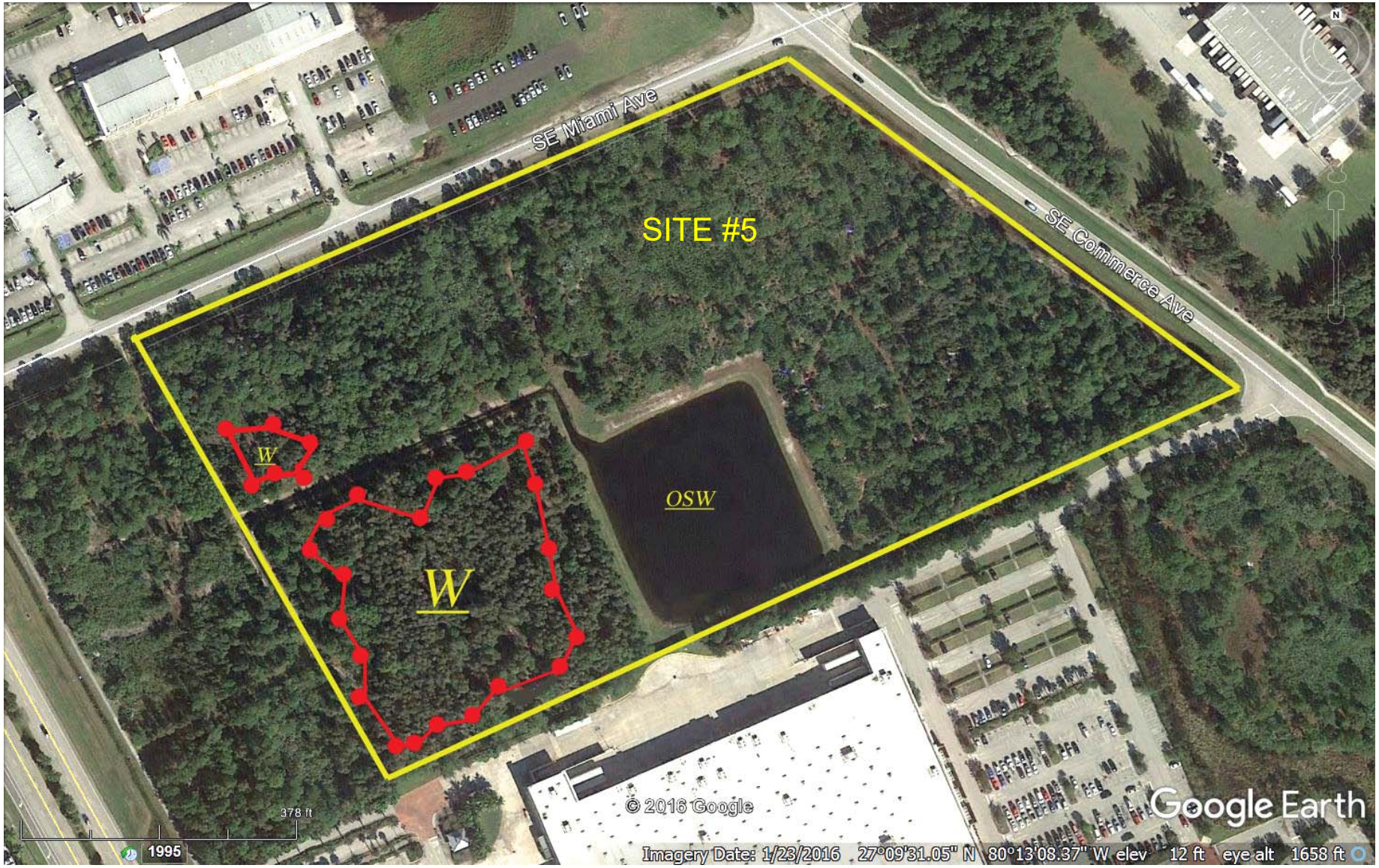
Exhibit No. 2.0 Wetland Map

SITE #1
SE Commerce Ave

SITE #2
SE Railroad Ave
SE Commerce Ave

SITE #3
ce Ave
© 2016 Google

mmerce Ave
SITE #4


SE Miami Ave
SE Commerce Ave
SITE #5
W
W
OSW
© 2016 Google
Google Earth
378 ft
1995
Imagery Date: 1/23/2016 27°09'31.05" N 80°13'08.37" W elev 12 ft eye alt 1658 ft

Attachment 4.3

FORM #0157
Rev. 07/09

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
PERMIT MODIFICATION NO. 43-00014-S
DATE ISSUED: AUGUST 6, 2012

PERMITTEE: INDUSTRIAL DEVELOPMENT CORPORATION
(STUART BUSINESS PARK STORMWATER MASTER PLAN)
12994 170TH ROAD NORTH,
JUPITER, FL 33478

ORIGINAL PERMIT ISSUED: FEBRUARY 7, 1975

ORIGINAL PROJECT DESCRIPTION: STORM WATER DRAINAGE SERVING 213 ACRES BY MEANS OF SWALE CONNECTIONS TO RAILROAD DRAINAGE DITCH AND DISCHARING TO THE MANATEE POCKET VIA COUNTY DITCH AT A1A APPROXIMATELY 1/4 MILE NORTH OF ST. LUCIE AVENUE.

APPROVED MODIFICATION: CONCEPTUAL APPROVAL OF A SURFACE WATER MANAGEMENT SYSTEM TO SERVE 83.55 ACRES AND OPERATION OF THE MASTER SYSTEM SERVING 230 ACRES OF COMMERCIAL PROPERTY KNOWN AS STUART BUSINESS PARK.

PROJECT LOCATION: MARTIN COUNTY , SECTION 38 TWP 38S RGE 41E

PERMIT DURATION: See Special Condition No:1. Pursuant to Rule 40E-4.321, Florida Administrative Code.

This is to notify you of the District's agency action concerning Permit Application No. 120614-4, dated June 14, 2012. This action is taken pursuant to the provisions of Chapter 373, Part IV, Florida Statutes (F.S.), and the Operation Agreement Concerning Regulation Under Part IV, Chapter 373 F.S., between South Florida Water Management District and the Department of Environmental Protection.

Based on the information provided, District rules have been adhered to and an Environmental Resource Permit Modification is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.57 and Section 120.569, or request a judicial review pursuant Section 120.68, Florida Statutes.
2. The attached 19 General Conditions.
3. The attached 18 Special Conditions.
4. The attached 2 Exhibits.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition, please provide written objections, petitions and/or waivers to:

Elizabeth Veguilla, Deputy Clerk, MSC2440
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416-4680

Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

CERTIFICATION OF SERVICE

I HEREBY CERTIFY that the Staff Report, Conditions and Notice of Rights have been mailed to the Permittee (and the persons listed on the attached staff report distribution list) no later than 5:00 p.m. on this 7th day of August, 2012, in accordance with Section 120.60(3), Florida Statutes, and a copy has been filed and acknowledged with the Deputy District Clerk.

By Elizabeth V
DEPUTY CLERK
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Attachments

SPECIAL CONDITIONS

1. The conceptual phase of this permit shall expire on August 6, 2017.
   The construction phase of this permit shall expire on August 6, 2017.

2. Operation of the Stuart Business Park master surface water management system including conveyances and control structures (and maintenance of wetlands/mitigation areas, if applicable) shall be the responsibility of Stuart Business Park Owners Association, Inc.

   Individual lot owners are responsible to operate and maintain the secondary water management systems within their property.

   Within one year of permit issuance and prior to the sale of any lot within the conceptual approval area, the permittee shall submit to the District a copy of the deed restrictions that clearly describe the responsibility of future property owners to construct, operate, and maintain water management facilities within the individual lots. These deed restrictions shall be included in the deeds for the sale of any lots in the conceptual approval area.

3. Discharge Facilities: No New Discharge Facilities

4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.

5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

7. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.

8. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

9. 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 report. The location of the elevation reference must be noted on or with the certification report.

10. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments, debris, and vegitation. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

11. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed surface water management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to modify the surface water management system, if necessary, to eliminate the cause of the adverse impacts.

12. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.

13. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving

subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

14. Minimum building floor elevation: 18.50 ngvd

15. All commercial/industrial parcels shall provide a minimum dry pre-treatment volume of 1/2 inch of runoff prior to discharge into the master surface water management system.

16. The exhibits and special conditions in this permit apply only to this application. They do not supersede or delete any requirements for other applications covered in Permit No. 43-00014-S unless otherwise specified herein.

17. All future development connecting to the Stuart Business Park stormwater master system shall provide water quality treatment equivalent to the greater of 1 inch or 2.5 inches over the percent imperviousness within the proposed project limits prior to discharging to the Stuart Business Park stormwater master system.

18. Any future projects within the Stuart Business Park shall require a modification to this permit and will be subject to evaluation of wetland impacts and potential mitigation requirements in accordance with the environmental criteria in effect at the time of the application for any such proposed work.

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373. F.S.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.

6. Within 30 days after completion of construction of the permitted activity, the permitee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation 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. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved

responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No Notice" Rule.

14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.

19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does <u>not</u> constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office**. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing
Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation
The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW
Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

FINAL APPROVED BY EXECUTIVE DIRECTOR AUGUST 6, 2012

Last Date For Agency Action: September 12, 2012

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Stuart Business Park Stormwater Master Plan

Permit No.: 43-00014-S

Application No.: 120614-4

Application Type: Environmental Resource (Conceptual Approval And Construction/Operation Modification)

Location: Martin County, S38/T38S/R41E

Permittee : Industrial Development Corporation

Operating Entity : Stuart Business Park Owners Association Inc

Project Area: 230.00 acres

Project Land Use: Commercial
Industrial

Drainage Basin: SOUTH COASTAL

Receiving Body: FDOT (US-1) system **Class:** N/A

Special Drainage District: NA

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE

This application is a request for an Environmental Resource Permit modification of a surface water permit to authorize conceptual approval of a surface water management system to serve 83.55 acres and operation of the master system serving 230 acres of commercial property known as Stuart Business Park.

PROJECT EVALUATION:

PROJECT SITE DESCRIPTION:

The site is located in the City of Stuart (Martin County) between U.S. 1 and the Florida East Coast (FEC) railroad line and between Indian Street and approximately 800 feet south of SE Market Place. Please see the Location Map Exhibit 1.

There are existing surface water management facilities that were previously permitted under Permit Nos. 43-00014-S, 43-00380-S, and 43-02368-P. The site contains commercial and industrial facilities, roads, supporting infrastructure, lakes, wetlands, and undeveloped tracts.

PROJECT BACKGROUND:

On February 7, 1975, the District authorized Surface Water Management Permit No. 43-00014-S (Application No. 22163) for the construction of a drainage system to serve 213 acres of industrial lands by means of swale connections to the Florida East Coast Railroad borrow ditch with ultimate discharge to Manatee Pocket.

On June 11, 1981, the District authorized (Application No. X000002020) a permit modification to change the outfall location from the southeast corner of the project to the southwest corner of the project. The outfall in the southwest corner discharges into the U.S. 1 Florida Department of Transportation (FDOT) ditch that flows south and then east and eventually discharging into Manatee Pocket. Also proposed with this modification was the construction of a 5 ft wide weir at elevation 16.0 ft NGVD with a bleeder at elevation 14.0 ft NGVD and a requirement for future phases to dedicate 25 percent of the project surface area to surface water management area at elevation 14.0 ft NGVD. In April of 1984, a modification was approved to enlarge the bleeder to 420 square inches.

In August of 1982, Florida East Coast Railway notified the permitee of its concern over the possibility of Stuart Business Park runoff washing out their tracks. Numerous meetings and field visits occurred during 1983 and 1984 to resolve the railroad and Stuart Buisness Park drainage issues. On May 9, 1985, the District authorized (Application X000002021) construction of two internal sites, individual water management systems within the park, master system design and the separation of the eastern ditch from the FEC right-of-way as well as the rip-rapping of the east ditch bank at the lateral inflow points.

On August 5, 1986, the District authorized (Permit No. 43-00014-S-04, Application 03106-H) construction of the Stuart Lincoln-Mercury car dealership. The surface water management system is not connected to the Stuart Business Park master system and retains all runoff up to the 100 year 1 day storm flood elevation of 16.2 NGVD.

On May 19, 1987, the District authorized (Permit No. 43-00380-S, Application 09306-K) construction of the 10.99 acre Fischer Automotive Dealership located on SE Fischer Street and US-1. The property is within the boundary of the Stuart Business Park, but does not connect to the Stuart Business Park stormwater management system. The project surface water management system retains all runoff up to the 100 year 3 day storm flood elevation of 18.2 NGVD. The system includes dry retention pre-treatment and wet retention.

On June 19, 1987, the District authorized (Permit No. 43-00014-S-04, Application 02187-D) construction of the Stuart Lincoln-Mercury and Stuart Toyota car dealerships. The 18.43 acre property (13.15 ac Lincoln-Mercury / 5.28 ac Toyota) is located on Miami Street and US-1. The surface water management system is not connected to the Stuart Business Park master system and retains all runoff up to the 100 year 1 day storm elevation of 17.2 NGVD within a lake between the two projects.

On July 14, 2004, the District authorized (Application 030714-12) modifications to the stormwater management system to accomodate additional parcels not currently part of the Stuart Business Park master system for a total of 234.83 acres. This application created two basins within Stuart Business Park and authorized a new control structure for Basin 2 and minor modifications to the Basin 1 control structure. Construction authorization was granted for the revised master drainage system design and Wal-Mart Store 1087-01.

On September 10, 2004, the District authorized (Permit 43-00014-S-06, Application 040524-4) a modification of the Stuart Business Park surface water management system to include the development of an Eckerd's Drug Store. Proposed construction consisted of an approximately 14,130 sf building, associated parking and utilities, and a dry detention pond to provide water quality pre-treatment. After receiving pre-treatment, runoff from the Eckerd's would overflow a drop inlet that is connected to the Stuart Business Park Master System. On July 21, 2006, the permit was transferred to K'bana, LLC.

On October 5, 2005, a letter modification (Application No. 050809-13) was issued, transferring 33.9 acres from Industrial Development Corporation (Stuart Business Park) to Wal-Mart Stores East, Inc. and indicating the construction limits of the project. The plans presented with this modification identified the facilities to be constructed, including features to provide stormwater management for the Wal-Mart store. The modification stated that there were no changes to the permit requirements for the area south of SE Market Place.

On September 30, 2006, a Reciprocal Easement Agreement was made between Mica Investments, the prior owners of The Shoppes at Market Place site, and K'bana, L.L.C., the owners of the project area permitted as Eckerd's Drug Store, subsequently transferred to K'bana, LLC (now under ownership of Racetrac Petroleum, Inc.). The agreement allows for the conveyance of runoff via a culvert from the permitted Eckerd's project (Permit No. 43-00014-S-06), through the Shoppes at Market Place, to the existing lake.

On December 8, 2006, the District authorized (Permit No. 43-00014-S-07, Application 060208-7) construction of The Shoppes at Market Place, within the previously permitted Stuart Business Park Basin No. 1. Proposed construction consists of approximately 1.12 acres of buildings with associated parking and utilities. Two interconnected dry detention ponds will provide water quality pre-treatment with discharge from the southernmost dry detention area through a control structure into the existing lake that adjoins the subject site along its eastern property line. The existing lake is connected to the Stuart Business Park master system through an open channel at the existing lake's southern limits.

On January 23, 2007, the District authorized (Permit No. 43-00013-S-06, Application. No. 060920-23) construction of the 1.61 acre K'bana Grill which directs runoff to the conveyance system of the Shoppes at Market Place within Stuart Business Park.

On March 4, 2011, the District authorized (Permit No. 43-00014-S-10, Application No. 100923-39) a modification of the Stuart Business Park surface water management system to include the development of a gas station, RaceTrac #934, within the Stuart Business Park Basin No. 1, and more specifically, the previously permitted project site for Eckerd's and K'bana Grill. Permitted construction consists of approximately 5,000 sf of building with associated parking and utilities. A series of inlets and culverts will direct runoff through a network of exfiltration trenches to a dry detention pond that provides water quality treatment. After receiving treatment, runoff discharges from the dry detention area, through the proposed control structure, to a drainage conveyance system within The Shoppes at Marketplace, which in turn discharges into the existing lake east of the subject properties' boundaries. This existing lake is part of the Stuart Business Park master system and discharges through an open channel at the existing lake's southern limits to the Basin 1 outfall ditch.

PROPOSED PROJECT:

This application is a request to modify the Stuart Business Park stormwater management system to clarify its boundaries, land use, water quality treatment, and attenuation of the system and provide for the future development and/or re-development of parcels within the Stuart Business Park.

The Stuart Business Park (SBP) is an existing 230 +/- acre commercial industrial business park that was originally permitted by the District in 1975 and has been modified by approximately 30 applications for various construction projects. Please see the project background for descriptions of significant permit modifications. The SBP surface water management system has been divided into two basins, Basin 1 and Basin 2. Please see the Master Basin Map sheet MD2 of Exhibit 2.0. Basin 1 is the southern 76 acres of the project and Basin 2 is the 154 acre northern portion of the project. Since 1975 several parcels within the project were designed and permitted to retain up to the 100 year 1-3 day storm event and do not connect to the Stuart Business Park stormwater master system for treatment or attenuation. Please see the Master Nodal Map sheet MD4 of Exhibit 2.0 which identifies those parcels that provide 100% retention.

Basin 1 conveys runoff via roadside swales, culverts and internal controls to an outfall ditch along the southern boundary of the SBP. Please refer to the Master Drainage Map sheet MD3 of Exhibit 2.0. The Basin 1 outfall ditch discharges to the US-1 system via a control structure (CS#1) in the ditch near the US-1 right-of-way in the southwest corner of the SBP.

Basin 2 conveys runoff via road side swales, culverts and internal controls to a 48 inch diameter culvert on SE Commerce Ave. east of Wal-Mart that connects to a 1.62 ac lake on parcel 5 located north of Wal-Mart. The parcel 5 lake is connected to a control structure (CS#2) via an open ditch and culvert system and discharges to the US-1 system just north of the Wal-Mart site. The Wal-Mart parcel is part of Basin 1. The Wal-Mart roof gutter system is directed to the parcel 5 lake in Basin 2.

The SBP stormwater master system will be operated and maintained by the Stuart Business Park Owners Association, Inc. (SBPOA). Please see the Maintenance Entity Map sheet MD6 of Exhibit 2 which identifies the common infrastructure to be maintained by SBPOA. Individual lot owners are responsible for operating and maintaining the secondary water management systems within their properties. Within one year of permit issuance the permittee shall submit a copy of the revised deed restrictions clearly describing the responsibility of existing and future property owners to construct and maintain water management facilities within individual lots by the lot owner (see Special Conditions).

The applicant's engineer has prepared detailed maps that describe the SBP stormwater master system including individual parcel characteristics. These maps have been included as Exhibit 2.0. Additional details can be found in the engineering analysis and reports in the permit file.

LAND USE:

The applicant's engineer reviewed previously issued permits to establish land use and design storm discharge for developed parcels. Assumptions were made for developed parcels that did not have permit information. For the purposes of establishing the land uses for the remaining undeveloped parcels, typical commercial land use assumptions were used. The SBP stormwater master system design storm analysis assumed the following land use for undeveloped parcels and or redevelopment parcels within the SBP:

BASIN 1:
Parcels 7, 8, 9 and any redevelopment would consist of 15% water management, 25% pervious, 30%

LAND USE

impervious, and 30% building coverage. The Lisa Dames and Georgia Auto properties in the southeast corner of the project are currently developed, but not connected to the SBP stormwater master system. The analysis included these properties so they could be connected in the future.

BASIN 2:
Parcels 1-4, 6 and any redevelopment would consist of 15% water management, 25% pervious, 30% impervious, and 30% building coverage. Parcel 5 land use is 18% lake, 18% pervious, 24% impervious, 40% building coverage.

The land use in the table below represents the available land use within undeveloped parcels.

Construction

Basin : BASIN 1

	Total Basin	
Building Coverage	7.12	acres
Impervious	7.12	acres
Pervious	5.93	acres
Water Mgnt Acreage	3.56	acres
Total:	**23.73**	

Basin : BASIN 2

	Total Basin	
Building Coverage	20.55	acres
Impervious	15.65	acres
Pervious	13.87	acres
Water Mgnt Acreage	9.75	acres
Total:	**59.82**	

WATER QUANTITY

A significant part of the overall master system has been constructed. The design storm routing analysis that includes the existing system predicts that the SBP stormwater master system will not recover to the control elevation (14.0 NGVD) within 12 days. A second design storm routing was performed with the initial starting elevation set at the 12 day recovery elevation of the initial routing for the 25 year and 100 year design storms. This analysis was performed to demonstrate that the system would provide adequate flood protection. The peak stage prediction of the second routing of the 100 year storm was 18.48 NGVD which is below the previously permitted minimum building elevation of 18.50 NGVD.

Discharge Rate :

Application No. 030714-12 included an analysis of the overall system that indicated a design storm peak rate of 12.3 cfs for Basins 1 and 2. Earlier permits included higher 25 year 3 day design storm peak rates. The applicants engineer has reevaluated the existing system and determined that 22 cfs is the appropriate design storm rate. The peak discharge rate was divided between the two basins to develop a unit rate for future parcel development as follows:

The peak discharge rate for future development within Basin 1 contributing runoff to the SBP stormwater master system is 0.252 cfs/acre. This discharge rate is based on the permitted peak rate of 11.0 cfs over the 76 acre basin less previously permitted discharges to the SBP master system from Wal-Mart, Shoppes at Marketplace, and the Fowler/Dubner property.

The peak discharge rate for future development within Basin 2 contributing runoff to the SBP stormwater master system is 0.123 cfs/acre. This discharge rate is based on the permitted peak rate of 11.0 cfs over the 154 acre basin less previously permitted discharges to the SBP master system from Turbo Combustor and the Theis Distributing property.

The discharge rates for each parcel have been tabulated and can be found on the Master Basin Map sheet MD2 of Exhibit 2.0.

Discharge Storm Frequency : 25 YEAR-3 DAY Design Rainfall : 11 inches

Finished Floors :

Building Storm Frequency : 100 YEAR-3 DAY Design Rainfall : 13.6 inches

Road Design :

Road Storm Frequency : 5 YEAR-1 DAY Design Rainfall: 6 inches

Control Elevation :

Basin	Area (Acres)	Ctrl Elev (ft, NGVD 29)	WSWT Ctrl Elev (ft, NGVD 29)	Method Of Determination
BASIN 1	23.73	14	14.00	Previously Permitted
BASIN 2	59.82	14	14.00	Previously Permitted

WATER QUALITY:

No adverse water quality impacts are anticipated as a result of the proposed project. The existing SBP stormwater master system provides water quality treatment equivalent to 2.5 inches over the percent imperviousness (1.65 inches over Basin 1 and 1.31 inches over Basin 2) for all existing projects and roadways connected to the SBP stormwater master system.

All future projects connecting to the SBP stormwater master system shall provide water quality treatment equivalent to the greater of 1 inch or 2.5 inches times the percent imperviousness within the proposed project limits and 1/2 inch of dry pre-treatment for all commercial projects prior to discharging to the SBP stormwater master system. Please see Special Conditions.

WETLANDS:

Since wetland areas may exist within some of the parcels that are neither proposed to be impacted or preserved from the proposed activities, all future applications for construction within the Stuart Business park development are subject to the wetland protection and mitigation requirements in effect at the time of permit application (see Special Conditions).

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of

Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

RELATED CONCERNS:

Water Use Permit Status:

The applicant has indicated that supplemental irrigation is not required as part of this application.

This application is not requesting any construction as part of this application and will not need authorization for short term dewatering at this time.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

CERP:

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

Potable Water Supplier:

Martin County Utilities

Waste Water System/Supplier:

Martin County Utilities

Right-Of-Way Permit Status:

A District Right-of-Way Permit is not required for this project.

DRI Status:

This project is not a DRI.

Historical/Archeological Resources:

The District has received correspondence from the Florida Department of State, Division of Historical Resources indicating that no significant archaeological or historical resources are recorded in the project area and therefore is unlikely to have an effect upon any such properties.

DEO/CZM Consistency Review:

The issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

Third Party Interest:

No third party has contacted the District with concerns about this application.

Enforcement:

There has been no enforcement activity associated with this application.

STAFF RECOMMENDATION TO EXECUTIVE DIRECTOR:

The Staff recommends that the following be issued :

Conceptual approval of a surface water management system to serve 83.55 acres and operation of the master system serving 230 acres of commercial property known as Stuart Business Park.

Based on the information provided, District rules have been adhered to.

Staff recommendation is for approval subject to the attached General and Special Conditions.

STAFF REVIEW:

NATURAL RESOURCE MANAGEMENT APPROVAL

ENVIRONMENTAL EVALUATION

Jose Vega

SUPERVISOR

Barbara J. Conmy

SURFACE WATER MANAGEMENT APPROVAL

ENGINEERING EVALUATION

Glen J. Gareau, P.E.

SUPERVISOR

Hugo A. Carter, P.E.

ENVIRONMENTAL RESOURCE PERMITTING BUREAU CHIEF :

Anita R. Bain

DATE: 7/31/12

REGULATION DIVISION ASSISTANT DIRECTOR :

Anthony M. Waterhouse, P.E.

DATE: 8/1/12

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373. F.S.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.

6. Within 30 days after completion of construction of the permitted activity, the permitee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation 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. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental

GENERAL CONDITIONS

Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No

GENERAL CONDITIONS

Notice" Rule.

14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.

19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIAL CONDITIONS

1. The conceptual phase of this permit shall expire on August 6, 2017.
   The construction phase of this permit shall expire on August 6, 2017.

2. Operation of the Stuart Business Park master surface water management system including conveyances and control structures (and maintenance of wetlands/mitigation areas, if applicable) shall be the responsibility of Stuart Business Park Owners Association, Inc.

   Individual lot owners are responsible to operate and maintain the secondary water management systems within their property.

   Within one year of permit issuance and prior to the sale of any lot within the conceptual approval area, the permittee shall submit to the District a copy of the deed restrictions that clearly describe the responsibility of future property owners to construct, operate, and maintain water management facilities within the individual lots. These deed restrictions shall be included in the deeds for the sale of any lots in the conceptual approval area.

3. Discharge Facilities: No New Discharge Facilities

4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.

5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

7. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.

8. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

9. 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 report. The location of the elevation reference must be noted on or with the certification report.

10. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments, debris, and vegitation. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

11. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed surface water management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to modify the surface water management system, if necessary, to eliminate the cause of the adverse impacts.

12. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.

13. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout

SPECIAL CONDITIONS

canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

14. Minimum building floor elevation: 18.50 ngvd

15. All commercial/industrial parcels shall provide a minimum dry pre-treatment volume of 1/2 inch of runoff prior to discharge into the master surface water management system.

16. The exhibits and special conditions in this permit apply only to this application. They do not supersede or delete any requirements for other applications covered in Permit No. 43-00014-S unless otherwise specified herein.

17. All future development connecting to the Stuart Business Park stormwater master system shall provide water quality treatment equivalent to the greater of 1 inch or 2.5 inches over the percent imperviousness within the proposed project limits prior to discharging to the Stuart Business Park stormwater master system.

18. Any future projects within the Stuart Business Park shall require a modification to this permit and will be subject to evaluation of wetland impacts and potential mitigation requirements in accordance with the environmental criteria in effect at the time of the application for any such proposed work.

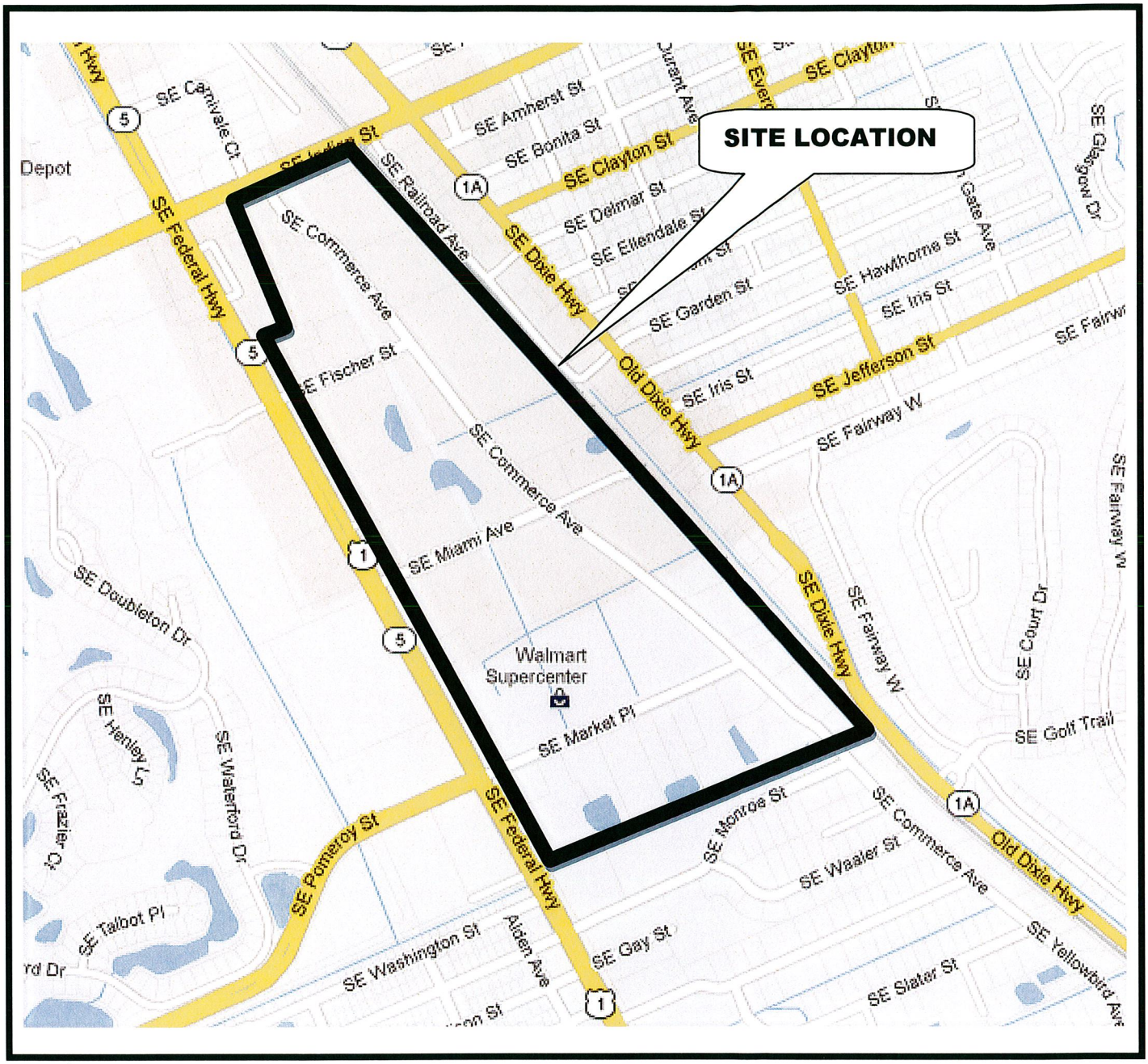
Table of Contents for Staff Report Exhibits

App. No. 120614-4

Stuart Business Park Stormwater Master Plan

1.0 Location Map

2.0 Plans and maps (6 sheets)



N
(n.t.s.)

STUART BUSINESS PARK

LOCATION MAP

APPLICATION 120614-4 EXHIBIT 1.0 PAGE 1 OF 1

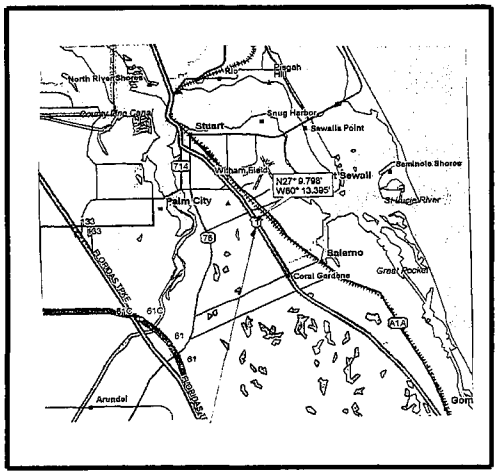
STUART BUSINESS PARK
MASTER DRAINAGE PLAN

CITY OF STUART, MARTIN COUNTY, FLORIDA

INDUSTRIAL DEVELOPMENT CORP.
12994 170TH ROAD NORTH
JUPITER, FLORIDA 33478
(561) 745-6619

MASTER STORMWATER PLANS

SECTION 38, TOWNSHIP 38S, RANGE 41E



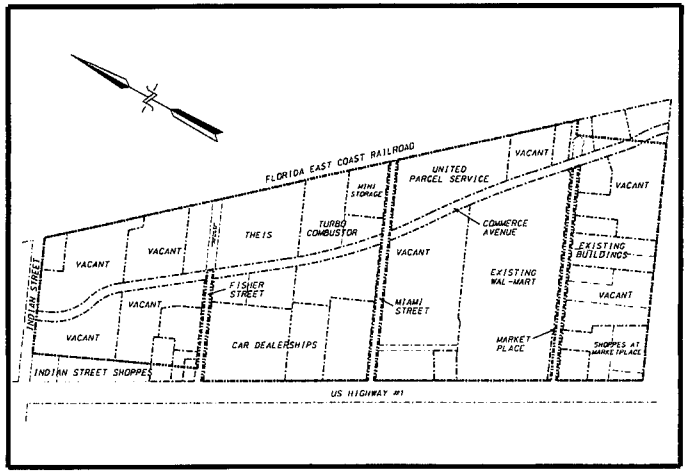
THIS SITE —

LOCATION MAP

NOT TO SCALE

SHEET INDEX:

MD1. COVER SHEET
MD2. MASTER BASIN MAP
MD3. MASTER DRAINAGE MAP
MD4. BASIN 1 & BASIN 2 NODAL MAP
MD5. CONTROL STRUCUTRE DETAILS.
MD6. MAINTENANCE ENTITY MAP



STUART BUSINESS PARK MASTER DRAINAGE PLAN

NOT TO SCALE

120614-4 D

PROJECT: STUART BUSINESS PARK MASTER DRAINAGE PLAN	TITLE: COVER SHEET		
DATE: 10/15/11	REVISIONS		AJ HYDRO ENGINEERING, INC. 5932 NW 73RD COURT PARKLAND, FL 33067 TEL (954) 344-7866 FAX (954) 344-7866
SCALE: NA	DATE	COMMENTS	
DRAWN BY: HEJ			
CHECKED BY: LJ			
APPROVED BY: HEJ			
PROJECT #: 10-0170			

SHEET NUMBER: MD1 OF 6

LICENSE No 67514 STATE OF FLORIDA PROFESSIONAL ENGINEER HOWARD JULIEN, P.E. APR 09 2012 DATE

10-0170 STUART BUSINESS PARK MASTER DRAINAGE PLAN CIVIL ENGINEERING PLANS

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STUART BUSINESS PARK
MASTER BASIN MAP

BASIN 1 ALLOWABLE DISCHARGE

ALLOWABLE DISCHARGE RATE PER
SFWMD PERMIT NO. 43-00014-S
APPLICATION NO. 030714-12
ISSUED TO WAL-MART STORES, INC. 07/14/04

BASIN 1:

ALLOWABLE RATE = 11.0 CFS
TOTAL AREA = 75.58 AC
ZERO Q AREA = 4.34 AC
WAL-MART = 28.68 AC; 2.50 CFS
SHOPPES AT MP & RACETRAC = 8.33 AC; 0.69 CFS
FOWLER/DUBNER = 4.95 AC; 0.43 CFS

PRO RATA AREA = 75.58-4.34-28.68-8.33=4.95
PRO RATA AREA = 29.28 AC

PRO RATA Q (CFS) = 11.0 - 2.50 - 0.69 - 0.43
PRO RATA Q = 7.38 CFS

ALLOW. PARCEL Q = PRO RATA Q / PRO RATA AREA
ALLOW. PARCEL Q = 7.38 CFS / 29.28 AC
ALLOW. PARCEL Q = 0.252 CFS/AC

NOTE: THE TOTAL AREA ABOVE USED TO DETERMINE THE ALLOWABLE DISCHARGE RATE WAS OBTAINED FROM THE SUM OF THE PARCELS LISTED ON THIS MAP. THE AREAS THAT ARE 100% RETENTION & THE PERMITTED PROJECTS WITH DISCHARGE WERE SUBTRACTED FROM THE TOTAL AREA AND THE ALLOWABLE DISCHARGE WAS PRORATED OVER THE REMAINING PARCELS.

BASIN 2 ALLOWABLE DISCHARGE

ALLOWABLE DISCHARGE RATE PER
SFWMD PERMIT NO. 43-00014-S
APPLICATION NO. 030714-12
ISSUED TO WAL-MART STORES, INC. 07/14/04

BASIN 2:

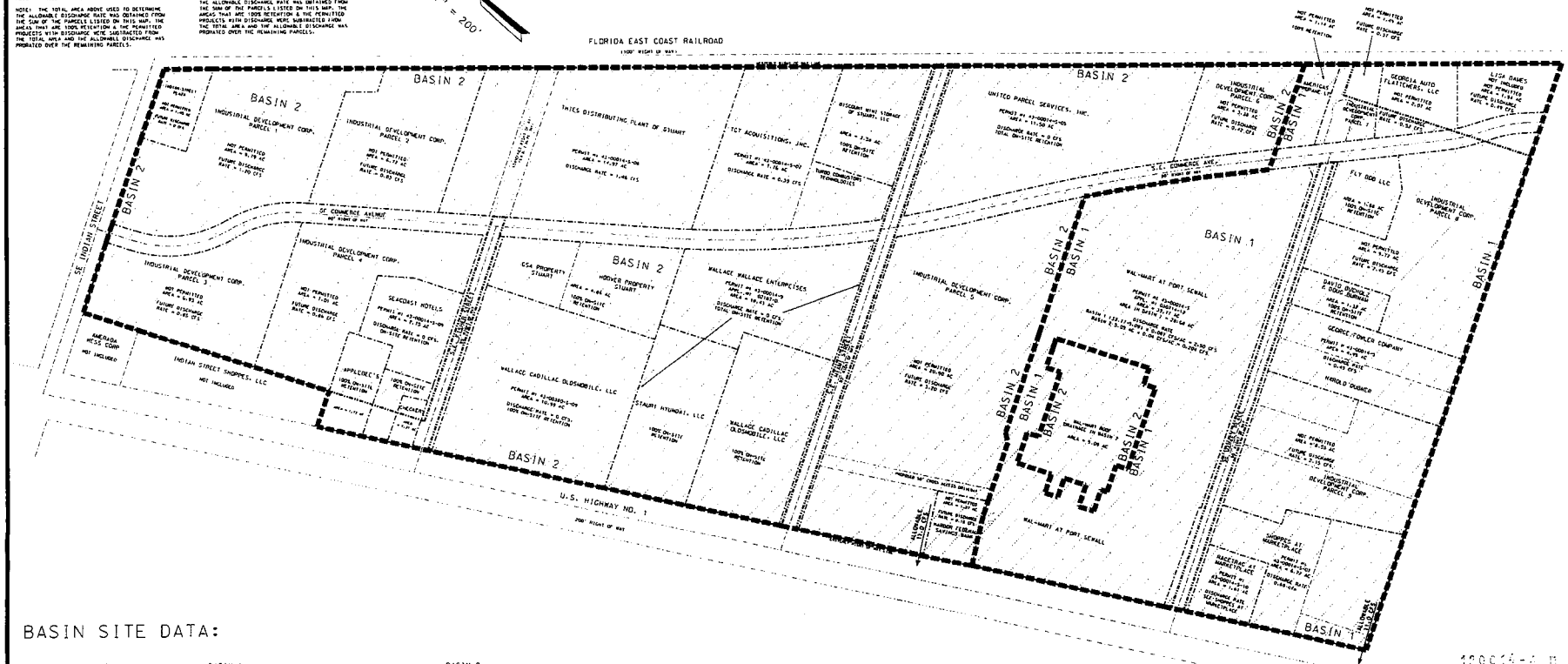
ALLOWABLE RATE = 11.0 CFS
TOTAL AREA = 154.26 AC
ZERO Q AREA = 36.94 AC
THEIS = 14.97 AC; 1.37 CFS
TCI = 7.76 AC; 0.39 CFS

PRO RATA AREA = 154.26 - 36.94 - 14.97 - 7.76
PRO RATA AREA = 94.59 AC

PRO RATA Q = 11.0 CFS - 1.37 CFS - 0.39 CFS
PRO RATA Q = 9.24 CFS

ALLOW. PARCEL Q = PRO RATA Q / PRO RATA AREA
ALLOW. PARCEL Q = 9.24 CFS / 94.59 AC
ALLOW. PARCEL Q = 0.123 CFS/AC

NOTE: THE TOTAL AREA ABOVE USED TO DETERMINE THE ALLOWABLE DISCHARGE RATE WAS OBTAINED FROM THE SUM OF THE PARCELS LISTED ON THIS MAP. THE AREAS THAT ARE 100% RETENTION & THE PERMITTED PROJECTS WITH DISCHARGE WERE SUBTRACTED FROM THE TOTAL AREA AND THE ALLOWABLE DISCHARGE WAS PRORATED OVER THE REMAINING PARCELS.



BASIN SITE DATA:

RIGHTS OF WAY AREA

FISHER ST (BASIN 2)	: 1.69 AC
MIAMI ST (BASIN 2)	: 3.49 AC
MARKET ST (BASIN 1)	: 3.54 AC
COMMERCE AVE (BASIN 1)	: 2.01 AC
COMMERCE AVE (BASIN 2)	: 8.72 AC

BASIN 1

PROPERTY	AREA	Q (CFS)
WAL-MART (LESS BLDG)	: 28.68 AC	2.50
AMERIGAS PROPANE	: 1.14 AC	0.00
IDC PARCEL 7	: 1.45 AC	0.37
GEORGIA AUTO	: 2.07 AC	0.52
LISA DAMES	: 1.94 AC	0.49
FLY BOB LLC	: 1.88 AC	0.00
IDC PARCEL 8	: 9.72 AC	2.45
BUCHOLZ & BURNAM	: 1.32 AC	0.00
FOWLER/DUBNER	: 4.95 AC	0.43
IDC PARCEL 9	: 8.55 AC	2.15
SHOPPES AT MARKETPLACE	: 6.72 AC	0.69
RACETRAC	: 1.61 AC	NA
MARKET PLACE	: 3.54 AC	0.89
COMMERCE AVENUE	: 2.01 AC	0.51
TOTAL AREA	: 75.58 AC	11.0 CFS

BASIN 2

PROPERTY	AREA	Q (CFS)
INDIAN ST. PLAZA	: 1.40 AC	0.00
IDC PARCEL 1	: 9.79 AC	1.20
IDC PARCEL 2	: 6.72 AC	0.83
IDC PARCEL 3	: 6.93 AC	0.85
IDC PARCEL 4	: 7.01 AC	0.86
SEACOAST HOTELS	: 2.75 AC	0.00
APPLEBEE'S	: 1.72 AC	0.00
CHECKERS	: 1.31 AC	0.00
HOOVER PROPERTY (GSA + VACANT)	: 4.86 AC	0.00
WALLACE CADILLAC	: 10.99 AC	0.00
WALLACE WALLACE ENT.	: 18.43 AC	0.00
THEIS DIST. PLANT	: 14.97 AC	1.37
TCI ACQUISITIONS	: 7.76 AC	0.39
DISCOUNT MINI STORAGE	: 3.58 AC	0.00
UNITED PARCEL SERVICE	: 11.50 AC	0.00
IDC PARCEL 5	: 70.90 AC	3.20
HARBOR FEDERAL	: 1.27 AC	0.16
IDC PARCEL 6	: 3.38 AC	0.42
WAL-MART ROOF	: 5.09 AC	NA
FISHER STREET	: 1.69 AC	0.21
MIAMI STREET	: 3.49 AC	0.43
COMMERCE AVENUE	: 8.72 AC	1.07
TOTAL AREA	:154.26 AC	11.0 CFS

DRAINAGE AREA NOTES:

1. SHADED AREA IS PROPERTY WITHIN THE ORIGINAL STUART BUSINESS PARK MASTER SURFACE WATER MANAGEMENT SYSTEM.
2. AREA WITHIN BASIN BOUNDARY, BUT NOT SHADED, HAS BEEN ADDED TO THE SBP WATER MANAGEMENT SYSTEM AFTER INITIAL PERMIT WAS ISSUED, AND INCORPORATED PER SFWMD PERMIT MOD., APPLICATION # 030714-12.
3. RIGHTS OF WAY WITHIN THE STUART BUSINESS PARK, WHILE NOT SHADED, ARE ALSO INCLUDED WITHIN THE MASTER SURFACE WATER MANAGEMENT SYSTEM. THESE INCLUDE FISHER ST, MIAMI ST, MARKET PLACE, AND COMMERCE AVENUE.

STATE OF FLORIDA LICENSED No 47514 PROFESSIONAL ENGINEER
MARCH 1, 2012
HOWARD JACKON, P.E. DATE

PROJECT:	STUART BUSINESS PARK MASTER DRAINAGE PLAN
TITLE:	MASTER BASIN MAP
DATE:	10/15/11
SCALE:	1" = 200'
DRAWN BY:	HJ
CHECKED BY:	HJ
APPROVED BY:	HJ
PROJECT #:	10-0170

REVISIONS: DATE | COMMENTS

AJ HYDRO ENGINEERING, INC.
5932 NW 73RD COURT
PARKLAND, FL 33067
TEL (954) 344-7866
FAX (954) 344-7866

SHEET NUMBER: MD2 OF 6

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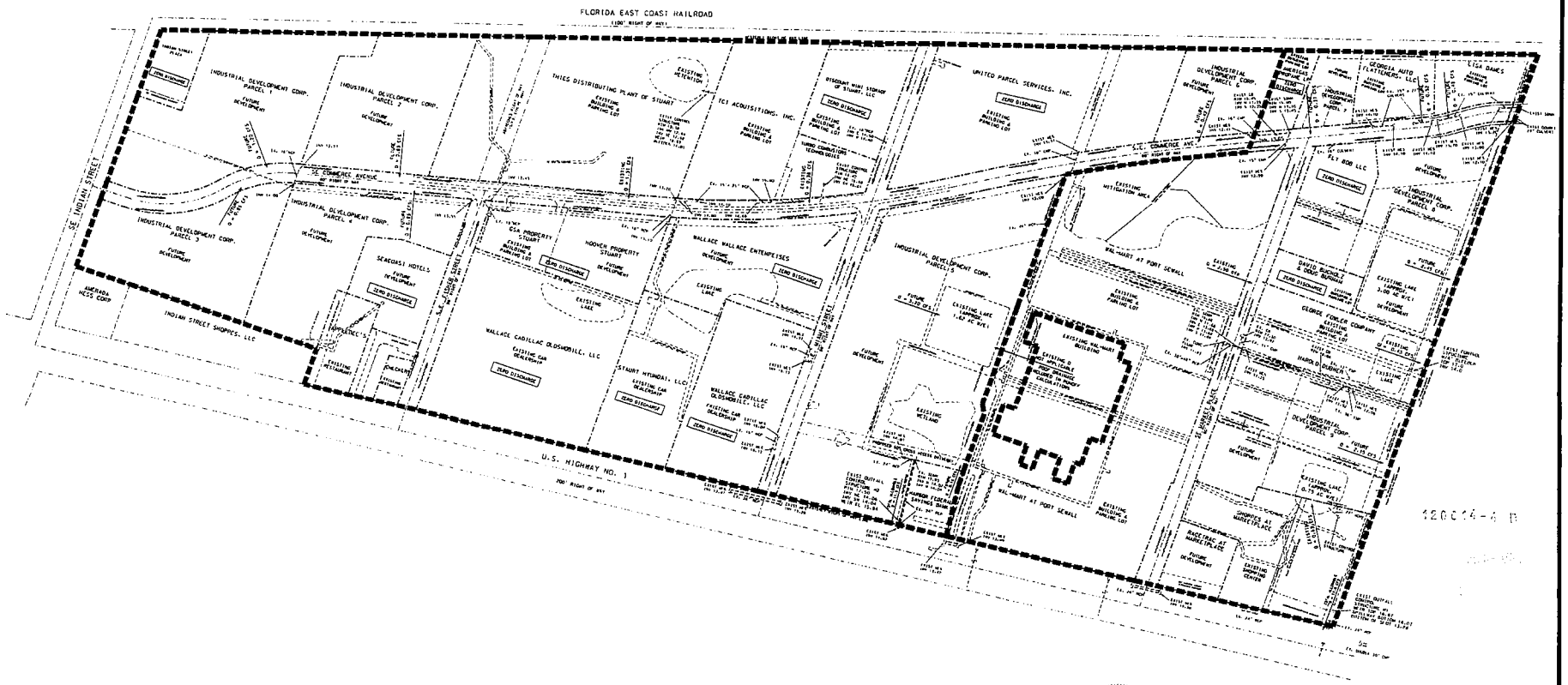
120614-4 P

STUART BUSINESS PARK
MASTER DRAINAGE MAP



PROJECT:	STUART BUSINESS PARK MASTER DRAINAGE PLAN
TITLE:	MASTER DRAINAGE MAP
DATE:	10/25/11
SCALE:	1" = 200'
DRAWN BY:	WJ
CHECKED BY:	LL
APPROVED BY:	WJ
PROJECT #:	10-0170
REVISIONS	DATE / COMMENTS
	STATE OF FLORIDA LICENSE No 41214 PROFESSIONAL ENGINEER — NOV 02 2012

AJ HYDRO ENGINEERING, INC.
5932 NW 73RD COURT
PARKLAND, FL 33067
TEL (954) 344-7866
FAX (954) 344-7866

SHEET NUMBER MD3 of 6

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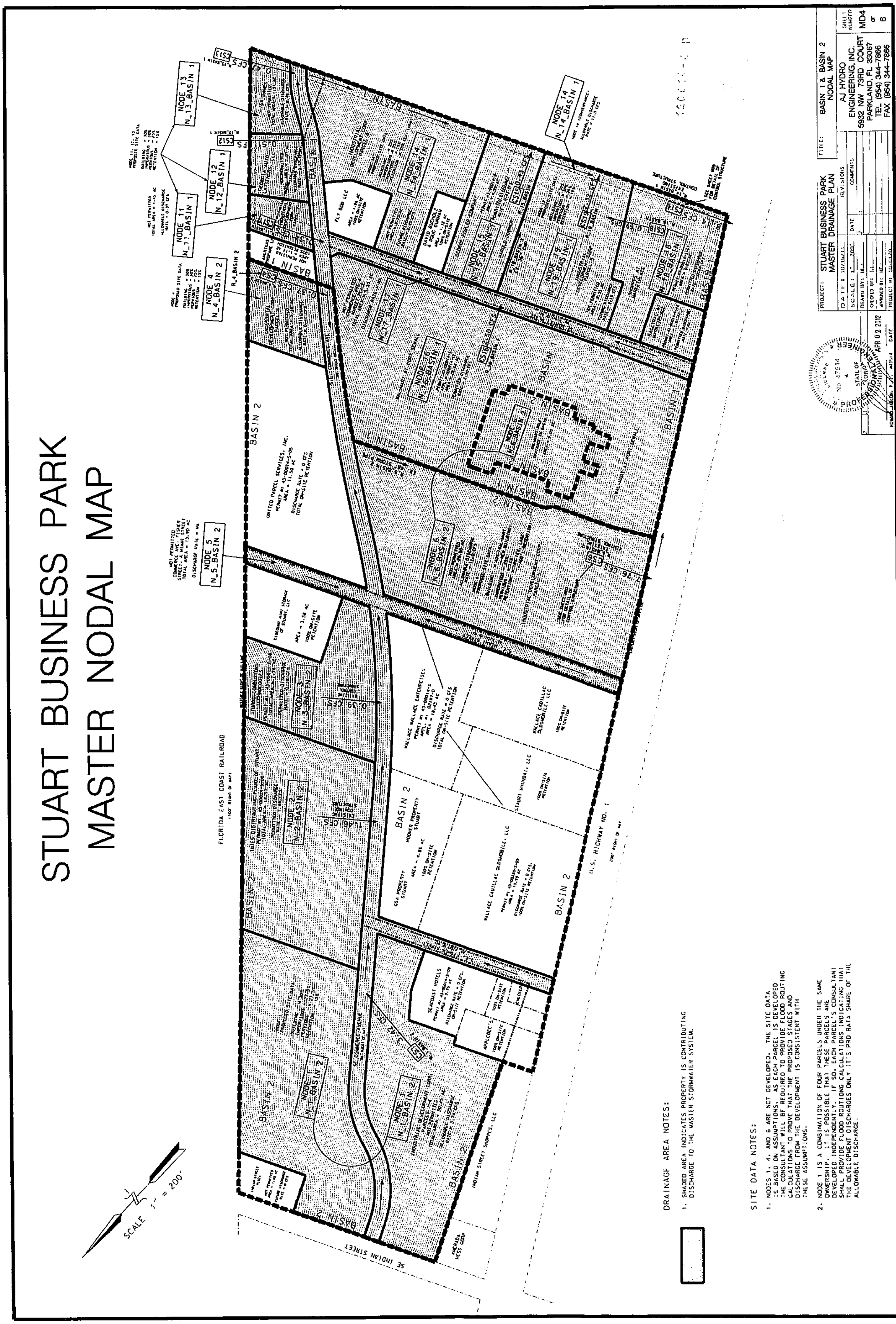
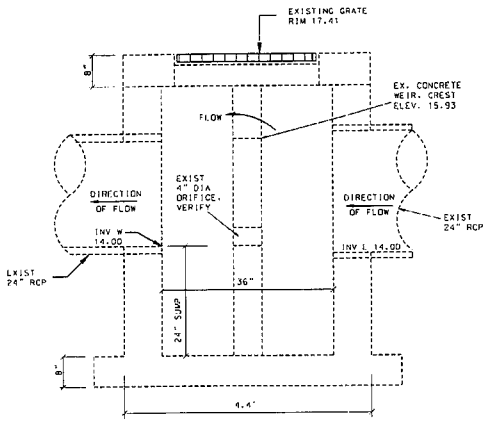
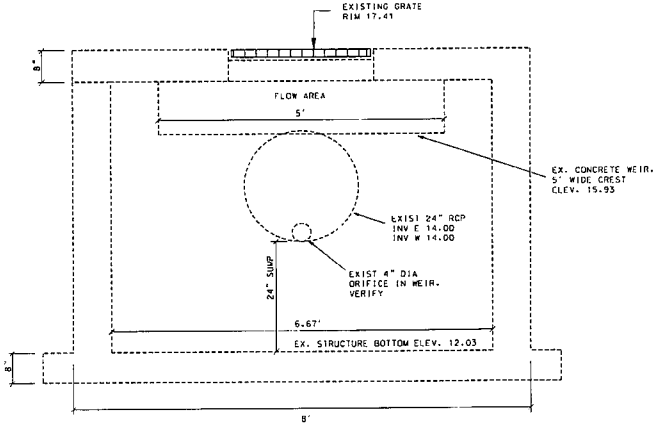

STUART BUSINESS PARK
MASTER NODAL MAP
FLORIDA EAST COAST RAILROAD
U.S. HIGHWAY NO. 1
SE INDIAN STREET
SCALE 1" = 200'
BASIN 1
BASIN 2
DRAINAGE AREA NOTES:
SITE DATA NOTES:
STUART BUSINESS PARK
MASTER DRAINAGE PLAN
BASIN 1 & BASIN 2
NODAL MAP
AJ HYDRO
ENGINEERING, INC.
5932 NW 73RD COURT
PARKLAND, FL 33067
TEL (954) 344-7866
FAX (954) 344-7866
MD4

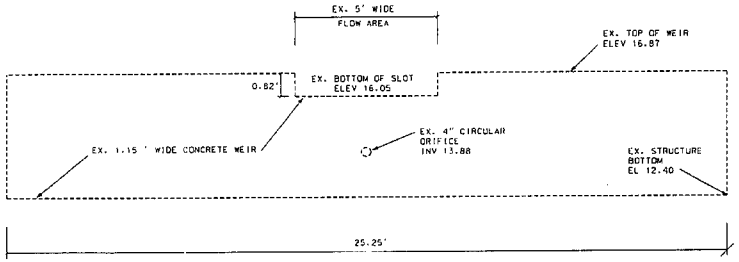


PROFILE



SECTION

BASIN 2
EXISTING CONTROL STRUCTURE
1" = 1'



BASIN 1
EXISTING CONTROL STRUCTURE
1" = 5'

120614-4 D

PROJECT: STUART BUSINESS PARK MASTER DRAINAGE PLAN		TITLE: CONTROL STRUCTURE DETAILS	
DATE: 10/15/11	REVISIONS	AJ HYDRO ENGINEERING, INC. 5932 NW 73RD COURT PARKLAND, FL 33067 TEL (954) 344-7866 FAX (954) 344-7866	SHEET NUMBER MD5 OF 6
SCALE: NA	DATE / COMMENTS		
DRAWN BY: MFJ			
CHECKED BY:			
APPROVED BY:			
PROJECT #: 10-0170			

LICENSED PROFESSIONAL ENGINEER No 47514 STATE OF FLORIDA HOWARD JAMISON, P.E. #47514 DATE APR 02 2012

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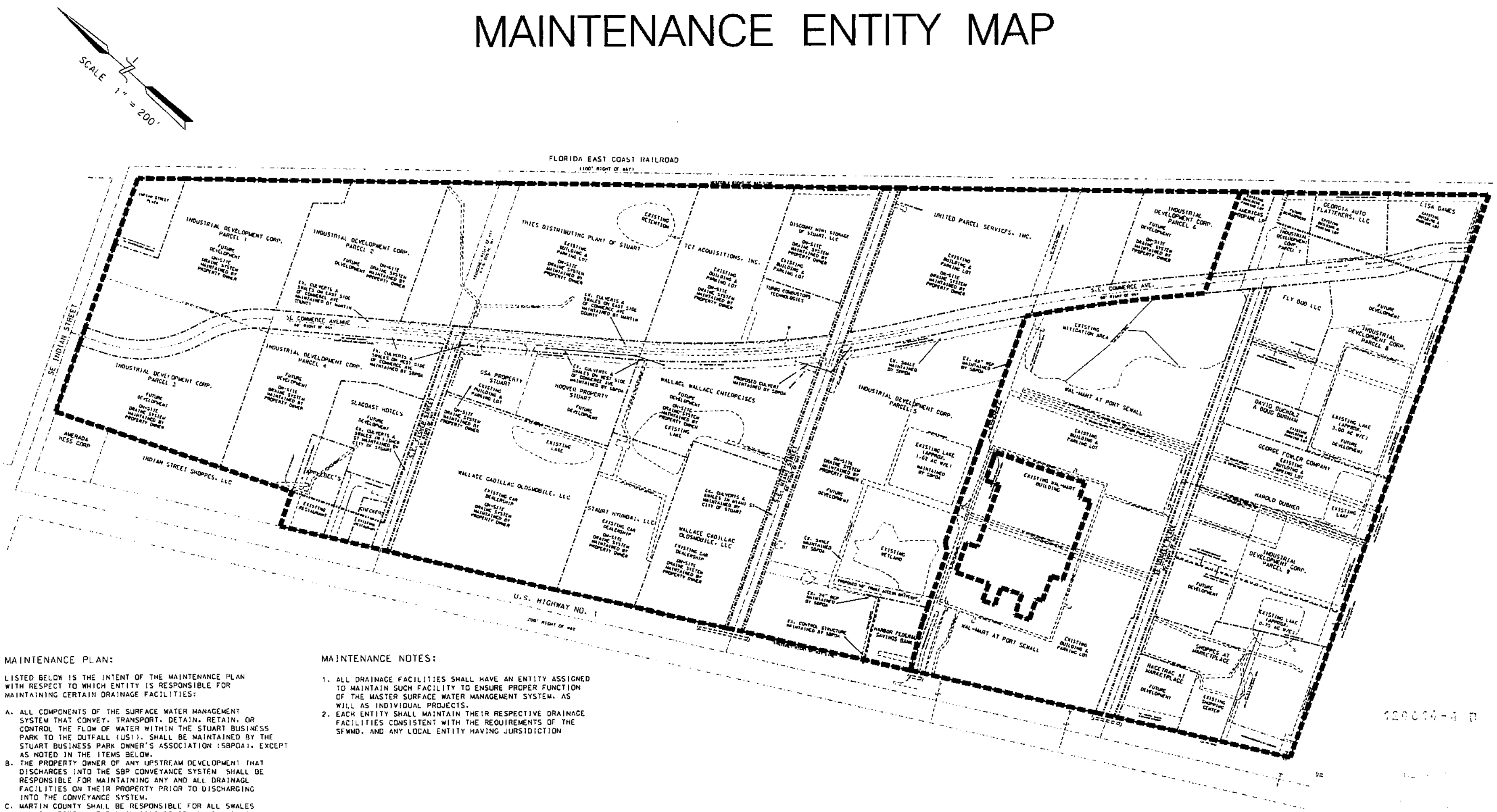
STUART BUSINESS PARK
MAINTENANCE ENTITY MAP



MAINTENANCE PLAN:

LISTED BELOW IS THE INTENT OF THE MAINTENANCE PLAN WITH RESPECT TO WHICH ENTITY IS RESPONSIBLE FOR MAINTAINING CERTAIN DRAINAGE FACILITIES:

A. ALL COMPONENTS OF THE SURFACE WATER MANAGEMENT SYSTEM THAT CONVEY, TRANSPORT, DETAIN, RETAIN, OR CONTROL THE FLOW OF WATER WITHIN THE STUART BUSINESS PARK TO THE OUTFALL (US1), SHALL BE MAINTAINED BY THE STUART BUSINESS PARK OWNER'S ASSOCIATION (SBPOA), EXCEPT AS NOTED IN THE ITEMS BELOW.
B. THE PROPERTY OWNER OF ANY UPSTREAM DEVELOPMENT THAT DISCHARGES INTO THE SBP CONVEYANCE SYSTEM SHALL BE RESPONSIBLE FOR MAINTAINING ANY AND ALL DRAINAGE FACILITIES ON THEIR PROPERTY PRIOR TO DISCHARGING INTO THE CONVEYANCE SYSTEM.
C. MARTIN COUNTY SHALL BE RESPONSIBLE FOR ALL SWALES AND CULVERTS ON THE EAST SIDE OF COMMERCE AVENUE. MARTIN COUNTY SHALL BE RESPONSIBLE FOR ALL CULVERTS CROSSING UNDER COMMERCE AVENUE FROM THE WEST SIDE TO THE EAST SIDE.
D. THE CITY OF STUART SHALL BE RESPONSIBLE FOR ALL SWALES AND CULVERTS IN MIAMI STREET, FISHER STREET, AND MARKET PLACE.
E. THE EXISTING LAKE, CONTROL STRUCTURE, AND OUTFALL PIPE ON IDC PARCEL #5 SHALL BE MAINTAINED BY THE SBPOA. ONCE THIS PROPERTY IS DEVELOPED, THE ON-SITE STORMWATER SYSTEM SHALL BE MAINTAINED BY THE PROPERTY OWNER/DEVELOPER AND SPECIFIC MAINTENANCE PLAN SUBMITTED ALONG WITH THE PERMIT MODIFICATION.

MAINTENANCE NOTES:

1. ALL DRAINAGE FACILITIES SHALL HAVE AN ENTITY ASSIGNED TO MAINTAIN SUCH FACILITY TO ENSURE PROPER FUNCTION OF THE MASTER SURFACE WATER MANAGEMENT SYSTEM, AS WILL AS INDIVIDUAL PROJECTS.
2. EACH ENTITY SHALL MAINTAIN THEIR RESPECTIVE DRAINAGE FACILITIES CONSISTENT WITH THE REQUIREMENTS OF THE SFWMD, AND ANY LOCAL ENTITY HAVING JURSIDICTION

PROFESSIONAL ENGINEER No 47514 STATE OF FLORIDA — APR 0 8 2012
HOWARD JABLON, P.E. #47514 DATE

PROJECT: STUART BUSINESS PARK MASTER DRAINAGE PLAN			TITLE: MAINTENANCE ENTITY MAP	
DATE: [illegible]	REVISIONS		AJ HYDRO ENGINEERING, INC. 5932 NW 73RD COURT PARKLAND, FL 33067 TEL (954) 344-7866 FAX (954) 344-7866	SHEET NUMBER MD6 OF 6
SCALE: 1" = 200'	DATE	COMMENTS		
DRAWN BY: [illegible]				
CHECKED BY: [illegible]				
APPROVED BY: [illegible]				
PROJECT #: 10-0170				

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STAFF REPORT DISTRIBUTION LIST

STUART BUSINESS PARK STORMWATER MASTER PLAN

Application No: 120614-4

Permit No: 43-00014-S

INTERNAL DISTRIBUTION

X Glen J. Gareau, P.E.
X Jose Vega
X Hugo A. Carter, P.E.
X Barbara J. Conmy
X A. Bain
X A. Waterhouse
X ERC Martin/St. Lucie

EXTERNAL DISTRIBUTION

X Permittee - Industrial Development Corporation
X Engr Consultant - A J Hydro Engineering Inc

GOVERNMENT AGENCIES

X City of Stuart Public Works Department - Samuel T. Amerson, P.E.
X Div of Recreation and Park - District 5 - FDEP
X Martin County - County Administrator
X Martin County Board of County Commissioners
X Martin County Engineering Dept. - Don G. Donaldson, P.E.

Attachment 4.4

****

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MODIFICATION OF SURFACE WATER MANAGEMENT PERMIT NO. 43-00014-S

****

DATE ISSUED: August 13, 1987

POSTED
Permit Number Book
Inventory Book
15 Canal Quadrangles ITEM 6
Date 9-15-87
Signed KRUPILIS

ISSUED TO: Industrial Development Corporation
(Stuart Business Park)
3000 South Ocean Blvd.
Boca Raton, Florida 33432

LOCATION: Martin COUNTY, SEC Hanson Grant TWP 38S RGE 41E

ORIGINAL PERMIT AUTHORIZATION: CONSTRUCTION AND OPERATION OF A WATER MANAGEMENT SYSTEM SERVING 250 ACRES OF RESIDENITAL AND COMMERCIAL LAND DISCHARGING INTO A FLORIDA DEPARTMENT OF TRANSPORTATION'S DITCH.

APPROVED MODIFICATION: REVISION OF THE MASTER DRAINAGE PLAN BY REMOVING THE NORTH/SOUTH DITCH ALONG THE FLORIDA EAST COAST RAILWAY AND THE CONSTRUCTION OF A NEW DITCH ALONG S.E. COMMERCE AVENUE DISCHARGING INTO MANATEE POCKET.

(App. No. 07157-B)

THIS PERMIT MODIFICATION IS APPROVED PURSUANT TO A REQUEST DATED July 14, 19 87. PERMITEE AGREES TO HOLD AND SAVE THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND ITS SUCCESSORS HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE, OR USE OF ANY WORK OR STRUCTURE INVOLVED IN THE PERMIT. THE ORIGINAL PERMIT, INCLUDING ALL PLANS AND SPECIFICATIONS ATTACHED THERETO, AS ADDRESSED BY THE STAFF REPORT AND THOSE ADDRESSED BY THE MODIFICATION STAFF REPORT, ARE BY REFERENCE MADE A PART HEREOF.

ALL SPECIFICATIONS, SPECIAL AND LIMITING CONDITIONS ATTENDANT TO THE ORIGINAL PERMIT, UNLESS SPECIFICALLY RECINDED BY THIS OR PREVIOUS MODIFICATIONS, REMAIN IN EFFECT.

SPECIAL CONDITIONS: SEE SHEETS 2 AND 3 OF 4 - 11 PROJECT SPECIAL CONDITIONS.
SEE SHEET 4 OF 4 - 12 LIMITING CONDITIONS.

ORIGINAL PERMIT ISSUED: February 7, 1975.
PERMIT RE-ISSUED: June 11, 1981.

PERMIT MODIFICATION APPROVED BY THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

ON 8-17-87 Original signed by:
BY Vern Kaiser
DEPUTY CLERK

ORIGINAL SIGNED BY:
RICHARD A. ROGERS, P.E.

RICHARD A. ROGERS, P.E., DIRECTOR
RESOURCE CONTROL DEPARTMENT

SCANNED

****

FORM 0157
Rev. 8/84

SCANNED

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX "V"
WEST PALM BEACH, FL. 33402
TELEPHONE:(305) 686-8800 TOLL FREE: 1-800-432-2045

INSP

(FOR USE BY SFWMD PERSONNEL ONLY) DATE REC'D:

APPL. NO.: 43-00014S 07157-B

APPLICATION TO SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR A PERMIT FOR:
( ) WATER USE
( ) SURFACE WATER MANAGEMENT (DRAINAGE) ([ ] CONCEPTUAL APPROVAL)
( ) UTILIZATION OF DISTRICT WORKS
(X) MODIFICATION OF EXISTING PERMIT NUMBER: 43-00014-S

OWNER'S NAME: Industrial Development Corp.
ADDRESS: 3000 South Ocean Blvd.
CITY: Boca Raton STATE: Fl. ZIP: 33432 PHONE: (305) 391-8858
DEVELOPER'S NAME:
ADDRESS:
CITY: STATE: ZIP: PHONE:

PROJECT ENGINEER: Mathers Engineering Corp.
ADDRESS: 295 Florida St.
CITY: Stuart STATE: Fl. ZIP: 34994 PHONE: (305) 287-0525

PROJECT NAME: Stuart Business Park
LOCATION: Stuart (CITY) Martin (COUNTY) Hanson Grant (SECTION(S)) T38S (TOWNSHIP(S)) S 41E (RANGE(S)) E

RECEIVED
JUL 1 ... RESOURCE CONTROL DEPARTMENT

PURPOSE: Industrial ZONING:
(RESIDENTIAL, AGRICUL., PUB. WTR. SUPPLY, ETC.)

PROJECT SIZE: 240 ACRES

PROJECT IS: ( ) PROPOSED ( ) EXISTING (X) TO BE MODIFIED

IF THIS APPLICATION IS FOR WATER USE, WHAT IS THE SOURCE OF WATER? N/A

IF THIS APPLICATION IS FOR DRAINAGE, WHERE WILL THE WATER DISCHARGE?
In the D.O.T. drainage ditch along U.S. #1

IF THIS IS A REQUEST TO MODIFY AN EXISTING PERMIT, DESCRIBE THE REQUESTED CHANGES:
Revised Master Drainage System

IF THIS APPLICATION INCLUDES USE OF DISTRICT WORKS, DESCRIBE THE USE: N/A

(CULVERT, BOAT DOCK, FENCE, BEAUTIFICATION, ETC. NOTE! INCLUDE CANAL NAME)

NOTE! IN ALL CASES AN ACCURATE LOCATION MAP WITH THE PROJECT BOUNDARIES CLEARLY SHOWN MUST BE SUBMITTED. ALSO, IF THIS IS A PROPOSED OR EXPANDED PROJECT SUBMIT A CURRENT AERIAL PHOTOGRAPH SHOWING THE PROJECT BOUNDARIES.

RULES 40E-2.101, 40E-4.101, and 40E-6.101 F.A.C. SPECIFY DATA REQUIREMENTS TO CONSTITUTE A COMPLETE PERMIT APPLICATION. A LIST OF THE REFERENCED RULES IS PROVIDED ON THE BACK OF THIS FORM. ANY NECESSARY CHECKLIST MAY BE OBTAINED FROM THE DISTRICT AT THE ABOVE ADDRESS.

[signature] DATE: 7/14/87
OWNER'S SIGNATURE (IF NOT THE OWNER, CERTIFY BELOW)

I HEREBY CERTIFY THAT I AM AN AUTHORIZED AGENT OF THE OWNER:

TITLE:

SCANNED

NOTE! MANY PROJECTS ALSO REQUIRE APPROVAL BY OTHER STATE AND FEDERAL AGENCIES. SFWMD INFORMS SOME AGENCIES OF PERMIT APPLICATIONS RECEIVED BUT THE RESPONSIBILITY FOR REQUESTING APPROVALS RESTS WITH THE C...

SPECIAL CONDITIONS

1. MINIMUM FLOOR ELEVATION 18.5 FEET NGVD.

2. MINIMUM ROAD CROWN ELEVATION 16.5 FEET NGVD.

3. DISCHARGE FACILITIES: 1-5.0' LONG WEIR WITH A CREST AT ELEVATION 16.0' NGVD AND 1-3.5' WIDE RECTANGULAR ORIFICE WITH AN INVERT AT ELEVATION 14.0' NGVD AND A HEIGHT OF 0.83.
   RECEIVING WATER: MANATEE POCKET VIA DITCH.

4. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

5. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.

6. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

7. THIS DISTRICT RESERVES THE RIGHT TO REQUIRE THAT WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.

8. OPERATION OF THE MASTER SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF AN OWNERS ASSOCIATION, OPERATION AND MAINTENANCE OF EACH INDIVIDUAL SITE WILL BE THE RESPONSIBILITY OF THE OWNER(S).

9. LAKE SIDE SLOPES SHALL BE 4:1 (HORIZONTAL:VERTICAL) TO A DEPTH OF TWO FEET BELOW THE CONTROL ELEVATION. LAKE LITTORAL ZONES (1 FOOT ABOVE TO 2 FEET BELOW CONTROL ELEVATION) SHALL BE TOPSOILED, MULCHED, OR OTHERWISE TREATED TO PRODUCE VEGETATIVE GROWTHS AS A PRECONDITION TO OPERATIONAL PERMIT ACCEPTANCE.

10. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.

SCANNED

11. WATER QUALITY SAMPLES SHALL BE TAKEN AT THE DISCHARGE LOCATION OF THE WATER MANAGEMENT SYSTEM. FLOW SHALL BE MEASURED AT THE TIME OF SAMPLE COLLECTION AND THE SURFACE ELEVATION OF THE WATER BODY SHALL BE PROVIDED. A LABORATORY CERTIFIED BY THE STATE OF FLORIDA SHALL BE USED FOR ALL WATER QUALITY SAMPLING AND ANALYSES. REPORTS SHALL BE SUBMITTED ON A SEMI-ANNUAL BASIS FOR WATER SAMPLES COLLECTED ON A BI-MONTHLY SCHEDULE. MONITORING RESULTS SHALL BE REVIEWED BY THIS DISTRICT FOLLOWING TWO YEARS OF DATA COLLECTION.

MONITORING TYPE	PARAMETERS
GENERAL (BI-MONTHLY)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, PH, TURBIDITY, SPECIFIC CONDUCTANCE, BIOLOGICAL OXYGEN DEMAND, ALKALINITY.
ORGANICS (SEMI-ANNUAL)	TRICHLOROETHYLENE, TETRACHLOROETHYLENE, CARBON TETRACHLORIDE, VINYL CHLORIDE, 1,1,1-TRICH-LOROETHANE, 1,2-DICHLOROETHANE, BENZENE, ETHYLENE DIBROMIDE.
METALS (SEMI-ANNUAL)	CLASS 111. ALUMINUM, ANTIMONY, BERYLLIUM, CADIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER AND ZINC.

SCANNED

LIMITING CONDITIONS

1. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE 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.

2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-3. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.

3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.

4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.

5. ALL ROADS SHALL BE SET AT OR ABOVE ELEVATIONS REQUIRED BY THE APPLICABLE LOCAL GOVERNMENT FLOOD CRITERIA.

6. ALL BUILDING FLOORS SHALL BE SET AT OR ABOVE ELEVATIONS ACCEPTABLE TO THE APPLICABLE LOCAL GOVERNMENT.

7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.

8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE DISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION, THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.

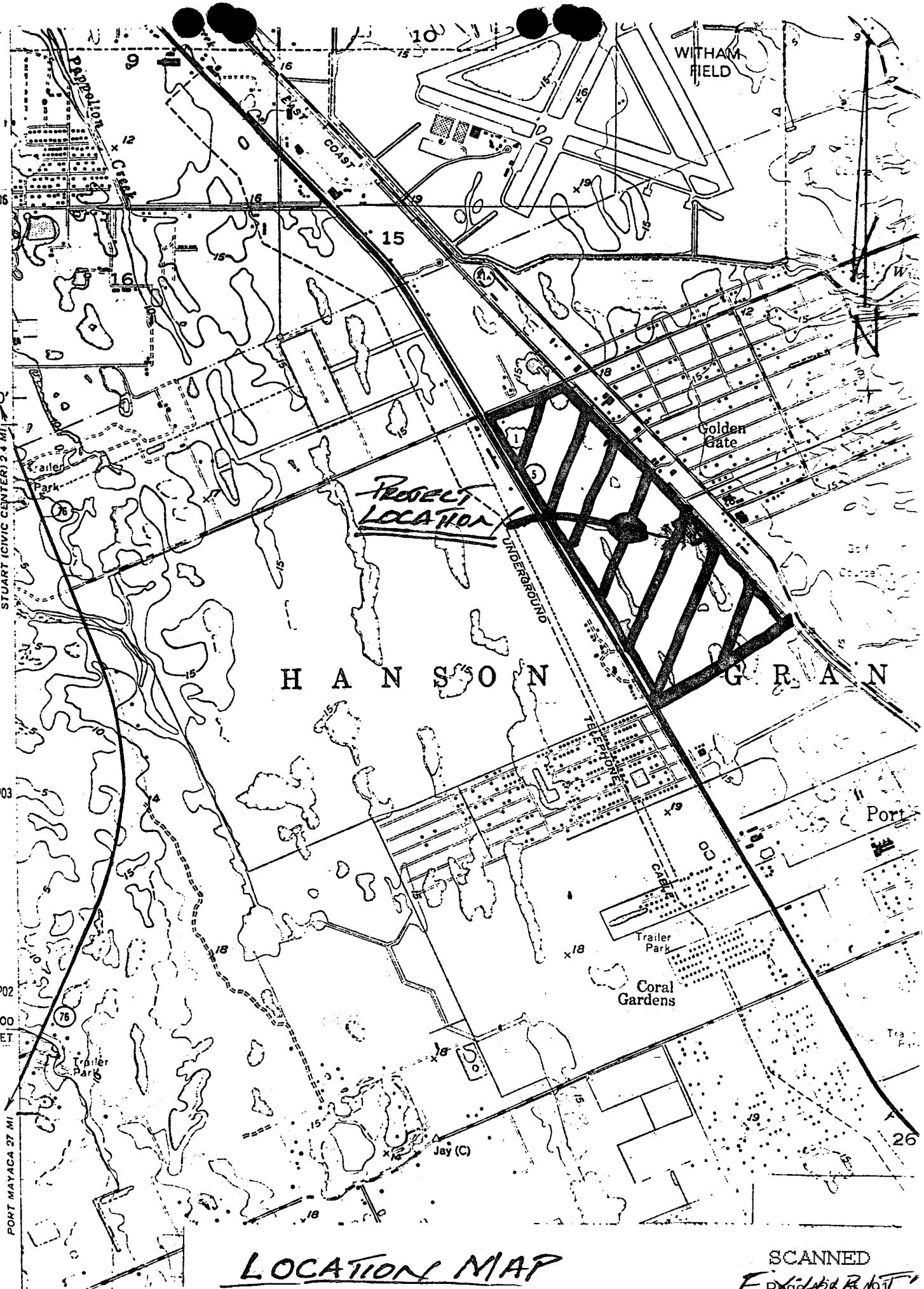
9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.

10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.

11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.

12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL. INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.

SCANNED



Q7157-B
43-000 AS

LOCATION MAP

SCANNED

EXHIBIT

Page 426 of 491

South Florida
Water Management District
Post Office Box 24680 3301 Gun Club Road
West Palm Beach, Florida 33416-4680
Telephone (305) 686-8800
Florida WATS Line 1-800-432-2045

BF

IN REPLY REFER TO:

RESOURCE CONTROL DEPARTMENT

August 13, 1987

Industrial Development Corp.
3000 South Ocean Blvd.
Boca Raton, FL 33432

Dear Sir or Madam:

Sybject: Corrected Staff Report, Application No. 07157-B, Permit No.:43-00014-S, Stuart Business Park, Martin County, Hanson Grant/T38S/R41E

Enclosed, please find a copy of this District's Standard Limiting Conditions of which was inadvertenly omitted from the staff report, which was mailed to you on July 29, 1987.

I am sorry for any inconvenience this may have caused you. If you have any questions, please do not hesitate to contact this office.

Sincerely

Carlos de Rojas, Assistant Director
Water Management Division

CR/ks

cc: Mathers & Assoc.
Martin County Engineer
Stuart City Engineer
FL East Coast Railroad Co.
Paul Wolfe, Esquire
John T. Carmody
James S. Telepman

Nancy H. Roen, Chairman - Plantation; J.D. York, Vice Chairman - Palm City; Nathanie F. Reed, Hobe Sound; Oscar M. Corbin, Jr., Ft. Myers; Arsenio Milian, Miami; Fritz Stein, Belle Glade; James F. Garner, Ft. Myers; Mike Stout, Windermere; Doran A. Jason, Ft. Lauderdale

SCANNED

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SCANNED

LAST DATE FOR GOVERNING BOARD ACTION:
September 10, 1987

Board Approval

APPLICATION NO.: 07157-B

MODIFICATION TO SURFACE WATER MANAGEMENT PERMIT NO.: 43-00014-S

LOCATION: STUART BUSINESS PARK, MARTIN COUNTY, HANSON GRANT, T38S/R41E

STAFF REPORT

ABSTRACT

A revised master drainage plan for Stuart Business Park has been submitted for review and approval by this District. The staff's recommendation is for approval of the revised plan with conditions.

BACKGROUND

Surface Water Management Permit No. 43-00014-S was issued to Industrial Development Corporation (Stuart Business Park) on February 7, 1975. The permit authorized the construction of a drainage system to serve 213 acres of industrial lands by means of swale connections to the Florida East Coast Railroad borrow ditch with eventual outfall to Manatee Pocket. On June 11, 1981 the permit was modified to change the outfall location from the southeast corner of the project to the southwest corner of the project. From the southwest corner, runoff would be directed into the U.S. 1 Department of Transportation ditch that flows south and then east and then south eventually discharging into Manatee Pocket. Also proposed with this modification was the construction of a 5' wide weir with a bleeder at elevation 14.0' NGVD and a crest at elevation 16.0' NGVD, and a requirement for future phases to include 25 percent water area at elevation 14.0' NGVD.

In August of 1982, Florida East Coast Railway Company notified Industrial Development Corporation of it's concern over the possibility of S.B.P. runoff washing out their tracks. Numerous meetings and field visits occurred during 1983 and 1984 to resolve the parks drainage problems.

In April of 1984, a modification was approved to enlarge the bleeder to 420 square inches.

On May 9, 1985, a modification to the permit was issued which addressed construction of two internal sites, individual water management systems within the park, master system design and the separation and berming of the eastern ditch from the FEC Right as well the rip-rapping of the east ditch Bank at the lateral inflow points. The permittee tried to proceed with the rip-rapping of the ditch bank, but was unable to get a contractor to sign the release and indemnification statement required by Florida East Coast Railway in order to work on it's right-of-way.

SCANNED

During this time period several individual tracts within the Park were permitted and developed using on-site stormwater retention up to the 100-year storm stage because of lack of positive outfall south of the park.

A drainage study of the East Hanson Grant was prepared for the Martin County Board of County Commissioners by Hutcheon Engineers in 1986. This study addressed the drainage problems in the Stuart Business Park area and gave recommendations to alleviate flooding problems. Martin County is proceeding ahead with the recommendations. Once the proposed basin improvements are completed, Stuart Business Park will have a legal/positive outfall and existing projects within the park will be allowed to tie into the backbone system.

THE APPLICATION

A. PURPOSE

The application is for approval of a revised master drainage plan for Stuart Business Park. A new north-south conveyance swale along S.E. Commerce Avenue is proposed to convey the majority of runoff from the site to the outfall structure. In addition, the east-west lateral swales will be regraded to flow west.

B. FACILITIES EXISTING

A 30' drainage easement runs parallel to the Florida East Coast Railway right-of-way along the eastern project perimeter. The existing ditch in some cases meanders onto the FEC right-of-way. This ditch was originally proposed and is permitted as the north-south conveyance route for the Business Park. Five east-west lateral swales/ditches, four of which are existing, are designed to convey runoff, east, to the north-south ditch. A natural low spot located north of Turbo Combustors Technology site also directs runoff to the north-south ditch. Approximately 15-20% of the Business Park is developed.

C. FACILITIES PROPOSED

It is proposed that the north-south ditch along the railway be removed from the park's surface water management system and that a new north-south conveyance system be constructed. The east-west lateral swales/ditches would be plugged at the western boundary of the east drainage easement, and regraded to drain west to S.E. Commerce Avenue. The eastern project perimeter would be brought up to elevation 16.5' which would prevent runoff from the park from entering the railroads right-of-way up to the 25-year, 3-day storm stage.

The new north-south conveyance route will follow S.E. Commerce Avenue from the northern most east-west lateral, south, to the southern most lateral. Additional easement area will be required in this reach. From this point south, the runoff will be routed through existing drainage easements which will be enlarged from 20' to 30' in width. Additional culverts will be required and are shown on Exhibit 2.

EVALUATION

The proposed ditch realignment should not affect water management system design within the park. The existing weir structure will not be modified. Once the East Hanson Grant drainage improvements are completed, individual tracks within the park will be able to obtain positive bleed-down. The pro-rated design discharges and projected hydraulic grade line within the park for a 25-year, 3-day storm event is shown on Exhibit 3. Typical swale/ditch sections are shown on Exhibit 4.

Runoff generated from the railroad right-of-way will remain within the right-of-way.

RECOMMENDATION

Staff recommends that the proposed modifications to the internal drainage system be approved subject to the attached 12 Standard Conditions and 11 Special Conditions and 11 Exhibits.

APPLICATION REVIEW:		SUPERVISOR/CHECKER:
TECHNICAL:	J. Nichols	C. de Rojas
WATER QUALITY:	J. Nichols	C. de Rojas
ENVIRONMENTAL:	C. Padera	C. Padera

DRAFT
Subject to Governing Board Approval

APPROVED:

ASST. DIVISION DIRECTOR: Carl de Rojas

DEPARTMENT DIRECTOR: Richard A. Rogers DATE: 2/27/87

Richard A. Rogers, P.E.
Resource Control Department

Subject to the following 12 Standard Limiting and 11 Special Conditions (for conceptual approvals only, these conditions as a minimum will apply to subsequent construction permitting).

SCANNED

SPECIAL CONDITIONS

1. MINIMUM FLOOR ELEVATION 18.5 FEET NGVD.

2. MINIMUM ROAD CROWN ELEVATION 16.5 FEET NGVD.

3. DISCHARGE FACILITIES: 1-5.0' LONG WEIR WITH A CREST AT ELEVATION 16.0' NGVD AND 1-3.5' WIDE RECTANGULAR ORIFICE WITH AN INVERT AT ELEVATION 14.0' NGVD AND A HEIGHT OF 0.83.
   RECEIVING WATER: MANATEE POCKET VIA DITCH.

4. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

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8. OPERATION OF THE MASTER SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF AN OWNERS ASSOCIATION, OPERATION AND MAINTENANCE OF EACH INDIVIDUAL SITE WILL BE THE RESPONSIBILITY OF THE OWNER(S).

9. LAKE SIDE SLOPES SHALL BE 4:1 (HORIZONTAL:VERTICAL) TO A DEPTH OF TWO FEET BELOW THE CONTROL ELEVATION. LAKE LITTORAL ZONES (1 FOOT ABOVE TO 2 FEET BELOW CONTROL ELEVATION) SHALL BE TOPSOILED, MULCHED, OR OTHERWISE TREATED TO PRODUCE VEGETATIVE GROWTHS AS A PRECONDITION TO OPERATIONAL PERMIT ACCEPTANCE.

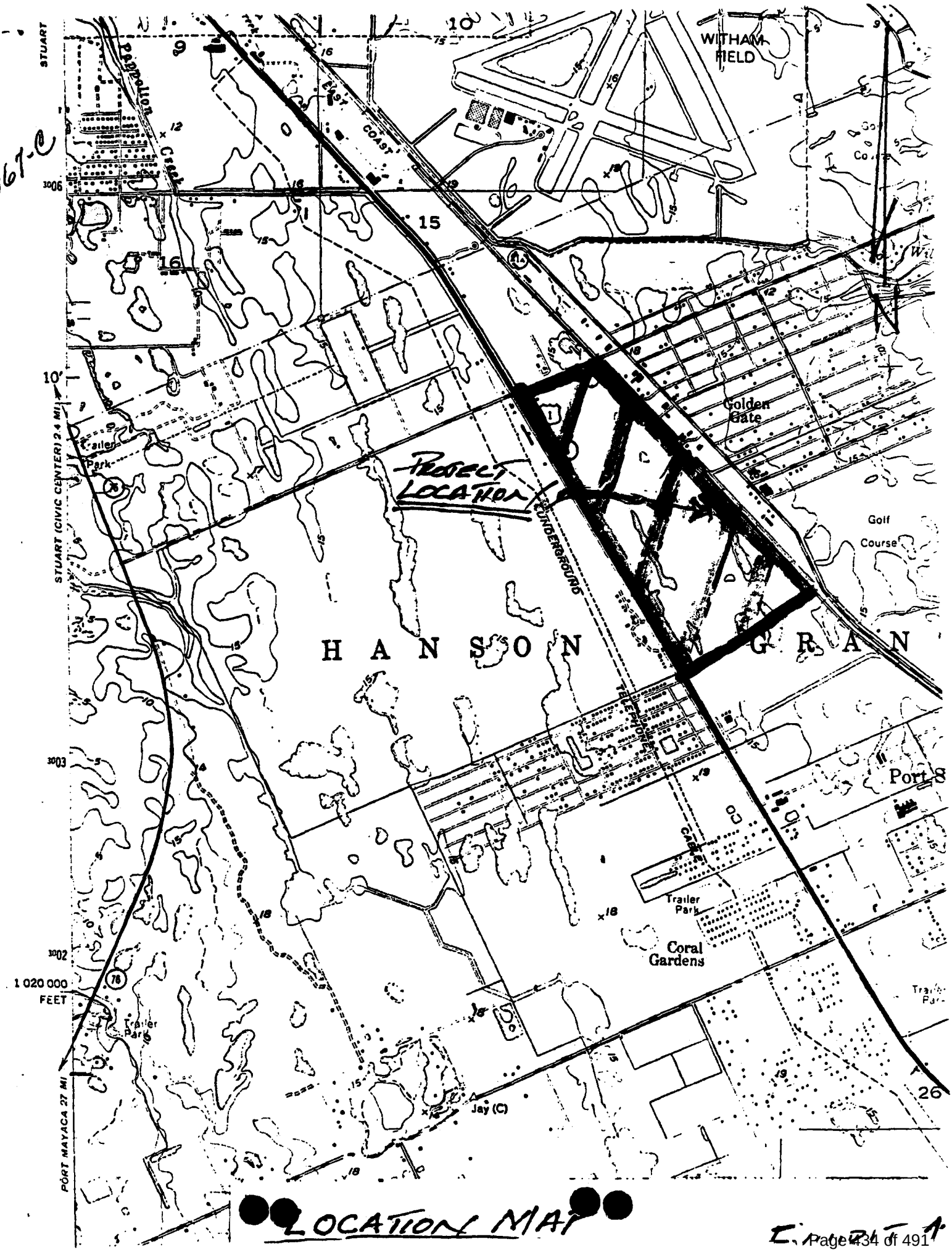
10. PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.

11. WATER QUALITY SAMPLES SHALL BE TAKEN AT THE DISCHARGE LOCATION OF THE WATER MANAGEMENT SYSTEM. FLOW SHALL BE MEASURED AT THE TIME OF SAMPLE COLLECTION AND THE SURFACE ELEVATION OF THE WATER BODY SHALL BE PROVIDED. A LABORATORY CERTIFIED BY THE STATE OF FLORIDA SHALL BE USED FOR ALL WATER QUALITY SAMPLING AND ANALYSES. REPORTS SHALL BE SUBMITTED ON A SEMI-ANNUAL BASIS FOR WATER SAMPLES COLLECTED ON A BI-MONTHLY SCHEDULE. MONITORING RESULTS SHALL BE REVIEWED BY THIS DISTRICT FOLLOWING TWO YEARS OF DATA COLLECTION.

MONITORING TYPE	PARAMETERS
GENERAL (BI-MONTHLY)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, PH, TURBIDITY, SPECIFIC CONDUCTANCE, BIOLOGICAL OXYGEN DEMAND, ALKALINITY.
ORGANICS (SEMI-ANNUAL)	TRICHLOROETHYLENE, TETRACHLOROETHYLENE, CARBON TETRACHLORIDE, VINYL CHLORIDE, 1,1,1-TRICH-LOROETHANE, 1,2-DICHLOROETHANE, BENZENE, ETHYLENE DIBROMIDE.
METALS (SEMI-ANNUAL)	CLASS 111. ALUMINUM, ANTIMONY, BERYLLIUM, CADIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER AND ZINC.

SCANNED

02067-C

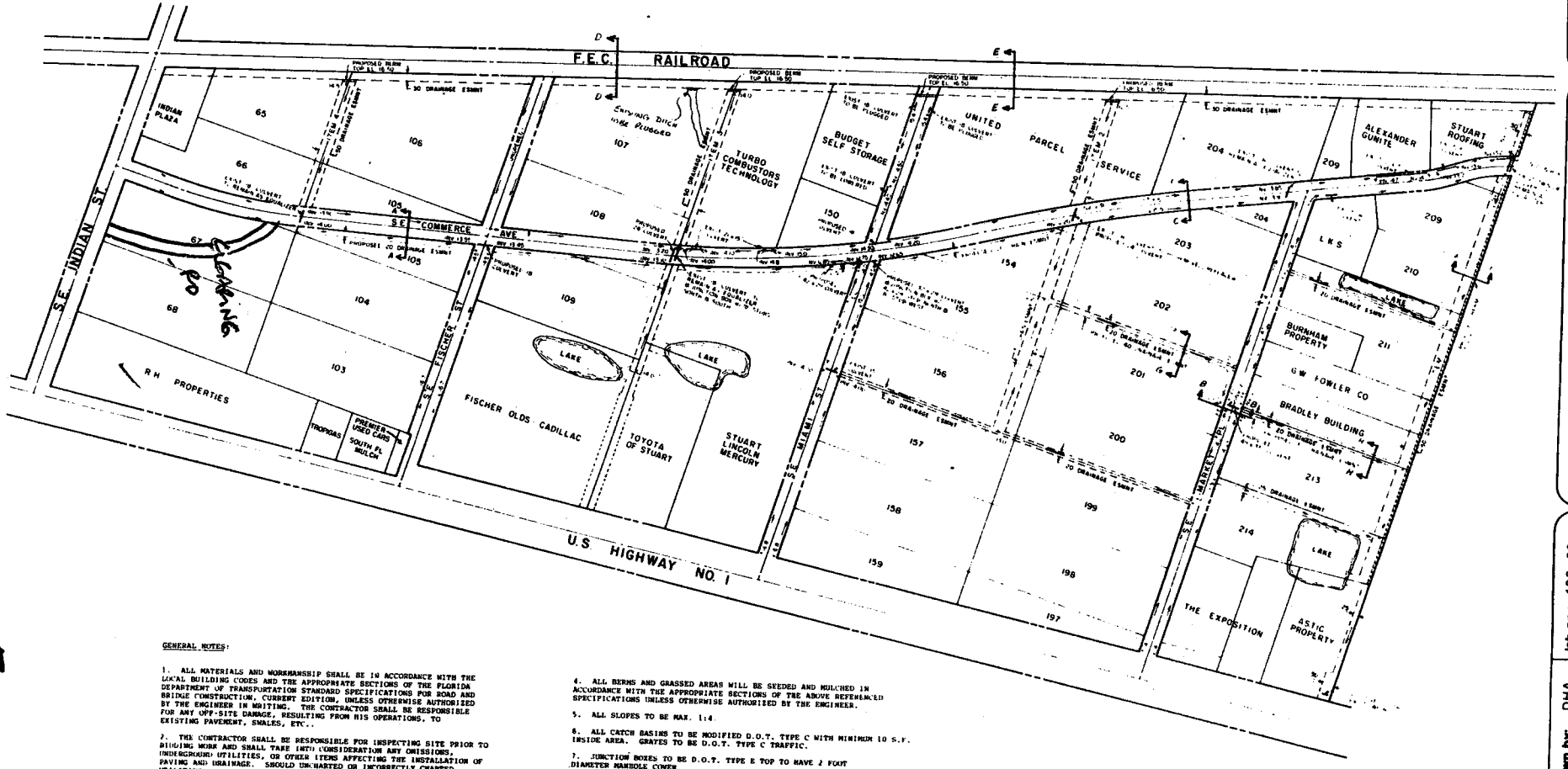


LOCATION MAP

EXHIBIT 1

INDEX TO SHEETS:

DRAINAGE RE-ROUTING PLAN	1
COMMERCE AVE.	2
FISCHER ST.	3
MIAMI ST.	4
MARKET PLACE	5
ITEMS 1 AND 2 DITCH	6
ITEMS 1 AND 4 DITCH	7



GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODES AND THE APPROPRIATE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY OFF-SITE DAMAGE, RESULTING FROM HIS OPERATIONS, TO EXISTING PAVEMENT, SWALES, ETC..

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING SITE PRIOR TO BIDDING WORK AND SHALL TAKE INTO CONSIDERATION ANY OMISSIONS, UNDERGROUND UTILITIES, OR OTHER ITEMS AFFECTING THE INSTALLATION OF PAVING AND DRAINAGE. SHOULD UNCHARTED OR INCORRECTLY CHARTED UTILITIES OR OTHER ITEMS BE ENCOUNTERED DURING CONSTRUCTION, CONSULT PROJECT ENGINEER IMMEDIATELY FOR DIRECTIONS. REPAIR DAMAGED UTILITIES OR OTHER ITEMS TO SATISFACTION OF UTILITY OWNER AND PROJECT ENGINEER.

3. THE CONTRACTOR SHALL CONSTRUCT THE PAVEMENT IN ACCORDANCE WITH THE TYPICAL SECTION SHOWN ON THESE PLANS AND IN COMPLIANCE WITH THE D.O.T. SPECIFICATIONS REFERRED TO UNDER GENERAL NOTES. PAVEMENT JOINTS SHALL CONFORM TO ACCEPTABLE CONSTRUCTION METHODS. TRANSVERSE, LONGITUDINAL, CONSTRUCTION, CONTRACTION AND EXPANSION JOINTS WILL BE PROVIDED IN ACCORDANCE WITH SECTION 350 OF THE D.O.T. SPECIFICATIONS AND/OR AS RECOMMENDED BY THE AMERICAN CONCRETE PAVEMENT ASSOCIATION OUTLINED IN THE MUNICIPAL CONCRETE PAVEMENT MANUAL. CONCRETE SHALL BE 3000 P.S.I.

4. ALL BERMS AND GRASSED AREAS WILL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE ABOVE REFERENCED SPECIFICATIONS UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

5. ALL SLOPES TO BE MAX. 1:4.

6. ALL CATCH BASINS TO BE MODIFIED D.O.T. TYPE C WITH MINIMUM 10 S.F. INSIDE AREA. GRATES TO BE D.O.T. TYPE C TRAFFIC.

7. JUNCTION BOXES TO BE D.O.T. TYPE E TOP TO HAVE 2 FOOT DIAMETER MANHOLE COVER.

8. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN AND PIPE LENGTHS MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.

9. IF HARDPAN IS ENCOUNTERED WITHIN RETENTION AREAS OR SWALES, IT SHALL BE REMOVED AND REPLACED WITH A GRANULAR MATERIAL.

10. IF MUCK IS ENCOUNTERED, IT SHALL BE COMPLETELY REMOVED AND BACKFILLED WITH A GRANULAR MATERIAL AND COMPACTED TO DENSITIES SUFFICIENT TO ACCOMMODATE THE INTENDED USE.

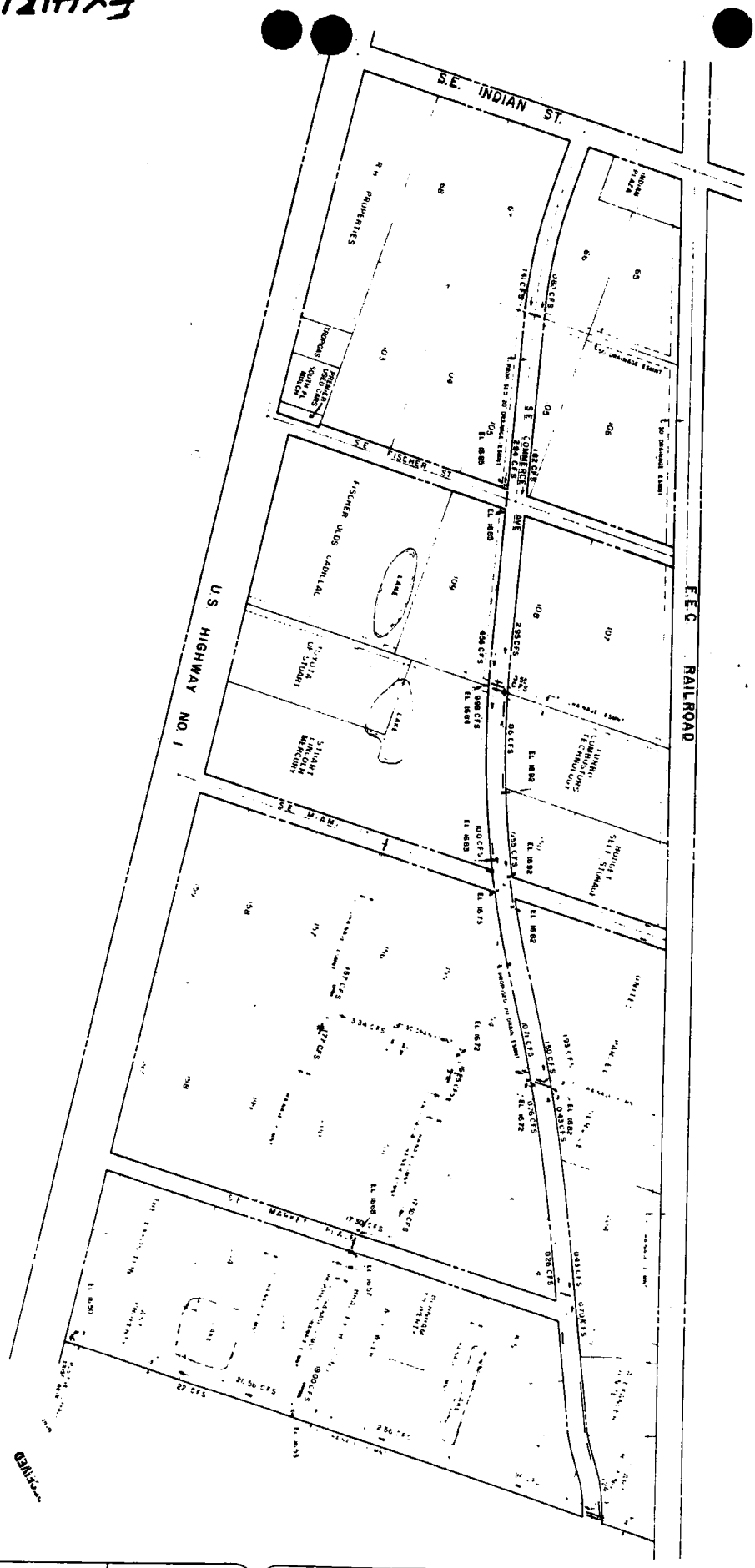
MATHERS & ASSOC.
surveyors
295 florida street stuart, florida 33497
305/287/0525

STUART BUSINESS PARK
DRAINAGE RE-ROUTING PLAN

drawn by: DHA	job no.: 108-23
checked by: WJM	revisions:
date: 5/21/87	date: description:
scale: 1"=200'	
sheet: 1 OF 7	

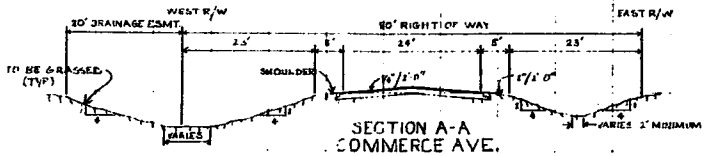
EXHIBIT SCANNED

EXHIBIT 3



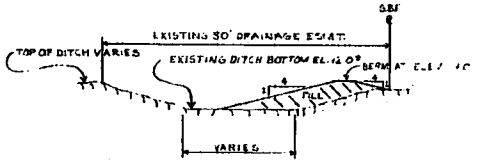
sheet:	drawn by: G.W.R.	job no.: 108-23	STUART BUSINESS PARK DESIGN DOCUMENTATION
	checked by: W.J.M.	revisions: date: description:	
	date: 6/12/87		
	scale: 1"=200'		

MATHERS & ASSOC.
engineers surveyors
295 florida street stuart, florida
305 287 0525 33497



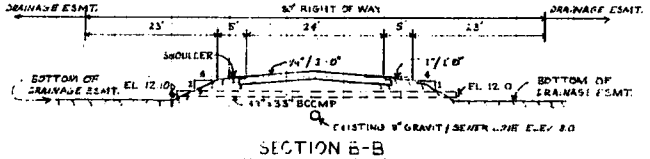
SECTION A-A
COMMERCE AVE.

NOTE: FOR DITCH BOTTOM ELEVATION REFER PLAN AND PROFILE



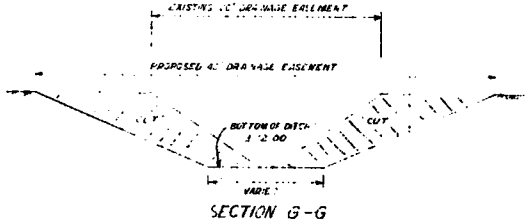
NOTE: PROVIDE BERM AT ELEV. 17.0 ONLY WHERE EXIST NS ELEVATION ALONG SOUTHERN PROPERTY LINE IS BELOW ELEV. 17.0

SECTION F-F

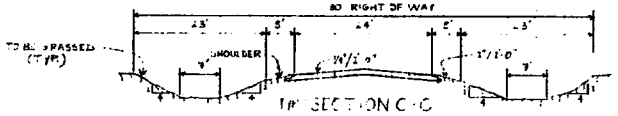


SECTION B-B
S.E. MARKET PLACE

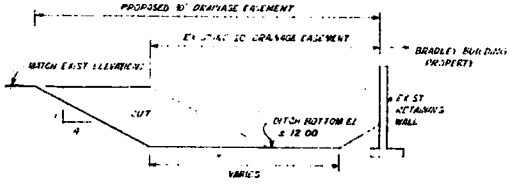
GENERAL NOTE: CONTRACTOR TO LOCATE AND VERIFY ALL UNDER UTILITIES PRIOR TO CONSTRUCTION. LOCATIONS AND ELEVATIONS SHOWN ON DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE TO THE CONTRACTOR ONLY.



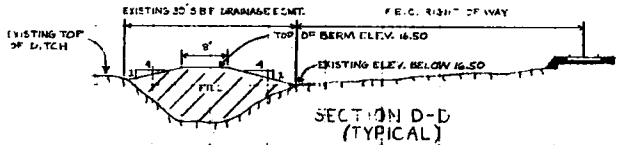
SECTION G-G



TYP. SECTION C-C
FOR
COMMERCE AVE
S.E. MARKET PLACE
S.E. MIAMI STREET
S.E. FISCHER ST.

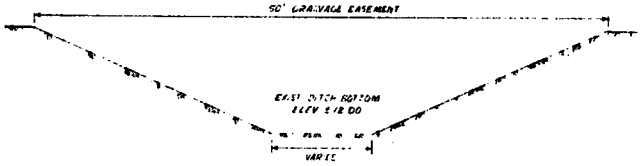


SECTION H-H

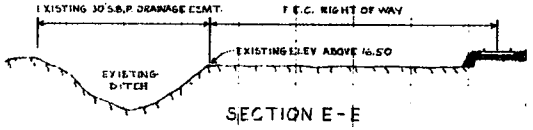


SECTION D-D
(TYPICAL)

NOTE: PROVIDE BERM AT ELEV. 16.50 AS SHOWN ONLY WHERE EXISTING ELEV. AT F.E.C. RIGHT OF WAY IS BELOW ELEV. 16.50



TYPICAL CROSS SECTION OF EXISTING 50' DRAINAGE EASEMENT



SECTION E-E
(TYPICAL)

NOTE: NO CHANGES IN ELEVATIONS WHERE EXISTING ELEVATION AT F.E.C. RIGHT OF WAY IS ABOVE ELEV. 16.50 HOWEVER, ADJACENT OWNER MAY FILL DITCH IN THE FUTURE AS PER SECTION D-D.

REVISIONS		
BY	DATE	DESCRIPTION
DRAWN BY:		CHECK BY
DATE		SCALE

PROFESSIONAL ENGINEER FLORIDA CERT. NO. 19858

JOB NO.
FIELD BK.
FILE NO.

SHEET TITLE

PROJECT

MATHERS & ASSOCIATES
ENGINEERS SURVEYORS
DESIGNERS LAND PLANNERS CONSULTANTS
41 KINDRED AVE. STUART, FLORIDA
(305) 287 0525

SHEET NO.

EXHIBIT 4

SCANNED

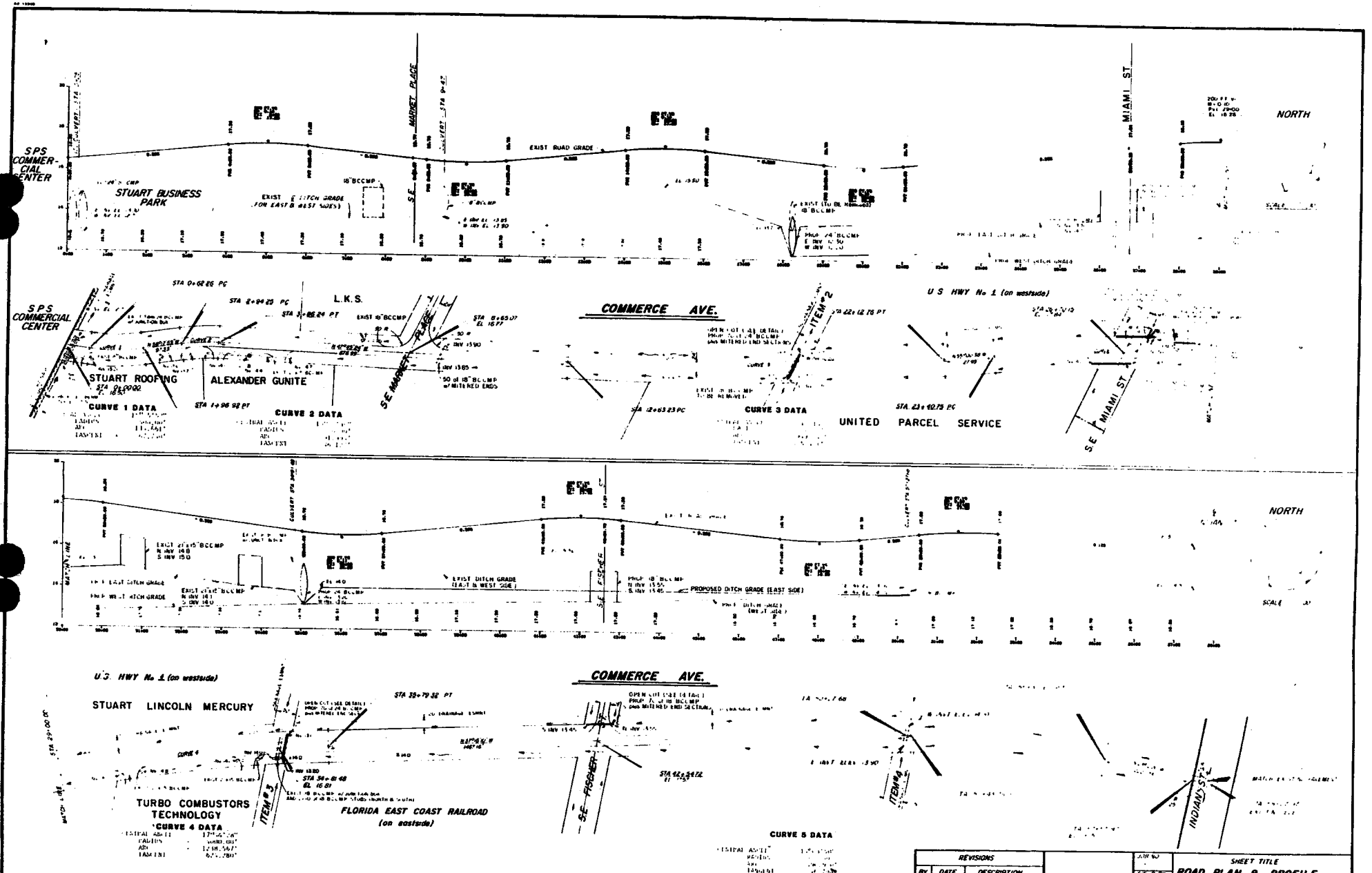
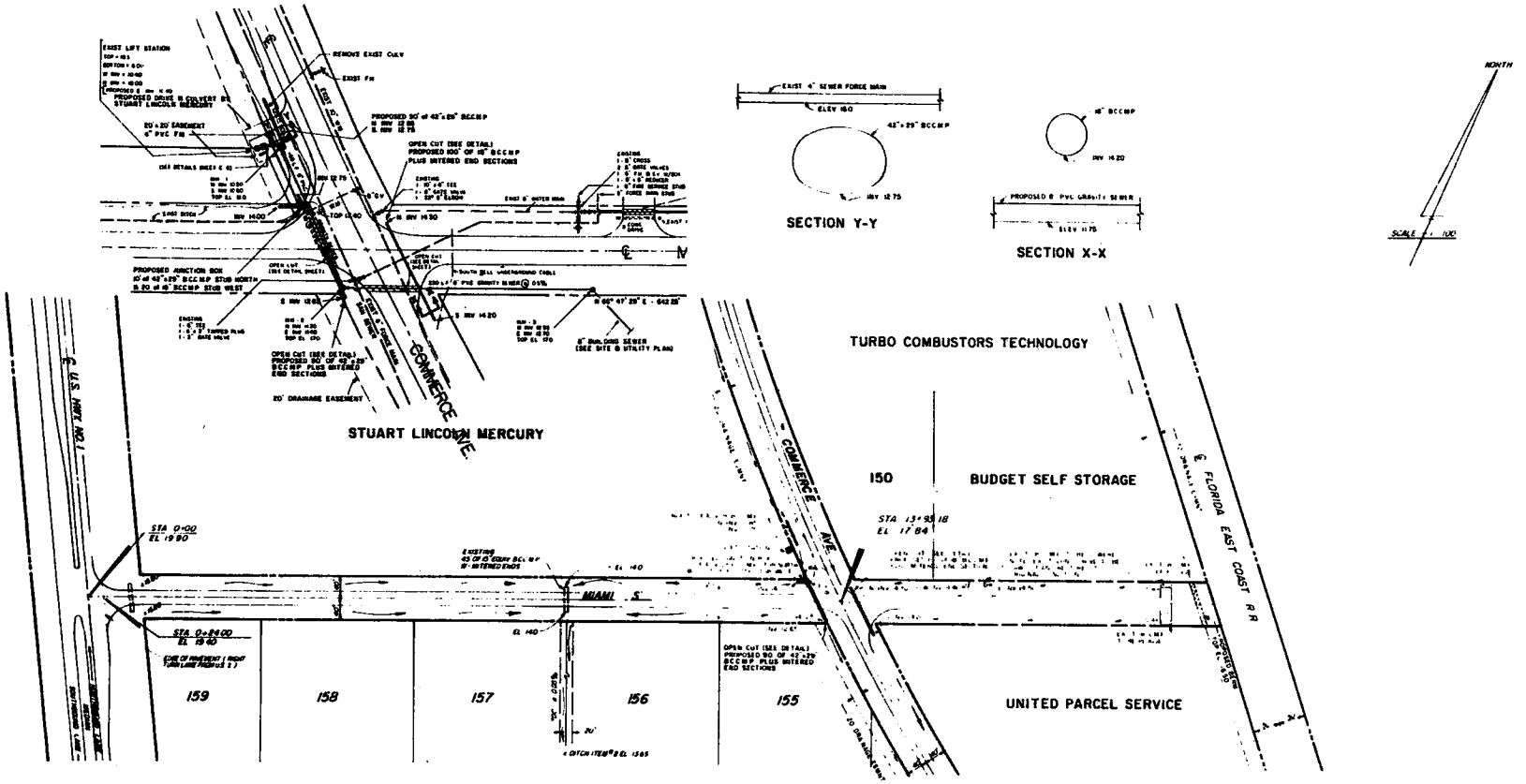
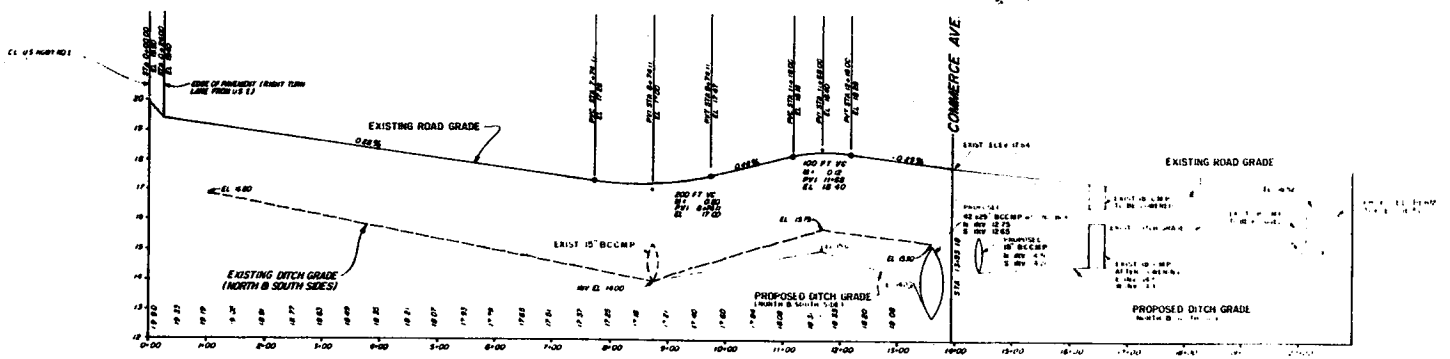

SPS COMMERCIAL CENTER
STUART BUSINESS PARK
EXIST ROAD GRADE
S.E. MARKET PLACE
MIAMI ST
NORTH
SPS COMMERCIAL CENTER
STUART ROOFING
ALEXANDER GUNITE
L.K.S.
COMMERCE AVE.
U S HWY No 1 (on westside)
CURVE 1 DATA
CURVE 2 DATA
CURVE 3 DATA
UNITED PARCEL SERVICE
S.E. MIAMI ST
NORTH
EXIST DITCH GRADE (EAST & WEST SIDE)
PROPOSED DITCH GRADE (EAST SIDE)
U.S. HWY No 1 (on westside)
STUART LINCOLN MERCURY
COMMERCE AVE.
TURBO COMBUSTORS TECHNOLOGY
CURVE 4 DATA
FLORIDA EAST COAST RAILROAD (on eastside)
S.E. FISHER
CURVE 5 DATA
INDIANA ST
REVISIONS
BY DATE DESCRIPTION
DRAWN BY M McCUE
CHECK BY D.H.
DATE OCT. 20, 1988
SCALE
SHEET TITLE ROAD PLAN & PROFILE
PROJECT COMMERCE AVE.
MATHERS & ASSOCIATES
ENGINEERS SURVEYORS
DESIGNERS AND PLANNERS CONSULTANTS
41 KINDRED AVE STUART, FLORIDA
(305) 287-3525
SHEET NO 2 OF 7

EXHIBIT "S"





MIAMI ST.

SCALES
HOR 1" = 100'
VERT 1" = 2'

REVISIONS		
BY	DATE	DESCRIPTION

DRAWN BY: M.M.
CHECK BY: D.I.H.
DATE: 11/12/81
SCALE: HOR. 1" = 100 VERT. 1" = 2

PROFESSIONAL ENGINEER FLORIDA CERT. NO. 19658

JOB NO.
FIELD BK
FILE NO.

SHEET TITLE: ROAD PLAN & PROFILE

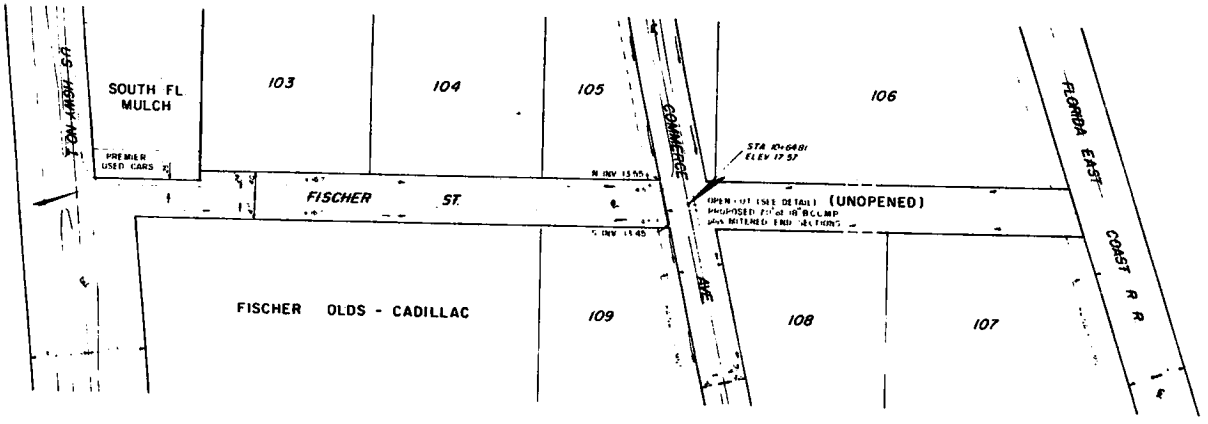
PROJECT: MIAMI ST.

MATHERS & ASSOCIATES
ENGINEERS SURVEYORS
DESIGNERS LAND PLANNERS CONSULTANTS
41 KINDRED AVE. STUART, FLORIDA
(305) 287 0525

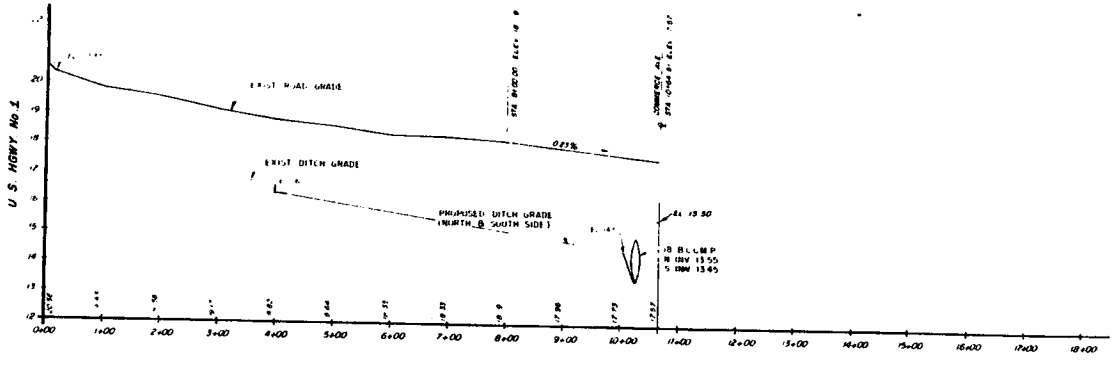
SHEET NO. 4 OF 7

SCANNED

Exhibit 4



SCALE - 1" = 100'



SCALE - HOR. = 1" = 100'
VER. = 1" = 8'

FISCHER ST.

NORTH

MATHERS & ASSOC.
surveyors
engineers
2 [illegible] stuart, florida 33494
305 287 0525

ROAD PLAN & PROFILE

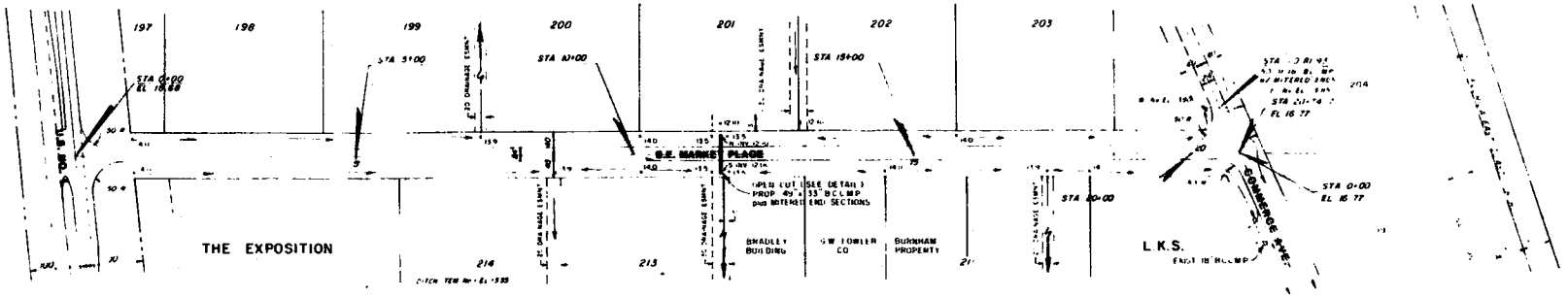
FISCHER ST.

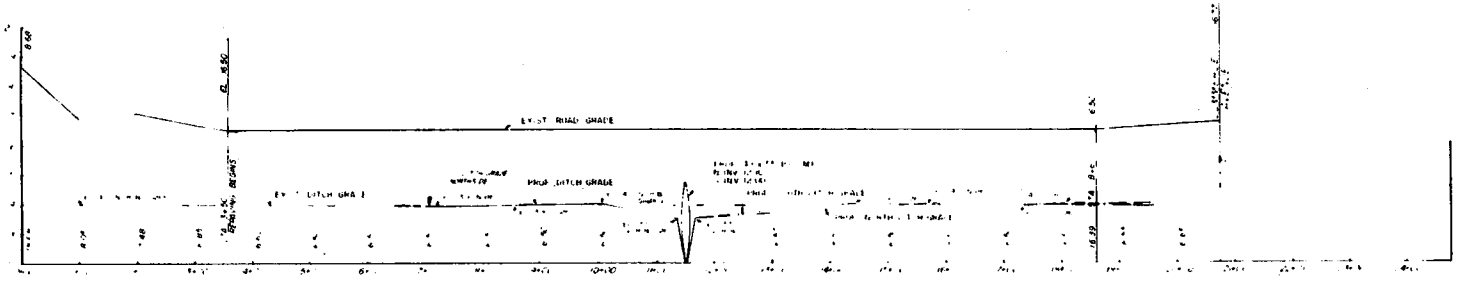
job no.: 108-23
revisions:
date: description:

drawn by: M M
checked by: D. I. H.
date: 12-11-81
scale: NOTED

sheet: 3 OF 7

EXHIBIT 6





S.E. MARKET PLACE

REVISIONS		
BY	DATE	DESCRIPTION

DRAWN BY: M M
CHECK BY: D I H
DATE: 11/5/81
SCALE: H 1"=100', V 1"=5'

JOB NO. 18 21
FIELD BK.
FILE NO.

SHEET TITLE
ROAD PLAN & PROFILE

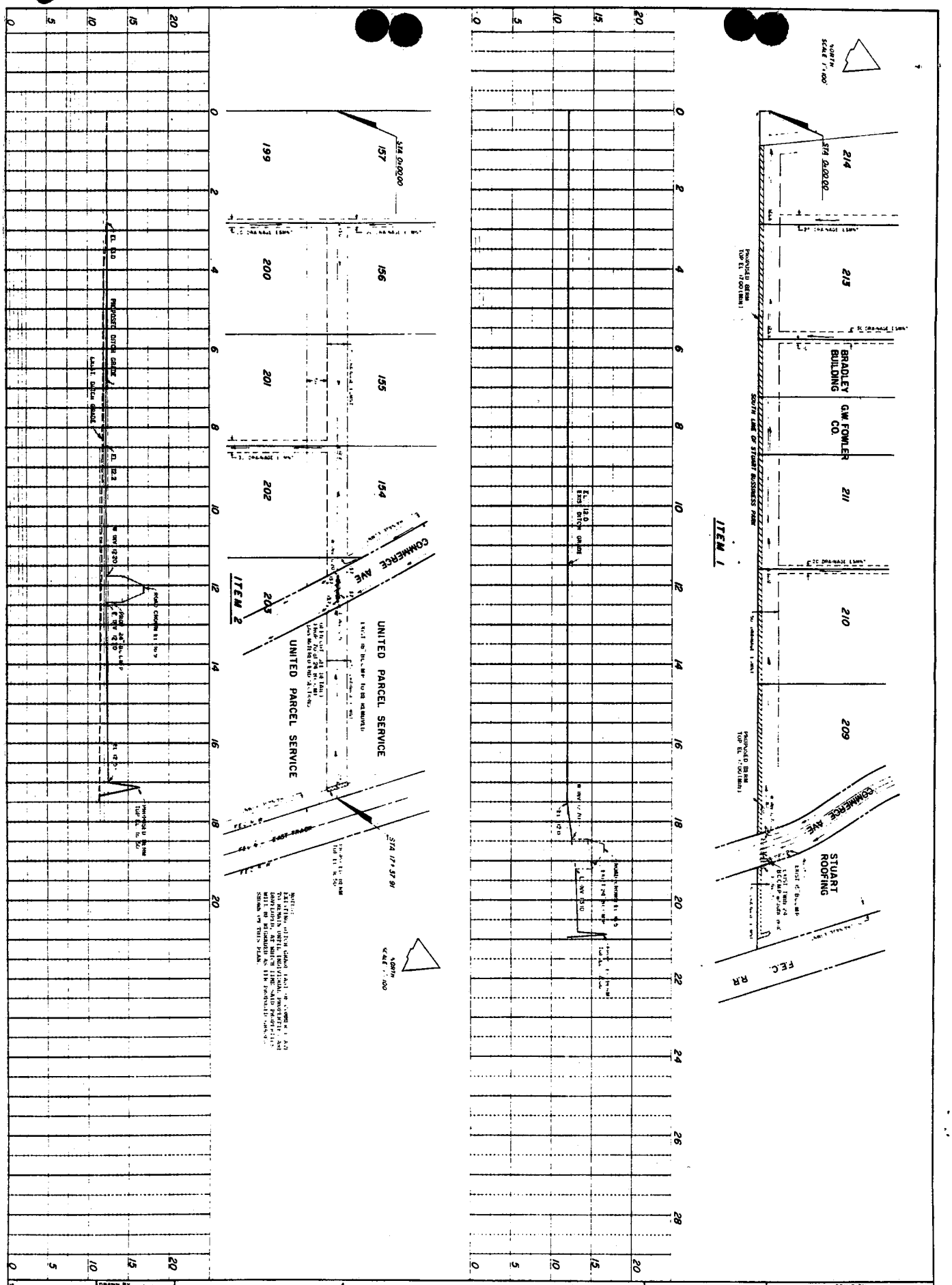
PROJECT
MARKET PLACE

MATHERS & ASSOCIATES
ENGINEERS SURVEYORS
DESIGNERS LAND PLANNERS CONSULTANTS
41 KINDRED AVE · STUART, FLORIDA
(305) 287-0525

SHEET NO. 5 OF 7

EXHIBIT 8
SCANNED

6 Items

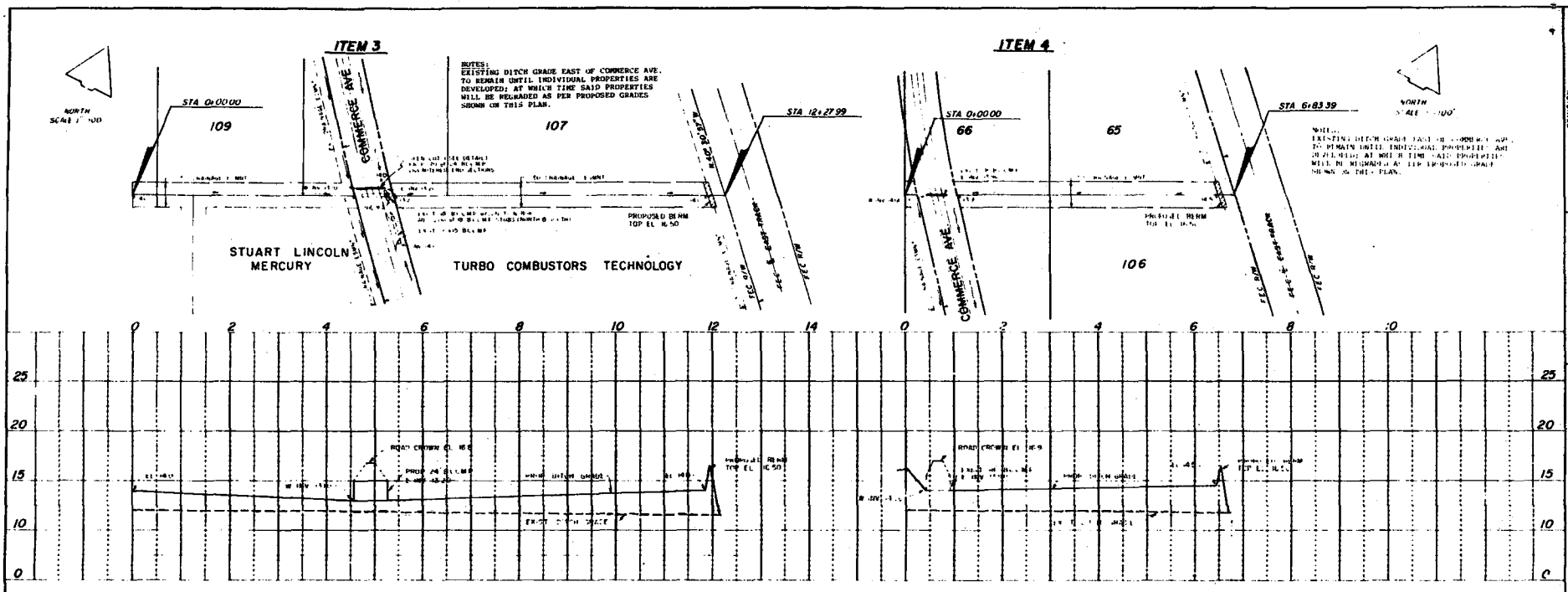


DRAWN BY		MATHERS & ASSOCIATES	P.O. BOX 259
CHECKED BY		ENGINEERS CONSULTANTS SURVEYORS DESIGNERS PLANNERS	STUART, FLORIDA
DATE		STUART BUSINESS PARK ITEMS 1 & 2 DITCH PLAN	(305) 287-0525
SCALE			
JOB NO			
FIELD BOOK			
FILE NO			

REVISION

DATE	BY	DESCRIPTION

SHEET 6 OF 7



NOTES:
EXISTING DITCH GRADE EAST OF COMMERCE AVE. TO REMAIN UNTIL INDIVIDUAL PROPERTIES ARE DEVELOPED; AT WHICH TIME SAID PROPERTIES WILL BE REGRADED AS PER PROPOSED GRADES SHOWN ON THIS PLAN.

REVISION			
	DATE	BY	DESCRIPTION

P.O. BOX 259
STUART, F[redacted]
(305) 28[redacted]

MATHERS & ASSOCIATES
ENGINEERS CONSULTANTS SURVEYORS DESIGNERS PLANNERS

STUART BUSINESS PARK

ITEMS 3 & 4 DITCH PLAN

Drawn By: S.G.
Checked By: [illegible]
Date: [illegible]
Scale: [illegible]
Field Book: [illegible]
File No.

SHEET 7 OF 7

SCANNED
Exhibit 16

STAFF REPORT DISTRIBUTION LIST

PROJECT Stuart Business Park

MODIFICATION NUMBER 43-00014-S
APPLICATION NUMBER 07157-B

INTERNAL DISTRIBUTION

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X Mr. J. D. York
Mr. J. Garner
Mr. D. Jason
Mr. A. Milian
X Mr. N. Reed
Mr. M. Stout
Mr. F. Stein
Mr. O. Corbin

X Applicant Industrial Development Corp.
X Applicant's Consultant: Mathers Engineering Corp.
Applicant's Agent:
X Engineer, County of Martin

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Local Drainage District:

BUILDING AND ZONING

Boca Raton
Boynton Beach
Royal Palm Beach
Tequesta
West Palm Beach

COUNTY

Broward -Dir. Water Mgmt Division

Collier -Agricultural Agent
Dade -DERM
Lee -Long Range Planning
-Mosquito Control
Martin -Planning and Zoning
Palm Beach - Building Department
- Area Planning Board
- School Brd, Plant Planning
Polk -Water Resources Department

Fred Vidzes, Big Cypress Basin
Kissimmee River Coordinating Council

X Other: R. W. Fondren, Chief Engineer
Florida East Coast Railroad Co.
P.O. Drawer 1048
1 Malaga Street
St. Augustine, FL 32084-0974

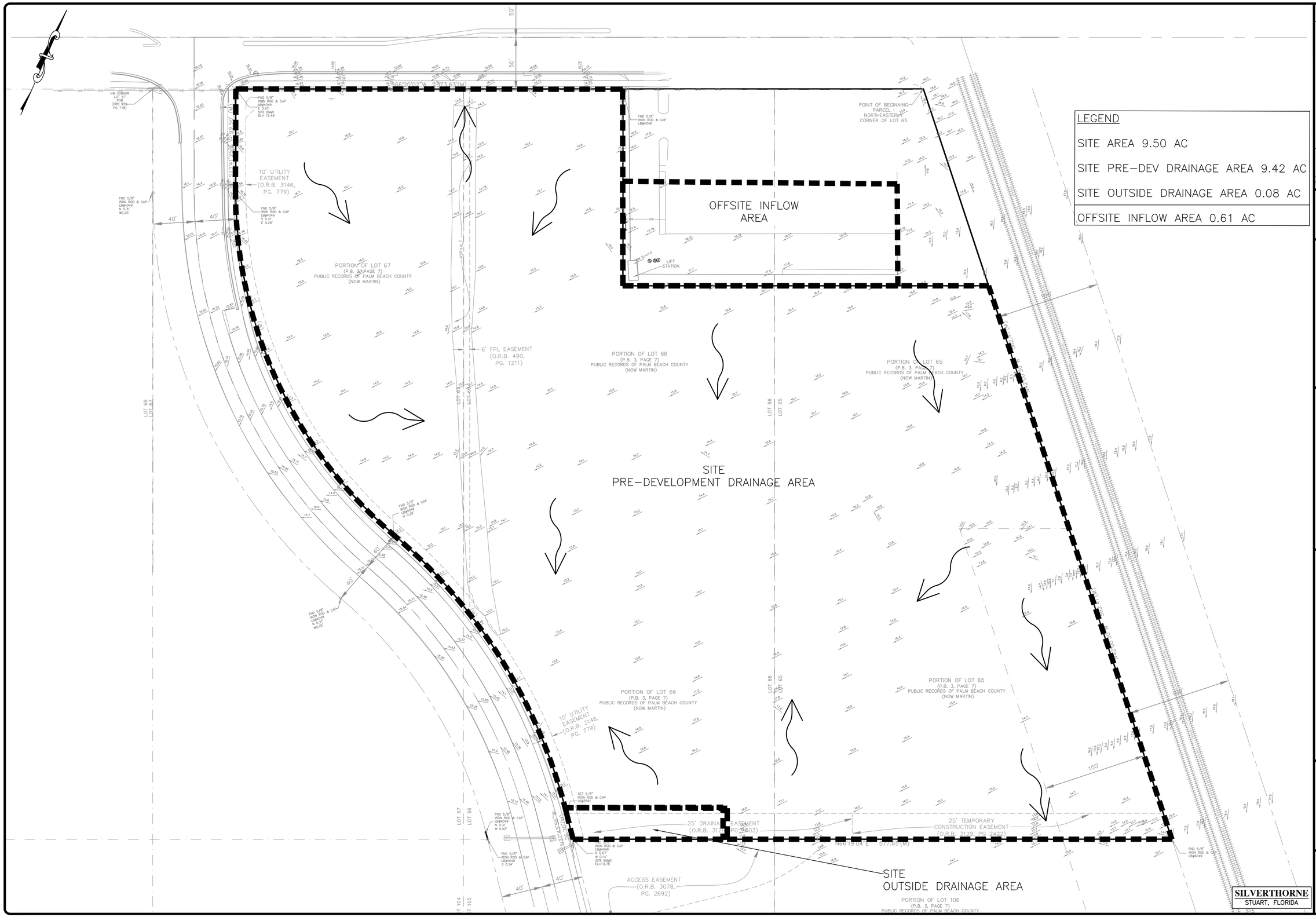
X Paul Wolfe, Esquire

X John T. Carmody, Jr., Esquire
Gunster, Yoakley,
Criser & Stewart, P.A.
10 Central Parkway, Suite 400
Stuart, FL 33497

X James S. Telepman, Esquire
Assistant County Attorney
County Administrative Center
50 Kindred Street
Stuart, FL 33497

EXHIBIT 11

Attachment 4.5



LEGEND

SITE AREA 9.50 AC

SITE PRE-DEV DRAINAGE AREA 9.42 AC

SITE OUTSIDE DRAINAGE AREA 0.08 AC

OFFSITE INFLOW AREA 0.61 AC

NO.	DATE:	REVISION:	BY
1			
2			
3			
4			
5			
6			
7			
8			

CALL 48 HOURS BEFORE YOU DIG 811

(IN FEET) 1 inch = 30 ft.

VERTICAL DATUM NAVD 88

DRAWN: D.W. 11-12-2020

PROJECT: M1810

FILE: Drainage Map.dwg

THE MILCOR GROUP, INC.

CIVIL ENGINEERS
10975 SE FEDERAL HIGHWAY
HOBE SOUND, FL 33455

725 SE PORT ST LUCIE BLVD
UNIT 104
PORT ST. LUCIE, FL 34984

PH: (772) 223-8850
FAX: (772) 223-8851

WWW.THEMILCORGROUP.COM

CERTIFICATE OF AUTHORIZATION: 28246

PREDEVELOPMENT MAP

SILVERTHORNE

STUART, FLORIDA

KENNETH M. RAU
LICENSE
No 77738
Mar 10 2022
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SHEET NO.

1

SILVERTHORNE
STUART, FLORIDA

J:\M18 – Meritage\M1810 – Glasrud II\DWG\DESIGN\EXHIBITS\Redesign March 2022 Drainage Map\Drainage Map.dwg, PRINTED BY: charlesk ON Thu, Mar 10 2022

LEGEND

SITE AREA 9.50 AC

SITE POST–DEV DRAINAGE AREA 9.21 AC

SITE OUTSIDE DRAINAGE AREA 0.29 AC

OFFSITE INFLOW AREA 0.61 AC

NO.	DATE:	REVISION:	BY
1			
2			
3			
4			
5			
6			
7			
8			

CALL 48 HOURS BEFORE YOU DIG 811

(IN FEET)
1 inch = 30 ft.

VERTICAL DATUM NAVD 88

DRAWN: D.W. 11–12–2020

PROJECT: M1810

FILE: Drainage Map.dwg

THE MILCOR GROUP, INC.

CIVIL ENGINEERS
10975 SE FEDERAL HIGHWAY
HOBE SOUND, FL 33455

725 SE PORT ST LUCIE BLVD
UNIT 104
PORT ST. LUCIE, FL 34984

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CERTIFICATE OF AUTHORIZATION: 28246

POST DEVELOPMENT MAP

SILVERTHORNE

STUART, FLORIDA

KENNETH M. RAU
LICENSE
No 77738
Mar 10 2022
STATE OF FLORIDA
PROFESSIONAL ENGINEER

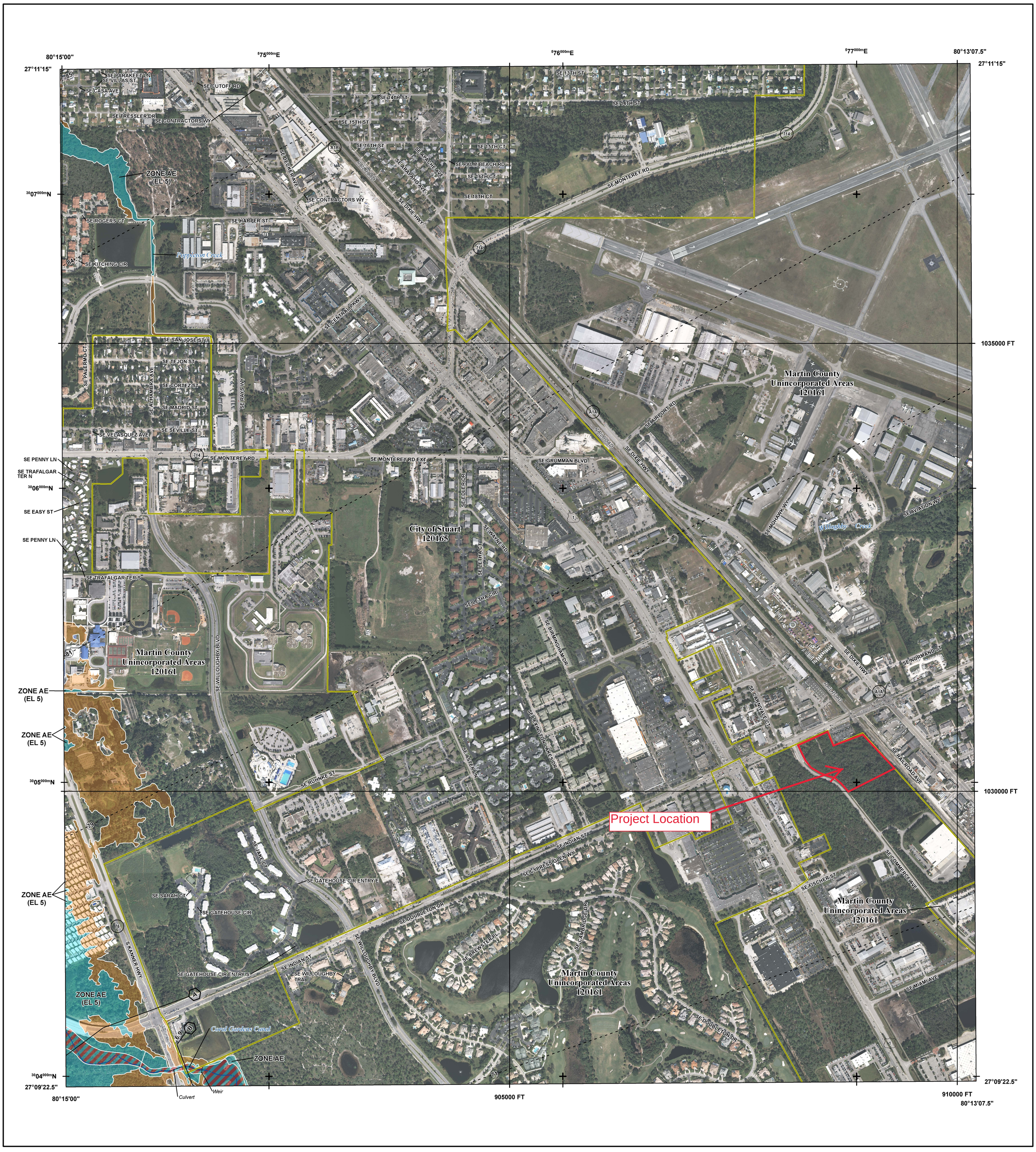
SHEET NO.

2

SILVERTHORNE
STUART, FLORIDA

J:\M18 – Meritage\M1810 – Glasrud II\DWG\DESIGN\EXHIBITS\Redesign March 2022 Drainage Map\Drainage Map.dwg, PRINTED BY: charlesk ON Thu, Mar 10 2022

Attachment 4.6



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTPS://MSC.FEMA.GOV

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*
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
OTHER FEATURES	E 18.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	513 Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the Martin County Information Technology Services Department, dated 2003, 2012 and 2015; the Florida Department of Transportation, dated 2014, 2015 and 2016; the U.S. Geological Survey, dated 2006; and the U.S. Department of Agriculture, dated 2016.

SCALE

N

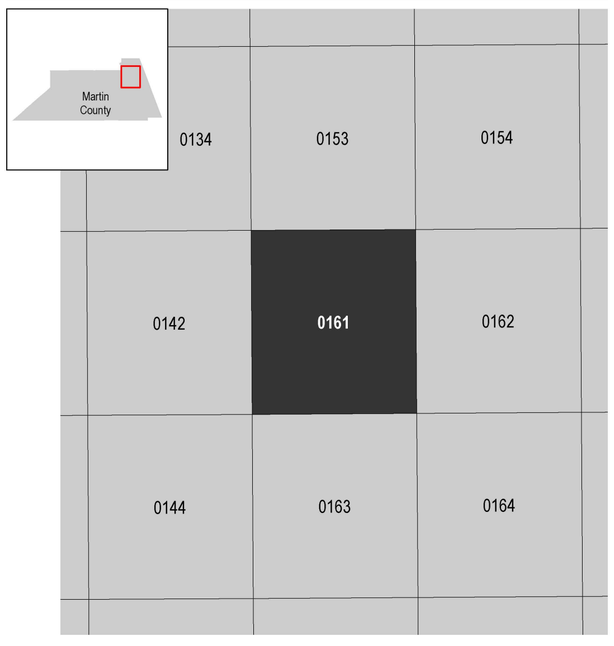
Map Projection:
State Plane Transverse Mercator, Florida East Zone 0901; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 750 1,000 2,000 feet

0 125 250 500 meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

MARTIN COUNTY, FLORIDA
and Incorporated Areas

PANEL **161** OF **527**

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARTIN COUNTY	120161	0161	H
STUART, CITY OF	120165	0161	H

VERSION NUMBER
2.3.3.2

MAP NUMBER
12085C0161H

MAP REVISED
FEBRUARY 19, 2020

Attachment 4.7

SURFACE WATER MANAGEMENT

APPLICATION FOR

120614-4

STUART BUSINESS PARK MASTER STORMWATER PLAN

RECEIVED
JUN 14 2012
WATER RESOURCE REGULATION

PREPARED BY
A. J. HYDRO ENGINEERING, INC.
5932 NW 73RD COURT
PARKLAND, FL 33067
NOVEMBER 15, 2011

South Florida Water Management District
Martin County Engineering Division
City of Stuart Engineering Division

Revised March 16, 2012

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HOWARD ELLIOTT JABLON
LICENSE
No. 47514
STATE OF FLORIDA
PROFESSIONAL ENGINEER

CERTIFICATION

4/5/12

Howard E. Jablon, P.E.
Florida Registration # 47514

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INTRODUCTION

The purpose of this report is to describe the master surface water management system for the +/- 230 acre ***Stuart Business Park (SBP)*** overall project. The property is located in Martin County and within the City of Stuart, bounded generally on the north by Indian Street, to the east by the FEC Railroad, and to the west by US 1. See the attached location and drainage maps for the southern boundary. The site has been previously permitted as a master surface water management system known as ***Stuart Business Park*** (Permit # 43-00114-S). However, though there was a master permit, there was never a specific master drainage plan for the park. Currently, there is an open application to modify the Master Permit, application #080619-17. If it has not already, application #080619-17 will be withdrawn and replaced by this current application. The purpose of this modification is to provide an overall drainage map and surface water management analysis for the ***SBP***. In addition to the master stormwater calculations, included in this application are construction plans for a series of swales and culverts along Commerce Avenue that will connect various parcels within the park so that the master surface water management system will function as proposed.

As will be described in detail in the sections below, the master surface water management system for the +/- 230 acre ***Stuart Business Park*** has been broken into two distinct Basins, Basin 1 and Basin 2. These two basins shall detain, treat, and attenuate the runoff into the master system, and then discharge runoff through each basin's control structure into US1. These control structures are currently existing and are used to model the surface water management system.

Many individual parcels within the ***SBP*** have been permitted and constructed. Some vacant parcels remain, as well. For this report, each developed site's SFWMD permit has been researched and the existing hydraulic information incorporated into master plan and calculations. Many of the parcels have been developed with zero discharge, though some have control structures on site limiting the discharge to the master system. For those parcels that have not been developed, logical assumptions have been made for their development, and these assumptions have been used to prepare the master plan and calculations, as well.

In this report I will show that the allowable discharge from the ***Stuart Business Park*** to the receiving body, US1, should be set at 22.0 cfs. This value has been referenced in several reports, including a SFWMD staff report for application #030714-12, though it was modified during one of the previous permit modifications to a total of 12.3 cfs. Pre-Development runoff calculations are provided to support this conclusion.

In a separate application being filed simultaneously called the ***Wal-mart / Miami Street Cross Access Drive***, the applicant is proposing to construct a driveway connecting the entry drive for the existing Wal-mart in Stuart to the existing Miami Street approximately 700 feet north of the Wal-Mart site. This cross access drive easement is 0.80 acres. This application is being noted here because there are some modifications to the outfall swale that are being proposed that will affect Basin 2 of the master stormwater system.

The master stormwater plans and construction plans are also being submitted to the Martin County Engineering Division and the City of Stuart.

APPLICATION #080619-17 RAIs

A previous application was filed for a similar request for the the Stuart Business Park. This application included plans to complete the conveyance system of the master drainage system, and to provide a master drainage plan. Numerous RAIs have been generated and responded to by the previous consultant. Though application #080619-17 has been (or is in the process of being) withdrawn, this report and the attached plans have incorporated the SFWMD RAI information as much as possible. All of the previous RAIs have been reviewed and addressed in preparation of this report, the attached calculations, and the attached plans. Listed below are the responses to the latest RAI dated March 19, 2010 (see RAI for SFWMD comment):

1. There are no direct or secondary impacts to any wetlands resulting from this application.

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Wetland C is west of Commerce Avenue, between Fisher Street and Miami Street. The previous application proposed to construct a conveyance swale within the wetland. This application proposes to bypass the wetland and install a storm pipe in the existing right of way of Commerce Avenue to convey the excess runoff from north to south. I have met with a environmental consultant in the field, and the right of way is not a wetland.

2. The property owner, Martin County, and City of Stuart are all working together and will be contacting the SFWMD regarding the appropriate legal entities to apply as applicants and owners for this application.

3. The Maintenance documents will be provided to the SFWMD. The proposed 19" x 30" culvert crossing Miami Street shall be maintained by the Stuart Business Park Owner's Association, as shall any swale or storm sewer that is part of the master drainage conveyance system. All plans and maps are being reconciled with this new application.

4. This proposal has eliminated the stagnant water conditions identified in the previous application. All conveyance ditches are at a minimum elevation of 15.0 NGVD, one foot above the control elevation of 14.0.

5. The responses to this multi-faceted comment is listed below. Later in this report, details and results of the calculations and assumptions are presented.

   a. i. In this report and attachments, all pertinent information has been provided for Basin 1. Each parcel is either undeveloped (IDC #7 - #9), or discharges a permitted amount into the conveyance system (such as Wal-Mart & Shoppes at Marketplace). Detailed information regarding the size, side slopes, elevations, and depths for the existing lakes on the IDC parcels will be provided when these projects apply for a permit modification.

      ii. In this report and attachments, all pertinent information has been provided for Basin 2. Each parcel is either undeveloped (IDC #1 - #6), or discharges a permitted amount into the conveyance system (such as Thies & TCT, Inc.). The downstream parcel prior to the control structure, IDC #5, will be required to obtain a permit modification when this parcel is developed. At that time, detailed information regarding the size, side slopes, elevations, and depths will be provided.

   b. All areas have been clearly identified on the included Drainage Maps. The existing and proposed discharge rates from all parcels contributing to the Master Drainage system have been tabulated, as well.

   c. This comment is specifically related to the previous application and is not applicable to this application.

   d. There is no mounding computed in this report. Soil conditions indicate that there will be minimal discharge through the soil, other than standard soil storage. All additional runoff is routed through the master storm conveyance system.

   e. Estimated Stage Storage Tables for each of the future developments, as well as actual Stage Storage Data for the existing, un-permitted projects (Fisher St., Miami St., Commerce Ave) have been provided. This data was used as input into the Flood Routing Routines.

   f. Details of the master control structures that discharge from the Stuart Business Park to US1 have been provided on the Master Drainage Plan. There are numerous

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intermediate control structures. Some are existing, some are proposed. Data from the existing permitted control structures have been used in the flood routing calculations in this report. For example, the permitted discharge from Thies and TCT have been added to the flood routing calculations as rating curves. There are also future proposed control structures. These have been modeled with assumed site data for the undeveloped parcels. They are included in the calculations, but will need to be verified and/or modified as each undeveloped parcel applies for a permit modification.

g. For purposes of these calculations, the tailwater at the outfall does not change. The tailwater is the control elevation of 14.0 NGVD. However, due to the systems inability to recover during the 15 Day Recovery requirement, a revised tailwater elevation (the 360 Hour recovery elevation) is used as the control elevation for re-rerouting the 25 year storm. See calculations and results later in this report..

Advisory Comments

1. Any impacts to wetlands are being addressed by Mr. Phil Jimrusti. An environmental assessment report has been submitted along with this application. Mr. Jimrusti will be proposing the appropriate mitigation, if any, to these impacts. It is not expected that there will be any impacts associated with this application. However, a similar application being filed at this time for the Wal-Mart Miami Street Cross Access Drive will be impacting wetlands and will require a mitigation proposal.

2. A construction Completion Certification for all improvements proposed with this permit application, along with the existing components already installed, but not yet certified, will be submitted upon completion of the improvements associated with this permit modification.

3. It is understood that this application will need to be approved and permitted, and the a construction completion submitted prior to the SFWMD deeming complete any other application within the Stuart Business Park Basin 2.

4. A copy of the Martin County Right of Way Permit will be provided, as requested.

EXISTING TOPOGRAPHY & LAKES

Much of the site has been developed. Some of the parcels have lakes, dry retention areas, parking lots, and buildings. The control elevation is 14.0. The bottom of the dry retention areas is 15.0. The parking lots vary between elevation 16.5 and 18.5. The minimum finished floor is elevation 18.50 NGVD.

The existing site elevations for undeveloped parcels that are not in the wetlands vary from +/- 15.5 NGVD to +/- 17.5 NGVD. In the existing wetlands, the elevations vary from +/- 15.5 NGVD to +/- 16.5 NGVD.

There are several lakes throughout the ***Stuart Business Park***. Lakes that have been permitted and constructed, such as on the ***Thies Distributing Plant*** property, are not identified in this report. However, there are some lakes that have been constructed that are on properties not yet developed. These lakes are either part of the master surface water management system, or will become part of the system upon future development. These lakes are listed below:

1. There is an existing approximate 0.75 acre lake on Industrial Development Corp Parcel #9. This lake currently serves as an outfall for the ***Shoppes at Marketplace***. When IDC Parcel #9 is developed, this lake will be used as retention. Flood routing calculations will be

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provided at the time of permitting for IDC Parcel #9.

2. There is an existing approximate 3.00 acre lake on Industrial Development Corp Parcel #8. It does not appear that any existing projects utilize this lake. When IDC Parcel #8 is developed, this lake will be used as retention. Flood routing calculations will be provided at the time of permitting for IDC Parcel #8. Due to the size of this lake, it is possible that other parcels may connect to this retention pond, but the appropriate permit modifications and flood routing calculations for will be required.
3. There is an existing approximate 1.62 acre lake on Industrial Development Corp Parcel #5. This lake currently serves as retention for the ***Wal-Mart at Port Sewall*** building. When IDC Parcel #5 is developed, this lake will be used as retention, and likely expanded. Flood routing calculations will be provided at the time of permitting for IDC Parcel #5.

As each future development is submitted for permitting, the precise details of these lakes: actual size, side slopes, depths, etc. will be provided. There is no proposed improvements or modifications to any of these lakes or retention areas associated with this permit modification. The only proposed improvements and modifications are associated with the ***Commerce Avenue / Miami Street Culvert & Swale Plan*** that is included with this application,

ENVIRONMENTAL CONDITIONS

There are three different considerations for the environmental conditions within the ***Stuart Business Park***.

First, the developed properties have already obtained SFWMD permits. If there were any wetland or threatened species for those parcels, these issues would have been addressed at the time the project was permitted.

Second, the undeveloped parcels will be required to apply for a SFWMD permit modification when a development is proposed. At that time any environmental issues will have to be addressed. For example, the ***Wal-mart / Miami Street Cross Access Drive*** application referenced above will be impacting known wetlands. Any mitigation required for these impacts will be addressed during that project's application process.

Finally, there is some construction proposed and plans submitted with this permit application. The construction is primarily within the right of way of Commerce Avenue and Miami Street. In addition, there is some construction proposed within drainage easements abutting Commerce Avenue. During the review of the previous application some wetland areas were identified within the proposed construction limits in a drainage easement west of Commerce Avenue. The construction plans prepared for this application modifies and relocates the proposed improvements from the drainage easement to within the right of way by replacing the swale design with a storm pipe design. Whether or not there are still any impacts will be addressed between the environmental consultant and the SFWMD review specialist.

SITE DATA

The ***Stuart Business Park*** project is +/- **230 acres**. The master surface water management system has been divided into two Basins, Basin 1 and Basin 2. Listed below are the individual parcels that comprise each of the basins. The parcels are further divided into whether or not they were permitted. If they were permitted, the design discharge has been presented. If they were not permitted, the pro rata discharge, as computed in the Flood Routing Section below, is presented. Also, if the parcel has not been developed or permitted, the assumed site data, ie retention area, pervious area, impervious area, building area, etc. is presented in this section, see table below.

BASIN 1

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Developed/Permitted Parcel Name	Permit #	Parcel Area	Design Discharge
Amerigas Propane	Not Permitted	1.14 Ac	0.00 cfs
Georgia Auto	Not Permitted	2.07 Ac	0.52 cfs
Lisa Dames	Not Permitted	1.94 Ac	0.49 cfs
Fly Bob, LLC	Cannot Find	1.88 Ac	0.00 cfs
Bucholz & Burnam	Cannot Find	1.32 Ac	0.00 cfs
Fowler/Dubner	43-00014-S	4.95 Ac	0.43 cfs
Wal-Mart	App #030714-12	28.68 Ac	2.50 cfs
Shoppes at MP	43-00014-S-07	6.72 Ac	0.69 cfs
Racetrac	43-00014-S-10	1.61 Ac	NA
Market Place	Not Permitted	3.54 Ac	0.89 cfs
Commerce Avenue	Not Permitted	2.01 Ac	0.51 cfs
Industrial Dev. #7	Not Permitted	1.45 Ac	0.37 cfs
Industrial Dev. #8	Not Permitted	9.72 Ac	2.45 cfs
Industrial Dev. #9	Not Permitted	8.55 Ac	2.15 cfs
	Total:	75.58 Ac	11.0 cfs

For purposes of the flood routing calculations described later in this report, the zero discharge projects are not included in the stormwater calculations. For projects with a permitted discharge, a rating curve is modeled in the stormwater calculations to account for the discharge. However, for the undeveloped and possible future re-development parcels, each parcel has an assumed land use. These land uses are indicated below:

Parcel Name	Lake (Ac)	Dry Reten. (Ac)	Pervi.. (Ac)	Imperv (Ac)	Building (Ac)	Total (Ac)
Georgia Auto*:	0.00	0.31 (15%)	0.52 (25%)	0.62 (30%)	0.62 (30%)	2.07
Lisa Dames*:	0.00	0.29 (15%)	0.49 (25%)	0.58 (30%)	0.58 (30%)	1.94
Ind. Dev #7:	0.00	0.22 (15%)	0.36 (25%)	0.435 (30%)	0.435 (30%)	1.45
Ind. Dev #8:	1.46 (15%)	0.00	2.42 (25%)	2.92 (30%)	2.92 (30%)	9.72
Ind. Dev. #9	1.28 (15%)	0.00	2.14 (25%)	2.56 (30%)	2.57 (30%)	8.55

*Note: The Lisa Dames and Georgia Auto properties are currently developed, but were not permitted by the South Florida Water Management District. Pursuant to a previous master permit, these parcels are not connected to the master surface water management system. However, for purposes of this report, I have included allowable discharge rates so that these parcels may connect in the future.

BASIN 2

Developed/Permitted Parcel Name	Permit #	Parcel Area	Design Discharge
Indian St. Plaza	Not Permitted	1.40 Ac	0.00 cfs
Seacoast Hotels	43-00014-S-09	2.75 Ac	0.00 cfs
Applebee's	Cannot Find	1.72 Ac	0.00 cfs
Checker's	Cannot Find	1.31 Ac	0.00 cfs
Hoover Property	Cannot Find	4.86 Ac	0.00 cfs
Wallace Cadillac	43-00380-S-09	10.99 Ac	0.00 cfs
Wallace Wallace Ent.	43-00380-S	18.43 Ac	0.00 cfs

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Theis Distribution	43-00380-S-08	14.97 Ac	1.37 cfs
TCT Acquisitions	43-00380-S-02	7.76 Ac	0.39 cfs
Discount Mini Storage	43-00380-S-03	3.58 Ac	0.00 cfs
United Parcel Service	43-00380-S-05	11.50 Ac	0.00 cfs
Wal-Mart Roof	App #030714-12	5.09 Ac	NA
Fisher Street	Not Permitted	1.69 Ac	0.21 cfs
Miami Street	Not Permitted	3.49 Ac	0.43 cfs
Commerce Avenue	Not Permitted	8.72 Ac	1.07 cfs
Industrial Dev. #1	Not Permitted	9.79 Ac	1.20 cfs
Industrial Dev. #2	Not Permitted	6.72 Ac	0.83 cfs
Industrial Dev. #3	Not Permitted	6.93 Ac	0.85 cfs
Industrial Dev. #4	Not Permitted	7.01 Ac	0.86 cfs
Industrial Dev. #5	Not Permitted	20.90 Ac + WM	3.20 cfs
Industrial Dev. #6	Not Permitted	3.38 Ac	0.42 cfs
Harbor Federal	Not Permitted	1.27 Ac	0.16 cfs
	Total:	154.26 Ac	11.0 cfs

For purposes of the flood routing calculations described later in this report, the zero discharge projects are not included in the stormwater calculations. For projects with a permitted discharge, a rating curve is modeled in the stormwater calculations to account for the discharge. However, for the undeveloped parcels, each parcel has an assumed land use. These land uses are indicated below:

Parcel Name	Lake (Ac)	Dry Reten. (Ac)	Pervi.. (Ac)	Imperv (Ac)	Building (Ac)	Total (Ac)
Ind. Dev #1-4:	4.57 (15%)	0.00	8.37 (27.5%)	8.37 (27.5%)	9.14 (30%)	30.45
Ind. Dev #5:	4.67 (18%)	0.00	4.65 (17.9%)	6.27 (24.1%)	10.40 (40%)	25.99
Ind. Dev. #6	0.00	0.51 (15%)	0.85 (25%)	1.01 (30%)	1.01 (30%)	3.38

WATER QUALITY & PRETREATMENT CALCULATIONS

The following is a description of how the water quality volume will be, or has been, retained within the ***Stuart Business Park***. There are several different scenarios and each one is discussed below:

1. For projects already constructed, such as Thies Distributing and TCT Acquisitions (Turbo Combustors Technology), the water quality storage volume is stored on that property as required by the applicable SFWMD requirements. Any discharge from that site through a control structure would be treated water.
2. Any undeveloped property will be required to provide water quality storage volume for either 1" of rainfall, or 2.5" rainfall times the impervious, whichever is greater. These water quality calculations will be provided as each undeveloped parcel applies for a SFWMD permit modification.
3. Any non-residential project will be required to provide 0.5" of dry pre-treatment prior to discharging into a wet retention system.
4. Since Commerce Avenue, Miami Street, and Fisher Street have been constructed may years ago without a permit, water quality calculations are not required for these projects.

In addition, all undeveloped and future re-developed parcels that are located in unincorporated Martin County, must comply with the Martin County water quality standards pursuant to Article 4, Division 9 *Stormwater Management and Flood Control* of the Martin County Land Development Code. There are several parcels east of Commerce Avenue and south of Miami Street that are located in unincorporated Martin County.

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STORMWATER SYSTEMS

The master stormwater system for the ***Stuart Business Park*** consists of a series of parcels, each either currently providing, or, if undeveloped, required to provide the appropriate water quality and flood protection within the limits of it's property. Each developed parcel either has a permitted discharge rate or is 100% on-site retention with zero discharge. The undeveloped parcels are being assigned a pro rata share of the remaining allowable discharge (see Flood Routing Section below). All of the parcels that are not 100% on-site retention shall then be interconnected through a series of swales and storm pipes.

Basin 1

Listed below is the path that runoff travels from the north and east portions of Basin 1 to the Basin 1 control structure. All properties that discharge into the conveyance system are identified, while the properties that are 100% on-site retention are not identified. Please refer to the attached Nodal Map for a graphic representation of the flow patterns.

1. The undeveloped parcel IDC7, and future master stormwater system connection parcels *Georgia Auto Flatteners* and *Lisa Dames*, shall be designed to overflow the allowable discharge into the east side of Commerce Ave. Control structures shall limit the discharge to the pro rata share allowed for these parcels.
2. There is an existing swale and existing culverts on the east side of Commerce Avenue that convey the excess runoff to a double 24" culvert connecting the outfall ditch on the east side of Commerce to the west side of Commerce Avenue. This outfall ditch is the southern boundary of the ***Stuart Business Park***.
3. The runoff then flows west all the way to the control structure located at the southwest corner of the SBP, in the southwest corner of the Shoppes at Marketplace. The control structure is a concrete weir with an overflow and pipe connected to US1.
4. Various parcels either currently, or will in the future, discharge into this outfall ditch.

    a) An existing permitted control structure controls the discharge from the Fowler/Dubner property directly into the ditch.
    b) An existing permitted control structure controls the discharge from the Wal-Mart property into the outfall ditch. Between the outfall ditch and Wal-Mart, there are conveyance dtiches and culverts within a drainage easement.
    c) An existing permitted control structure controls the discharge from the Shoppes at Marketplace property directly into the ditch.

5. Future developments, such as IDC #9, will also discharge the allowable rate through proposed future control structures directly into the ditch.
6. IDC Parcel #8 (Node 14 on the attached map) will be openly connected to the outfall ditch through a pipe connecting the existing approximate 3.0 acre lake to the date. This lake will help attenuate the runoff and ensure that the allowable discharge to the receiving body is not exceeded.

Basin 2

Listed below is the path that runoff travels from the north and east portions of Basin 2 to the Basin 2 control structure. All properties that discharge into the conveyance system are identified, while the properties that are 100% on-site retention are not identified. Please refer to the attached Nodal Map for a graphic representation of the flow patterns.

1. The undeveloped parcels IDC1-IDC4 shall be designed to overflow the allowable discharge into Commerce Ave. A control structure, or several control structures (depending on how the parcels are developed) shall limit the discharge to the pro rata share allowed for these

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parcels.

2. North of Fisher Street, there is an existing 18" RCP culvert connecting the east side of Commerce Ave to the west side.
3. There is an existing 18" RCP culvert on the west side of Commerce Ave that connects Commerce Ave north of Fisher Street to Commerce Ave south of Fisher Street.
4. A series of swales and storm pipes are now being proposed to convey this runoff south toward Miami Street.
5. Thies Distributing and Turbo Combustors Technology discharge into the swale on the east side of Commerce Avenue through previously permitted control structures.
6. There is an existing 18" RCP culvert connecting the east side of Commerce Ave to the west side adjacent to Thies and TCT.
7. A proposed 24" RCP culvert has been designed and shall be installed in Commerce Avenue under Miami Street connecting the north side to the south side. This runoff shall then discharge into a proposed swale on the east side of Commerce Ave south of Miami Street.
8. From the south, IDC parcel 6 shall discharge into an existing swale on the east side of Commerce Ave. A control structure shall limit the discharge from IDC6 into the swale to the pro rata share allowed for this parcel.
9. The runoff from the east side of Commerce and IDC6 is connected to the west side of Commerce Ave via an existing 18" CMP pipe east of the north driveway entrance to Wal-Mart.
10. The runoff shall then be directed through an existing 48" RCP pipe that runs along the southern portion of IDC parcel 5 into an existing lake.
11. This lake is connected via the Master Basin 2 control structure to US1. As the lake level rises, the water is conveyed through an existing swale and 24" RCP to the control structure, which limits the flow out of the ***Stuart Business Park***.

The results of the flood routing calculations, including peak stages and peak discharges, are indicated in the *Flood Routing Results* section below.

HYDROLOGIC RESULTS

Attached please find the Hydrologic results for each of the nodes. The rainfall data is pursuant to application #030714-12 and is listed below:

5 Year 24 Hour	6.0 in.
25 Year 72 Hour	11.0 in.
100 Year 72 Hour	13.6 in.

Basin 1

The curve number for all nodes are assumed to be 85, except for Node 14. This is due to the expected amount of landscape area that will be required to develop this site. Node 14, however, has a large amount of lake area (35% of the property) and is assumed to have about 25% of the property as building, for a total of 60% impervious, plus a parking lot. Therefore, there will be less infiltration during storm events. As each parcel is developed and applies for a permit modification, actual curve numbers will be computed and the basin hydrology calculated based on a proposed project.

Basin 2

The curve number for Nodes 1 and 4 was assumed to be 85. This is due to the expected amount of landscape area that will be required to develop this site. The curve number for Node 6 was assumed to be 90. This is due to the expected large building footprint (Wal-mart is already part of this Node) and lake area. As each parcel is developed and applies for a permit modification, actual curve numbers will be computed and the basin hydrology calculated based on a proposed project.

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The runoff values are listed on the attached Node Hydrologic Results sheets. These values are automatically used by ICPR version 3 during the routing calculations for the various design storms.

FLOOD ROUTING RESULTS

Stuart Business Park (SBP) is an existing +/- 230 acre commercial and industrial development consists of a master stormwater management system. Although a master permit had been issued for SBP in 1975 (SFWMD Permit No 43-0014-S), a formal master drainage plan has never been approved or permitted by the SFWMD. As a result, various parcels were developed and portions of the master surface water management system were constructed, including two outfall control structures that control the discharge from ***SBP*** to the permitted outfall, US Highway 1 (Federal Highway). The purpose of this report and the accompanying documents is to provide a detailed master drainage plan with detailed calculations for the master development. A description of each of the parcels indicates their allowable discharge rates, flood stages, how they connect to the master system, and the conveyance of the excess runoff to the permitted points of discharge.

Boundary Allowable Discharge Rate (Discharges to the Receiving System)

Permit #43-00014-S was initially permitted in 1975 and modified many times since then. For the master permit, the 25 Year 3 Day Storm (Design Storm) with discharges through the master control structures have been previously permitted through the SFWMD and the Florida DOT. The receiving body for the ***SBP*** is US1, and the Florida DOT has issued a permit for this discharge, permit number 03D490 0034. I have researched all of the permits that I could find, but I could not find a numerical allowable discharge rate identified in any of the permits prior to 2003.

Based on permits previously issued by the SFWMD and referenced in these permits and staff reports (see application #030714-12 sheet 4 of 17 and attached in Exhibit A), I believe the original total discharge rate was 22 cfs for the Stuart Business Park. During the course of that application for permit modification, the permitted rate was modified and reduced to 6.2 cfs for Basin 1 and 6.1 cfs for Basin 2. However, pursuant to the detailed flood routing calculations, I do not believe it is possible to achieve these low rates with the structures that have been designed, constructed, and are currently in use.

In consideration of the above, I have performed a pre-development calculation (see Exhibit A) to estimate what the pre-development discharge rate was for the ***Stuart Business Park*** prior to any development. Of course, much of the property is now developed, and, therefore, the initial topography and flow directions are not known. The general site topography is generally flat, and that has not changed. Given the above, I believe that I can show that the peak runoff rate was sufficiently high that the developed ***Stuart Business Park*** will only discharge a very small percentage of the pre-development rate.

Attached please find the pre-development runoff for the entire ***Stuart Business Park***. The site data includes:

1. Total Area = 230 acres
2. Total Rainfall = 11 inches
3. Curve Number = 69. This is based on the soil being Waveland and Immokalee fine sands, and provides are rather high infiltration rate (therefore less runoff).

Per the attached pre-development runoff, for 230 acres of property the peak runoff rate is 801 cfs. If we assume only 10% of the site flows to the west, there is still a peak discharge of 80.1 cfs. If 72.5% of that is captured in wetlands or other storage areas, the rate is still 22 cfs. Therefore, I believe it is reasonable to assume that the pre-development discharge rate from the Stuart Business Park to US1 is greater than 22 cfs.

Pursuant to the above, I have set the allowable discharge rate for the entire Stuart Business Park project to

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22 cfs. This discharge rate has been split between Basin 1 and Basin 2 and is 11 cfs per basin. As can be seen below, the routed peak discharges for each master basin are considerably less than the allowable of 11.0 cfs (though greater than 6.2 cfs).

Internal Discharge Rates

The boundary discharge rates are measured at each outfall structure to US1. However, there are internal discharge points where parcels outfall to the SBP conveyance system. In order to determine how much each parcel is allowed to discharge, a pro rata share of the allowable discharge rate is computed for each undeveloped parcel. Parcels that have been permitted with discharge already have a discharge rate assigned to that project. This rate is incorporated into the pro rata calculation. Parcels that have zero discharge are subtracted from the overall area in computing the pro rata share.

For **Basin 1**, the allowable discharge rate is 11 cfs. The total area is 75.58 acres. The total area that has zero discharge contributing to the overall system is 4.34 acres (see site data above). The total area that contributes discharge to the master drainage system is 71.24 acres. However, there are three existing projects that already discharge into the master system, Wal-Mart at Port Sewall, The Shoppes at Marketplace (w/Racetrac), and the Fowler/Dubner property. Therefore, I will subtract each of these projects' discharge rates (2.50 cfs, 0.69 cfs, and 0.43 cfs) and areas (28.68 Ac, 8.33 Ac, and 4.95 Ac) from the overall values. This leaves 7.38 cfs remaining over 29.28 acres. Now, the allowable discharge per acre may be calculated:

Allowable Discharge Rate Per Unit Area = (7.38 cfs / 29.28 Ac) = 0.252 cfs / Ac

Per the above unit discharge per acre, the allowable discharge rates have been tabularized in the Site Data Section of this report and on Sheet MD2 of the master drainage plans.

For **Basin 2**, the allowable discharge rate is 11 cfs. The total area is 154.26 acres. The total area that has zero discharge contributing to the overall system is 56.24 acres (see site data above). The total area that contributes discharge to the master drainage system is 97.72 acres. However, there are two existing projects that already discharge into the master system, Theis and Turbo Combustor Technologies. Therefore, I will subtract these projects discharge rates (1.37 cfs and 0.38 cfs) and areas (14.97 Ac and 7.76 Ac) from the overall values. This leaves 9.25 cfs remaining over 74.99 acres. Now, the allowable discharge per acre may be calculated:

Allowable Discharge Rate Per Unit Area = (9.25 cfs / 74.99 Ac) = 0.123 cfs / Ac

Per the above unit discharge per acre, the allowable discharge rates have been tabularized in the Site Data Section of this report and on Sheet MD2 of the master drainage plans.

Pursuant to this permit, no parcel shall be allowed to discharge at a higher rate than is indicated in the site data.

Flood Stages

All existing projects that have been permitted through the SFWMD were required to determine stages for the 5 Year, 25 Year, and 100 Year storms. These stages should have been determined by performing flood routing calculations. In this study, it is assumed that all existing on-site stormwater systems comply with the SFWMD regulations. For example, the finished floor is set at the appropriate stage and the perimeter berm was properly constructed. However, in no case is the finished floor elevation below 18.5 NGVD.

In the attached calculations, theoretical stages for the remaining undeveloped parcels have been computed. Please refer to the attached flood routing calculations. These computations indicate that, without exceeding the allowable discharge rate through the control structure, each parcel may be developed consistent with the assumed site data, and that the design stages are consistent with the original permit. For example, the 100

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Year, Zero Discharge Flood Elevation is below 18.5 NGVD. The 25 Year 3 Day flood stage is also provided and varies from site to site.

Again, there are no construction plans for any of the undeveloped parcels at this time. As each remaining parcel is developed, the developer's engineer will have to provide a detailed flood routing analysis to prove that the proposed development is consistent with these calculations and the master permit that will be issued.

Routing Results

Attached are the flood routing calculations, including:

1. Basin Hydrology Results for each Node
2. Stage Storage Table for each Node
3. Control Structure Data for each Node
4. Eouting Results including peak discharge rate and peak stage for each Node for the 5 Year, 25 Year, and 100 Year zero discharge design storms.

In addition, attached are the:

5. The 15 Day Recovery Stage routing results for the 25 year storm for the outfall Node..
6. The design storms rerouted utilizing the 25 year, 360 hour stage from the initial routing as the new control elevation.

Based on all of the previous permits, the control elevation for the Stuart Business Park is elevation 14.0 NGVD. The flood routing calculations were performed using the computer program ICPR version 3.

Listed below are the peak discharge and peak stage results of the above-referenced routing calculations. The existing permitted parcels are not listed since their permits indicate their respective discharge rates and stages.

Basin 1

Refer to the attached Nodal Map, Sheet MD4, for the node data and connections. Node 14 (IDC Parcel #8) is the downstream node prior to connection to the system outfall, US1. All other nodes connect to this node, which is then connected to US1 via an existing control structure (see Sheet MD5 for a detail of the existing structure). There is an existing approximate 3.0 acre lake located in Node 14.

***Time Zero Routing* (see Exhibit B)**

Parcel Name	5 Year Stage	25 Year Stage	100 Year Stage	25 Year Storm Peak Discharge Rate
IDC Parcel 7 (Node 11)	16.23	17.56	18.16	0.34 cfs
Georgia Auto (Node 12)	16.23	17.57	18.21	0.51 cfs
Lisa Dames (Node 13)	16.23	17.56	18.26	0.47 cfs
IDC Parcel 8 (Node 14)	16.23	17.29	17.27	8.14 cfs (to US 1)
Commerce & Market (Node 17)	16.23	17.34	NA	2.00 cfs
IDC Parcel 9 (Node 19)	16.26	17.60	17.97	2.32 cfs

The low value for the 100 Year, Zero Discharge Stage for Node 14 is due to the fact that there is an existing 3.0 acre lake on this 9.72 acre parcel (about 35% of the site including lake banks). The 25 Year stage is higher than the 100 Year stage due to the fact that all nodes are connected and discharge into Node 14, thus increasing the runoff contributing to this node well beyond the rainfall amount.

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Per the attached 15 day recovery results, the 25 year stage is at the 360 hour mark is 15.00. The stormwater model was then re-routed with the control elevation at 15.00 NGVD.

***Post 15 Day Recovery Routing* (see Exhibit C)**

Parcel Name	5 Year Stage	25 Year Stage	100 Year Stage	25 Year Storm Peak Discharge Rate
IDC Parcel 7 (Node 11)	16.42	17.62	18.16	NA
Georgia Auto (Node 12)	16.42	17.64	18.21	NA
Lisa Dames (Node 13)	16.41	17.62	18.26	NA
IDC Parcel 8 (Node 14)	16.38	17.32	17.61	NA
Commerce & Market (Node 17)	16.39	17.38	NA	NA
IDC Parcel 9 (Node 19)	16.51	17.64	18.19	NA

The design finished floor elevation is 18.50 NGVD. Based on the above table, the 100 Year Flood Stages do not exceed 18.50, even for the post 15 day recovery routing.

Basin 2

***Time Zero Routing* (see Exhibit D)**

Parcel Name	5 Year Stage	25 Year Stage	100 Year Stage	25 Year Storm Peak Discharge Rate
IDC Parcel 1-4 (Node 1)	16.59	17.66	18.09	3.42 cfs
IDC Parcel 6 (Node 4)	16.46	17.53	18.19	0.37 cfs
Commerce, Fisher & Miami Street (Node 5)	16.54	17.64	NA	2.55 cfs
IDC Parcel 5 (Node 6)	16.25	17.24	18.15	7.76 cfs (to US 1)

Per the attached 15 day recovery results, the 25 year stage is at the 360 hour mark is 15.80. The stormwater model was then re-routed with the control elevation at 15.80 NGVD.

***Post 15 Day Recovery Routing* (see Exhibit E)**

Parcel Name	5 Year Stage	25 Year Stage	100 Year Stage	25 Year Storm Peak Discharge Rate
IDC Parcel 1-4 (Node 1)	17.21	17.92	18.46	NA
IDC Parcel 6 (Node 4)	16.93	17.72	18.37	NA
Commerce, Fisher & Miami Street (Node 5)	17.14	17.89	NA	NA
IDC Parcel 5 (Node 6)	16.91	17.46	18.48	NA

The design finished floor elevation is 18.50 NGVD. Based on the above table, the 100 Year Flood Stages do not exceed 18.50, even for the post 15 day recovery routing.

The minimum perimeter berm elevation around each of the parcels will be based on the re-routed 25 Year Stage. The results presented are consistent with the assumptions in the Stage Storage Table. However, as stated earlier in the report, as each undeveloped parcel is developed, new calculations will be required to be submitted along with the permit modification application. The results listed above may be altered depending on the proposed use of the property. However, in no case shall the allowable discharge rate from a proposed

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development exceed the maximum rate indicated on these plans.

Commerce Avenue Stages

Pursuant to Martin County Standards, the minimum edge of pavement elevation for a major collector is the peak stage of a 25 Year 24 Hour Storm. Commerce Avenue, an existing roadway, is listed as a a major collector. The minimum edge of pavement for Commerce Avenue is 16.5 NGVD and goes up to about elevation 17.9 NGVD. Pursuant to the flood stages computed for the Stuart Business Park and specifically the public streets node (and listed above), Commerce Avenue does not flood during a 5 year 24 hour event. However, design rainfall events greater than this result in the lower portions of the roadway beginning to flood. Due to the fact that Commerce Avenue is an existing roadway that was built to these lower elevations, it is not possible to show that the edge of pavement will be above the 25 year 24 hour design event.

However, by preparing this master drainage system plan and the associated improvements to the swales and drainage conveyance system for **Stuart Business Park**, this proposal will increase the current drainage capacity in Commerce Avenue, as well as provide a more reliable conveyance system to the retention areas.

MAINTENANCE

Maintenance of the stormwater system shall be broken into three different categories. There shall be maintenance of the individual stormwater systems, maintenance of the common stormwater systems, and maintenance of the public stormwater systems as described below. A stormwater maintenance entity plan has been provided, see sheet MD6.

Private Stormwater Systems

In most cases, each independently permitted parcel shall be responsible for the maintenance of the their on-site surface water management system as permitted by the SFWMD. The only instance where this is not the case is for the Industrial Development Corporation Parcel #6. Since the on-site surface water management system is also the downstream node for the entire Basin 2, some components of this surface water management system, such as the 48" RCP, the lake, and the control structure are an integral part of the master surface water management system and shall be maintained by the Property Owner's Association.

Common Stormwater Systems

There is currently a master property owner's association. The Stuart Business Park Owner's Association shall be responsible for maintaining the common components of the stormwater system, such as the storm sewers, culverts, and swales in Commerce Avenue that are used as conveyance systems from the various parcels to the outfall.

Public Stormwater Systems

There are two public entities that own facilities within the Stuart Business Park. Commerce Avenue is a County Road that is owned and maintained by Martin County. Miami Street, Fisher Street, and Market Place are City Streets that are owned and maintained by the City of Stuart. All drainage facilities within these rights of way that are not directly related to the Stuart Business Park master drainage and conveyance system shall be maintained by appropriate public entity. Please refer to the Maintenance Entity Map, sheet MD6, for additional details.

CONCLUSION

This project is consistent with the existing permitted Water Management Systems and the requirements of the South Florida Water Management District, Martin County, and the City of Stuart.

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Attachment 4.8

Silverthorne
Stormwater Management Report
Site Basin

A. Acreage	**Area (Acres)**	**Percentage**
Buildings	1.83	19.87
Pavement/Impervious	2.02	21.94
Wet Detention EOW	0.69	7.51
Wet Detention Bank	0.36	3.92
Swale Banks	0.13	1.41
Swale Bottom	0.09	0.94
Driveways (Pavers)	0.63	6.83
Patios (Pavers)	0.27	2.88
East Rain Garden Bottom	0.12	1.25
East Rain Garden Banks	0.15	1.64
Green Space	2.93	31.81
Total Site Area	**9.21**	**100.00**

B. Minimum Elevations		
Roads and Driveways, 2' above control or as modeled	16.75	Feet
Floors, 18" above roads or as calculated	18.25	Feet
C. Design Storm allowable discharge		
The control structure has been designed to meet the Discharge Rate established in the SBP ERP.	1.13	cfs
D. Water Level Elevations		
Based on Existing SFWMD Permit	12.55	Feet NAVD
E. Rainfall Amounts:		
Roads (5-year, 1-day)	6.00	inches
Design (25-year, 3-day)	11.00	inches
Floors (100-year, 3-day)	13.60	inches

DESIGN CRITERIA:

A. Quality

Greater of
~ the first inch of runoff from the entire site
~ 2.5 inches times the percent impervious

Impaired Water
1.5 x the greater of above

B. Quantity		
The control structure has been designed to meet the Discharge Rate established in the SBP ERP.	1.13	cfs

COMPUTATIONS:

A. Quality

SFWMD		
First inch of runoff from the developed site 1inch x 1ft / 12inches x Total Site acres	**0.77**	**acre-feet**
Impaired Waters (St. Lucie River)-Provide a total of 150% of	**1.15**	**acre-feet**
SFWMD & City of Stuart		
2.5 inches times percent impervious		
1. Site Area = Project Area - (roofs* + lakes + wetlands)	6.69	acres
2. Impervious Area = Site Area - Pervious Area	2.92	acres
3. Percent Impervious = Impervious Area / Site Area	0.44	44%
4. 2.5 inches times percent impervious	1.09	inches
5. Volume required for treatment = inches to be treated x Site Area	**0.77**	**acre-feet**
Impaired Waters (St. Lucie River)-Provide a total of 150% of	**1.16**	**acre-feet**

Silverthorne
Stormwater Management Report
Site Basin

Martin County		
3 inches times percent impervious		
1. Site Area = Project Area - Preserve (Wetlands)	9.21	acres
2. Impervious Area = Site Area - Pervious Area	5.44	acres
3. Percent Impervious = Impervious Area / Site Area	0.59	59%
4. 3 inches times percent impervious	1.77	inches
5. Volume required for treatment = inches to be treated x Site Area	**1.36**	**acre-feet**

B. Soil Storage, S (SFWMD)		
Average Open Area Grade	16.9	feet
Average Wet Season Water Table	12.55	feet
Average Depth to Water Table	4.35	feet
Soil Storage, from Table	6.75	inches
Pervious Area =	3.38	acres
Soil Storage = Storage Available X Pervious Area	1.90	acre-feet
Moisture Soil Storage, S =	2.47	inches
S = Available Soil Storage / Developed Area		
SCS Curve Number, CN	**80**	
CN = 1000 / (S + 10)		

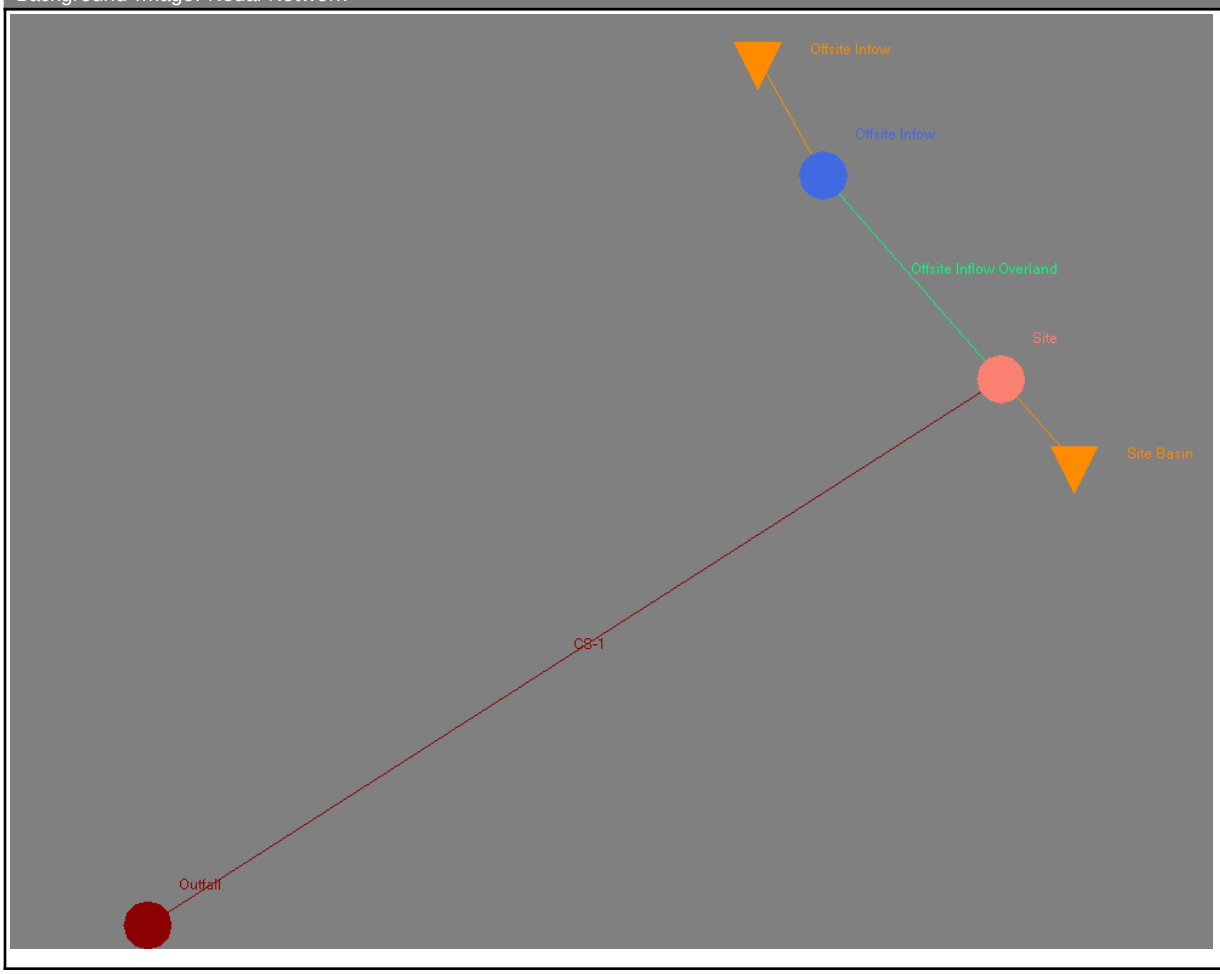
D. Stage-Storage - Developed Area

Refer to separate stage-storage calculation sheets.

Silverthorne													
Site Basin Stage Storage													
						Water Quality Elev.		14.80	ft				
			Area (ac)			5-year 1-day			ft				
Buildings			1.83			25-yr-3-day			ft				
Pavement/Impervious			2.02			Minimum Finished Floor Elev.		18.25	ft				
Wet Detention EOW			0.69										
Wet Detention Bank			0.36										
Swale Banks			0.13										
Swale Bottom			0.09										
Driveways (Pavers)			0.63										
Patios (Pavers)			0.27										
East Rain Garden Bottom			0.12										
East Rain Garden Banks			0.15										
Green Space			2.93										
		Total	9.21										
Elements	***Buildings***	***Pavement/Impervious***	***Wet Detention EOW***	***Wet Detention Bank***	***Swale Banks***	***Swale Bottom***	***Driveways (Pavers)***	***Patios (Pavers)***	***East Rain Garden Bottom***	***East Rain Garden Banks***	***Green Space***		*Total*
storage type	*Vertical*	*Linear*	*Vertical*	*Linear*	*Linear*	*Linear*	*Linear*	*Linear*	*Linear*	*Linear*	*Linear*		
area	*1.83*	*2.02*	*0.69*	*0.36*	*0.13*	*0.09*	*0.63*	*0.27*	*0.12*	*0.15*	*2.93*		***9.21***
start stage	18.25	16.75	12.55	12.55	14.05	14.05	16.75	18.00	13.55	13.55	15.85		
end stage	--	17.95	--	15.85	16.55	14.55	18.50	18.50	16.50	17.25	18.50		
stage	storage	storage	storage	storage	storage	storage	storage	storage	storage	storage	storage	stage	**storage**
12.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.55	0.00
12.65	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.65	0.07
12.75	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.75	0.14
12.85	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.85	0.21
12.95	0.00	0.00	0.28	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.95	0.29
13.05	0.00	0.00	0.35	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.05	0.36
13.15	0.00	0.00	0.41	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.15	0.43
13.25	0.00	0.00	0.48	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.25	0.51
13.35	0.00	0.00	0.55	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.35	0.59
13.45	0.00	0.00	0.62	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.45	0.67
13.55	0.00	0.00	0.69	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.55	0.75
13.65	0.00	0.00	0.76	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.65	0.83
13.75	0.00	0.00	0.83	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.75	0.91
13.85	0.00	0.00	0.90	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.85	0.99
13.95	0.00	0.00	0.97	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.95	1.08
14.05	0.00	0.00	1.04	0.12	0.00	0.00	0.00	0.00	0.00	0.01	0.00	14.05	1.17
14.15	0.00	0.00	1.11	0.14	0.00	0.00	0.00	0.00	0.01	0.01	0.00	14.15	1.26
14.25	0.00	0.00	1.18	0.16	0.00	0.00	0.00	0.00	0.01	0.01	0.00	14.25	1.36
14.35	0.00	0.00	1.24	0.18	0.00	0.01	0.00	0.00	0.01	0.01	0.00	14.35	1.46
14.45	0.00	0.00	1.31	0.20	0.00	0.01	0.00	0.00	0.02	0.02	0.00	14.45	1.56
14.55	0.00	0.00	1.38	0.22	0.01	0.02	0.00	0.00	0.02	0.02	0.00	14.55	1.67
14.65	0.00	0.00	1.45	0.24	0.01	0.03	0.00	0.00	0.02	0.02	0.00	14.65	1.78
14.75	0.00	0.00	1.52	0.26	0.01	0.04	0.00	0.00	0.03	0.03	0.00	14.75	1.90
14.85	0.00	0.00	1.59	0.29	0.02	0.05	0.00	0.00	0.03	0.03	0.00	14.85	2.01
14.95	0.00	0.00	1.66	0.31	0.02	0.06	0.00	0.00	0.04	0.04	0.00	14.95	2.13
15.05	0.00	0.00	1.73	0.34	0.03	0.07	0.00	0.00	0.04	0.05	0.00	15.05	2.25
15.15	0.00	0.00	1.80	0.37	0.03	0.07	0.00	0.00	0.05	0.05	0.00	15.15	2.38
15.25	0.00	0.00	1.87	0.40	0.04	0.08	0.00	0.00	0.06	0.06	0.00	15.25	2.50
15.35	0.00	0.00	1.94	0.43	0.04	0.09	0.00	0.00	0.06	0.07	0.00	15.35	2.63
15.45	0.00	0.00	2.01	0.46	0.05	0.10	0.00	0.00	0.07	0.07	0.00	15.45	2.76
15.55	0.00	0.00	2.07	0.49	0.06	0.11	0.00	0.00	0.08	0.08	0.00	15.55	2.89
15.65	0.00	0.00	2.14	0.53	0.07	0.12	0.00	0.00	0.09	0.09	0.00	15.65	3.03
15.75	0.00	0.00	2.21	0.56	0.08	0.13	0.00	0.00	0.09	0.10	0.00	15.75	3.17
15.85	0.00	0.00	2.28	0.60	0.08	0.13	0.00	0.00	0.10	0.11	0.00	15.85	3.31
15.95	0.00	0.00	2.35	0.63	0.09	0.14	0.00	0.00	0.11	0.12	0.01	15.95	3.46
16.05	0.00	0.00	2.42	0.67	0.10	0.15	0.00	0.00	0.12	0.13	0.02	16.05	3.62
16.15	0.00	0.00	2.49	0.70	0.11	0.16	0.00	0.00	0.13	0.14	0.05	16.15	3.79
16.25	0.00	0.00	2.56	0.74	0.13	0.17	0.00	0.00	0.14	0.15	0.09	16.25	3.97
16.35	0.00	0.00	2.63	0.78	0.14	0.18	0.00	0.00	0.15	0.16	0.14	16.35	4.17
16.45	0.00	0.00	2.70	0.81	0.15	0.19	0.00	0.00	0.16	0.17	0.20	16.45	4.38
16.55	0.00	0.00	2.77	0.85	0.16	0.20	0.00	0.00	0.18	0.18	0.27	16.55	4.60
16.65	0.00	0.00	2.84	0.88	0.18	0.20	0.00	0.00	0.19	0.20	0.35	16.65	4.84
16.75	0.00	0.00	2.90	0.92	0.19	0.21	0.00	0.00	0.20	0.21	0.45	16.75	5.08
16.85	0.00	0.01	2.97	0.96	0.20	0.22	0.00	0.00	0.21	0.22	0.55	16.85	5.35
16.95	0.00	0.03	3.04	0.99	0.21	0.23	0.01	0.00	0.22	0.24	0.67	16.95	5.65
17.05		0.08	3.11	1.03	0.23	0.24	0.02	0.00	0.23	0.25	0.80	17.05	5.98
17.15		0.13	3.18	1.06	0.24	0.25	0.03	0.00	0.25	0.26	0.93	17.15	6.34
17.25		0.21	3.25	1.10	0.25	0.26	0.04	0.00	0.26	0.28	1.08	17.25	6.74
17.35		0.30	3.32	1.14	0.27	0.27	0.06	0.00	0.27	0.29	1.24	17.35	7.16
17.45		0.41	3.39	1.17	0.28	0.27	0.09	0.00	0.28	0.31	1.42	17.45	7.62
17.55		0.54	3.46	1.21	0.29	0.28	0.12	0.00	0.29	0.32	1.60	17.55	8.11
17.65		0.68	3.53	1.24	0.31	0.29	0.15	0.00	0.30	0.34	1.79	17.65	8.63
17.75		0.84	3.60	1.28	0.32	0.30	0.18	0.00	0.31	0.35	2.00	17.75	9.18
17.85		1.02	3.66	1.32	0.33	0.31	0.22	0.00	0.33	0.37	2.21	17.85	9.77
17.95		1.21	3.73	1.35	0.34	0.32	0.26	0.00	0.34	0.38	2.44	17.95	10.38
18.05		1.42	3.80	1.39	0.36	0.33	0.30	0.00	0.35	0.40	2.68	18.05	11.02
18.15		1.62	3.87	1.42	0.37	0.34	0.35	0.01	0.36	0.42	2.93	18.15	11.68
18.25		1.82	3.94	1.46	0.38	0.34	0.40	0.02	0.37	0.43	3.19	18.25	12.36

Attachment 4.9

Background Image: Nodal Network



Simple Basin: Offsite Infow

Scenario:	Scenario1
Node:	Offsite Infow
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	5.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	0.6100 ac
Curve Number:	98.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00

Rainfall Name:

Comment:

Simple Basin: Site Basin

Scenario:	Scenario1
Node:	Site
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	9.2100 ac
Curve Number:	80.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Offsite Infow

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	17.00 ft
Warning Stage:	18.00 ft

Stage [ft]	Area [ac]	Area [ft2]
17.00	0.0000	0
18.00	0.3300	14375
17.10	0.0500	2178

Comment:

Node: Outfall

Scenario:	Scenario1
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	12.55 ft

Inputs

Warning Stage:	0.00 ft
Boundary Stage:	Master System

Comment:

Node: Site

Scenario:	Scenario1
Type:	Stage/Volume
Base Flow:	0.00 cfs
Initial Stage:	12.55 ft
Warning Stage:	18.25 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
12.55	0.00	0
13.55	0.75	32670
14.05	1.17	50965
14.55	1.67	72745
14.90	2.08	90605
16.05	3.62	157687
16.55	4.60	200376
16.75	5.08	221285
17.25	6.74	293594
17.75	9.19	400316
18.25	12.36	538402

Comment:

Drop Structure Link: CS-1

		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario1	Invert:	6.00 ft	Invert:	12.50 ft
From Node:	Site	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Outfall	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
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:	250.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	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		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Circular	Op Table:	
Invert:	12.55 ft	Ref Node:	
Control Elevation:	12.55 ft	**Discharge Coefficients**	
Max Depth:	0.25 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component		Bottom Clip	
Weir:	2	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Sharp Crested Vertical	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	14.90 ft	Ref Node:	
Control Elevation:	14.90 ft	**Discharge Coefficients**	
Max Depth:	0.33 ft	Weir Default:	3.200
Max Width:	0.33 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Weir Link: Offsite Inflow Overland		Bottom Clip	
Scenario:	Scenario1	Default:	0.00 ft
From Node:	Offsite Infow	Op Table:	
To Node:	Site	Ref Node:	
Link Count:	1	**Top Clip**	
Flow Direction:	Both	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:	
Weir Type:	Broad Crested Vertical	Ref Node:	
Geometry Type:	Rectangular	**Discharge Coefficients**	
Invert:	17.00 ft	Weir Default:	2.800
Control Elevation:	17.00 ft		

Inputs

Max Depth: 1.00 ft
Max Width: 50.00 ft
Fillet: 0.00 ft

Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Boundary Stage: Master System

Boundary Stage Set: 25yr 3 day

Year	Month	Day	Hour [hr]	Stage [ft]
0	0	0	0.0000	12.55
0	0	0	36.0000	13.52
0	0	0	58.0000	14.55
0	0	0	63.0000	15.79
0	0	0	360.0000	14.35

Comment:

Boundary Stage: Master System

Boundary Stage Set: 5yr 1 day

Year	Month	Day	Hour [hr]	Stage [ft]
0	0	0	0.0000	12.55
0	0	0	8.0000	13.05
0	0	0	20.0000	14.80
0	0	0	24.0000	14.35

Comment:

Simulation: -100yr 3 day

Scenario: Scenario1
Run Date/Time: 3/8/2022 4:10:01 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

Hydrology [sec]	Surface Hydraulics	Groundwater [sec]

	[sec]		
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72

		Rainfall Amount:	13.60 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: -25yr 3 day

Scenario: Scenario1
Run Date/Time: 3/8/2022 4:06:59 PM
Program Version: ICPR4 4.07.08

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]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
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	72.0000	180.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	72.0000	180.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Inputs

Save Restart: False

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:		Boundary Stage Set:	25yr 3 day
Reference ET Folder:		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	
		Roughness Set:	
		Crop Coef Set:	
		Fillable Porosity Set:	
		Conductivity Set:	
		Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: -5yr 1 day

Scenario: Scenario1

Run Date/Time: 3/8/2022 4:08:07 PM

Program Version: ICPR4 4.07.08

General

Run Mode: Normal

Year	Month	Day	Hour [hr]

Inputs

Start Time:	0	0	0	0.0000
End Time:	0	0	0	120.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 5yr 1 day
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Inputs

dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	6.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 2nd storm 100yr

Scenario:	Scenario1
Run Date/Time:	3/8/2022 4:10:25 PM
Program Version:	ICPR4 4.07.08

General

Run Mode:	Hot Start	Hot Start Simulation:	-25yr 3 day

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000
Hot Start Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]

Inputs

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	13.60 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 2nd storm 25 yr

Scenario: Scenario1
Run Date/Time: 3/8/2022 4:09:15 PM
Program Version: ICPR4 4.07.08

General

Run Mode: Hot Start

Hot Start Simulation: -25yr 3 day

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000
Hot Start Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
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	72.0000	180.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000
0	0	0	72.0000	180.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 25yr 3 day
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	11.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 2nd storm 5 yr

Scenario:	Scenario1
Run Date/Time:	3/8/2022 4:08:57 PM
Program Version:	ICPR4 4.07.08

General

Run Mode:	Hot Start	Hot Start Simulation:	-5yr 1 day

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	120.0000
Hot Start Time:	0	0	0	120.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 5yr 1 day
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage 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
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 6.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Node Max

Sim	Node Name	Maximum Stage [ft]	Time to Maximum Stage [hrs]
-100yr 3 day	Offsite Infow	17.68	96.0035
-100yr 3 day	Outfall	12.55	0.0000
-100yr 3 day	Site	17.68	72.9535
-25yr 3 day	Offsite Infow	17.08	59.9612
-25yr 3 day	Outfall	15.79	63.0007
-25yr 3 day	Site	17.06	72.0527
2nd storm 100yr	Offsite Infow	17.89	96.0000
2nd storm 100yr	Outfall	14.35	0.0000
2nd storm 100yr	Site	17.89	72.9500
2nd storm 25 yr	Offsite Infow	17.14	72.0110
2nd storm 25 yr	Outfall	15.79	63.0026
2nd storm 25 yr	Site	17.14	72.0443
-5yr 1 day	Offsite Infow	17.07	12.0057
-5yr 1 day	Outfall	14.80	19.9980
-5yr 1 day	Site	15.44	23.8314

Link Max

Sim	Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs
-100yr 3 day	CS-1	0.00	0.0000
-100yr 3 day	Offsite Inflow Overland	4.13	59.9623
-25yr 3 day	CS-1	0.94	60.7160
-25yr 3 day	Offsite Inflow Overland	3.34	59.9612
2nd storm 100yr	CS-1	0.00	0.0000
2nd storm 100yr	Offsite Inflow Overland	4.13	59.9619
2nd storm 25 yr	CS-1	0.97	60.6839
2nd storm 25 yr	Offsite Inflow Overland	3.34	59.9612

Node Time Series

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
-25yr 3 day	Site	0.0000	12.55	0.00
-25yr 3 day	Site	1.0027	12.55	0.00
-25yr 3 day	Site	2.0027	12.55	0.00
-25yr 3 day	Site	3.0027	12.55	0.00
-25yr 3 day	Site	4.0027	12.56	0.00
-25yr 3 day	Site	5.0027	12.56	0.00
-25yr 3 day	Site	6.0027	12.57	0.00
-25yr 3 day	Site	7.0027	12.58	0.00
-25yr 3 day	Site	8.0027	12.59	0.00
-25yr 3 day	Site	9.0027	12.60	0.00
-25yr 3 day	Site	10.0027	12.61	0.00
-25yr 3 day	Site	11.0027	12.62	0.00
-25yr 3 day	Site	12.0027	12.64	0.00
-25yr 3 day	Site	13.0027	12.66	0.00
-25yr 3 day	Site	14.0027	12.68	0.00
-25yr 3 day	Site	15.0027	12.71	0.00
-25yr 3 day	Site	16.0027	12.73	0.00
-25yr 3 day	Site	17.0027	12.76	0.00
-25yr 3 day	Site	18.0027	12.79	0.00
-25yr 3 day	Site	19.0027	12.82	0.00
-25yr 3 day	Site	20.0027	12.85	0.00
-25yr 3 day	Site	21.0027	12.88	0.00
-25yr 3 day	Site	22.0027	12.91	0.00
-25yr 3 day	Site	23.0027	12.95	0.00
-25yr 3 day	Site	24.0027	12.98	0.00
-25yr 3 day	Site	25.0027	13.02	0.00
-25yr 3 day	Site	26.0027	13.07	0.00
-25yr 3 day	Site	27.0027	13.12	0.00
-25yr 3 day	Site	28.0027	13.16	0.00
-25yr 3 day	Site	29.0027	13.21	0.00
-25yr 3 day	Site	30.0027	13.26	0.00
-25yr 3 day	Site	31.0027	13.31	0.00
-25yr 3 day	Site	32.0027	13.36	0.00
-25yr 3 day	Site	33.0027	13.41	0.00
-25yr 3 day	Site	34.0027	13.46	0.00
-25yr 3 day	Site	35.0027	13.50	0.02
-25yr 3 day	Site	36.0027	13.55	0.04
-25yr 3 day	Site	37.0027	13.59	0.03
-25yr 3 day	Site	38.0027	13.63	0.03
-25yr 3 day	Site	39.0027	13.68	0.03
-25yr 3 day	Site	40.0027	13.72	0.03
-25yr 3 day	Site	41.0027	13.77	0.03

Node Time Series

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
-25yr 3 day	Site	42.0027	13.82	0.03
-25yr 3 day	Site	43.0027	13.86	0.03
-25yr 3 day	Site	44.0027	13.91	0.02
-25yr 3 day	Site	45.0027	13.95	0.02
-25yr 3 day	Site	46.0027	14.00	0.02
-25yr 3 day	Site	47.0027	14.04	0.02
-25yr 3 day	Site	48.0027	14.09	0.02
-25yr 3 day	Site	49.0027	14.14	0.02
-25yr 3 day	Site	50.0027	14.19	0.03
-25yr 3 day	Site	51.0027	14.25	0.04
-25yr 3 day	Site	52.0027	14.31	0.05
-25yr 3 day	Site	53.0027	14.39	0.06
-25yr 3 day	Site	54.0027	14.48	0.08
-25yr 3 day	Site	55.0027	14.60	0.10
-25yr 3 day	Site	56.0027	14.72	0.12
-25yr 3 day	Site	57.0044	14.87	0.14
-25yr 3 day	Site	58.0008	15.03	0.21
-25yr 3 day	Site	59.0012	15.24	0.36
-25yr 3 day	Site	60.0003	16.16	0.79
-25yr 3 day	Site	61.0011	16.82	0.93
-25yr 3 day	Site	62.0007	16.91	0.88
-25yr 3 day	Site	63.0007	16.96	0.82
-25yr 3 day	Site	64.0007	17.00	0.83
-25yr 3 day	Site	65.0040	17.02	0.84
-25yr 3 day	Site	66.0027	17.03	0.84
-25yr 3 day	Site	67.0027	17.04	0.85
-25yr 3 day	Site	68.0027	17.05	0.86
-25yr 3 day	Site	69.0027	17.06	0.86
-25yr 3 day	Site	70.0027	17.06	0.86
-25yr 3 day	Site	71.0027	17.06	0.86
-25yr 3 day	Site	72.0027	17.06	0.87
-25yr 3 day	Site	75.0027	17.01	0.85
-25yr 3 day	Site	78.0027	16.95	0.84
-25yr 3 day	Site	81.0027	16.88	0.82
-25yr 3 day	Site	84.0027	16.82	0.80
-25yr 3 day	Site	87.0027	16.75	0.78
-25yr 3 day	Site	90.0027	16.68	0.76
-25yr 3 day	Site	93.0027	16.61	0.74
-25yr 3 day	Site	96.0027	16.53	0.72
-25yr 3 day	Site	99.0027	16.45	0.69
-25yr 3 day	Site	102.0027	16.36	0.66
-25yr 3 day	Site	105.0027	16.28	0.63

Node Time Series

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
-25yr 3 day	Site	108.0027	16.20	0.60
-25yr 3 day	Site	111.0027	16.12	0.56
-25yr 3 day	Site	114.0027	16.04	0.53
-25yr 3 day	Site	117.0027	15.96	0.50
-25yr 3 day	Site	120.0027	15.89	0.46
-25yr 3 day	Site	123.0027	15.82	0.42
-25yr 3 day	Site	126.0027	15.75	0.39
-25yr 3 day	Site	129.0027	15.69	0.35
-25yr 3 day	Site	132.0027	15.64	0.32
-25yr 3 day	Site	135.0027	15.59	0.29
-25yr 3 day	Site	138.0027	15.54	0.25
-25yr 3 day	Site	141.0027	15.50	0.22
-25yr 3 day	Site	144.0027	15.47	0.19
-25yr 3 day	Site	147.0027	15.43	0.17
-25yr 3 day	Site	150.0027	15.41	0.15
-25yr 3 day	Site	153.0027	15.38	0.13
-25yr 3 day	Site	156.0027	15.36	0.11
-25yr 3 day	Site	159.0027	15.34	0.10
-25yr 3 day	Site	162.0027	15.33	0.09
-25yr 3 day	Site	165.0027	15.31	0.09
-25yr 3 day	Site	168.0027	15.30	0.09
-25yr 3 day	Site	171.0027	15.28	0.08
-25yr 3 day	Site	174.0027	15.27	0.08
-25yr 3 day	Site	177.0027	15.25	0.08
-25yr 3 day	Site	180.0027	15.24	0.06
-25yr 3 day	Site	183.0027	15.22	0.08
-25yr 3 day	Site	186.0027	15.21	0.08
-25yr 3 day	Site	189.0027	15.20	0.08
-25yr 3 day	Site	192.0027	15.18	0.08
-25yr 3 day	Site	195.0027	15.17	0.08
-25yr 3 day	Site	198.0027	15.16	0.08
-25yr 3 day	Site	201.0027	15.14	0.08
-25yr 3 day	Site	204.0027	15.13	0.07
-25yr 3 day	Site	207.0027	15.11	0.07
-25yr 3 day	Site	210.0027	15.10	0.07
-25yr 3 day	Site	213.0027	15.09	0.07
-25yr 3 day	Site	216.0027	15.07	0.07
-25yr 3 day	Site	219.0027	15.06	0.07
-25yr 3 day	Site	222.0027	15.05	0.07
-25yr 3 day	Site	225.0027	15.03	0.07
-25yr 3 day	Site	228.0027	15.02	0.07
-25yr 3 day	Site	231.0027	15.01	0.07

Node Time Series

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
-25yr 3 day	Site	234.0027	14.99	0.06
-25yr 3 day	Site	237.0027	14.98	0.06
-25yr 3 day	Site	240.0027	14.97	0.06
-25yr 3 day	Site	243.0027	14.96	0.06
-25yr 3 day	Site	246.0027	14.95	0.06
-25yr 3 day	Site	249.0027	14.94	0.06
-25yr 3 day	Site	252.0027	14.92	0.06
-25yr 3 day	Site	255.0027	14.91	0.06
-25yr 3 day	Site	258.0027	14.90	0.06
-25yr 3 day	Site	261.0027	14.89	0.06
-25yr 3 day	Site	264.0027	14.88	0.06
-25yr 3 day	Site	267.0027	14.87	0.06
-25yr 3 day	Site	270.0027	14.86	0.06
-25yr 3 day	Site	273.0027	14.84	0.06
-25yr 3 day	Site	276.0027	14.83	0.06
-25yr 3 day	Site	279.0027	14.82	0.06
-25yr 3 day	Site	282.0027	14.80	0.06
-25yr 3 day	Site	285.0027	14.79	0.06
-25yr 3 day	Site	288.0027	14.78	0.07
-25yr 3 day	Site	291.0027	14.76	0.07
-25yr 3 day	Site	294.0027	14.75	0.07
-25yr 3 day	Site	297.0027	14.74	0.07
-25yr 3 day	Site	300.0027	14.72	0.07
-25yr 3 day	Site	303.0027	14.71	0.07
-25yr 3 day	Site	306.0027	14.69	0.07
-25yr 3 day	Site	309.0027	14.68	0.07
-25yr 3 day	Site	312.0027	14.66	0.07
-25yr 3 day	Site	315.0027	14.65	0.07
-25yr 3 day	Site	318.0027	14.64	0.07
-25yr 3 day	Site	321.0027	14.62	0.07
-25yr 3 day	Site	324.0027	14.61	0.07
-25yr 3 day	Site	327.0027	14.59	0.07
-25yr 3 day	Site	330.0027	14.58	0.07
-25yr 3 day	Site	333.0027	14.56	0.07
-25yr 3 day	Site	336.0027	14.55	0.07
-25yr 3 day	Site	339.0027	14.53	0.07
-25yr 3 day	Site	342.0027	14.52	0.07
-25yr 3 day	Site	345.0027	14.50	0.07
-25yr 3 day	Site	348.0027	14.49	0.06
-25yr 3 day	Site	351.0027	14.47	0.06
-25yr 3 day	Site	354.0027	14.46	0.06
-25yr 3 day	Site	357.0027	14.44	0.06

Node Time Series

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Outflow Rate [cfs]
-25yr 3 day	Site	360.0027	14.42	0.06