City of Stuart

AGENDA

REGULAR MEETING OF THE STUART CITY COMMISSION
TO BE HELD March 9, 2020
AT 5:30 PM Commission Chambers
121 SW FLAGLER AVE.
STUART, FLORIDA 34994

CITY COMMISSION

Mayor Michael J. Meier
Vice Mayor Eula R. Clarke
Commissioner Becky Bruner
Commissioner Kelli Glass Leighton
Commissioner Merritt Matheson

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.*

ROLL CALL

PLEDGE OF ALLEGIANCE

1. ARTS MOMENT - PRESENTATION OF THE 1895 CHURCH OF ART BY ROBERT AND OLGA HAMILTON

PROCLAMATIONS

2. VIETNAM VETERANS DAY - MARCH 29, 2020

3. 2020 CENSUS PARTNERSHIP

4. GOVERNMENT FINANCE PROFESSIONALS WEEK - MARCH 16-20, 2020

PRESENTATIONS

COMMENTS BY CITY COMMISSIONERS

COMMENTS BY CITY MANAGER

APPROVAL OF AGENDA

COMMENTS FROM THE PUBLIC (5 min. max)

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

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.*

5. APPROVAL OF 02/24/2020 CCM MINUTES (RC)

6. ANNUAL CHILDREN'S SERVICES COUNCIL GRANT APPLICATION (RC):

   RESOLUTION No. 34-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE APPLICATION, AS THE LEAD AGENCY, WITH THE CHILDREN'S SERVICES COUNCIL OF MARTIN COUNTY FOR THE EAST STUART YOUTH

INITIATIVE; IF APPROVED, AUTHORIZING THE ACCEPTANCE AND EXPENDITURE OF THIS GRANT, AND EMERGENCY FUNDING, PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

7. FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY (FDEO) COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG) (RC):

RESOLUTION No. 35-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM AND ECONOMIC DEVELOPMENT PROGRAM AND ESTABLISH A REQUEST FOR PROPOSAL TO HIRE A CONSULTANT FOR COMMUNITY DEVELOPMENT BLOCK GRANT WRITING AND GRANT ADMINISTRATION SERVICES; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

END OF CONSENT CALENDAR

COMMISSION ACTION

8. INTENTION TO ABANDON A PORTION OF OSCEOLA STREET RIGHT-OF-WAY (RC):

RESOLUTION No. 16-2020; 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 23, 2020, AND APRIL 13, 2020, AT 5:30 P.M. IN THE CITY COMMISSION CHAMBERS TO CONSIDER THE ABANDONMENT OF A 50' WIDE PUBLIC RIGHT-OF-WAY WITHIN THE CITY, BEING THE PORTION OF S.E. OSCEOLA STREET, MORE CLEARLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FOR OTHER PURPOSES.

ORDINANCE FIRST READING

9. AMENDMENT TO CITY TREE REPLACEMENT CODE TO COMPLY WITH STATE STATUTE AND TO INCORPORATE INNOVATIVE STORMWATER DESIGN. (RC):

ORDINANCE No. 2432-2020; AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING CHAPTER V OF THE CITY'S LAND DEVELOPMENT CODE ENTITLED 'RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS' TO COMPLY WITH STATE STATUTE REGARDING TREE REMOVAL PERMITS AND TO PROMOTE INNOVATIVE STORMWATER TREATMENT AND LOW IMPACT DEVELOPMENT PRACTICES AND TO ALLOW THE CITY'S TREE REPLACEMENT FUND TO BE UTILIZED FOR INNOVATIVE STORMWATER TREATMENT SYSTEMS ON PUBLIC LANDS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

10. AVONLEA PUD AMENDMENT PARCEL B (PARCEL 16) (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2434-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, BEING THE THIRD AMENDMENT OF ORDINANCE NO. 2307-2015, ALSO KNOWN AS THE "NEW AVONLEA PLANNED UNIT DEVELOPMENT (PUD)" CONSISTING OF 12.40 ACRES ZONED RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD), 16.24 ACRES ZONED COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD), AND 20.4 ACRES OF WETLAND/UPLAND PRESERVE ZONED RPUD, FOR A TOTAL OF 49.04 ACRES; SAID PUD BEING GENERALLY LOCATED BETWEEN NE DIXIE HIGHWAY TO THE SOUTH, LAND ON BOTH SIDES OF GREEN RIVER PARKWAY ON THE WEST, LAND ON BOTH SIDES OF CARDINAL AVENUE ON THE EAST AND THE CITY BOUNDARY TO THE NORTH, BEING

MORE FULLY DESCRIBED BY EXHIBIT "A" ATTACHED; AMENDING SAID PUD TO PROVIDE FOR THE APPROVAL OF THE MASTER PARCEL SITE PLAN FOR THE AVONLEA CROSSINGS PARCEL B (PARCEL 16); PROVIDING FOR A MASTER OFF-SITE INFRASTRUCTURE PLAN FOR THE ENTIRE PUD; PROVIDING FOR REVISED AND ADDITIONAL DEVELOPMENT CONDITIONS OF APPROVAL; PROVIDING FOR AMENDED AND NEW TIMETABLES 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.

11. STUART SPRINGTREE RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2427-2020; 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 ASSIGNING A FUTURE LAND USE DESIGNATION OF "MULTI-FAMILY RESIDENTIAL" FOR THREE PARCELS EQUALING 13.59 ACRES ANNEXED BY ORDINANCE NO. 2352-2017, OWNED BY STUART 13 ACRES, LLC, TIERRA DEL LAGO, INC. AND STUART HARBOR MARINA AND YACHT CLUB, LOCATED WEST OF S.E. FEDERAL HIGHWAY, SOUTH OF S.E. HARRISON STREET, AND NORTH OF THE NATALIE ESTATES MOBILE HOME PARK WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE STUART–SPRINGTREE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF TWO HUNDRED EIGHTY (280) MULTI-FAMILY UNITS WITHIN SEVEN (7) INDIVIDUAL FOUR-STORY APARTMENT BUILDINGS; 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.

ORDINANCE SECOND READING

12. SAFE AND SECURE SELF STORAGE AT STUART CPUD MINOR AMENDMENT (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2430-2020; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING A MINOR AMENDMENT TO "SAFE AND SECURE SELF-STORAGE AT STUART" COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) AT 700 SW FEDERAL HIGHWAY; THEREBY AMENDING THE CONDITIONAL OF APPROVAL FOR THE ART COMPONENT, ACCEPTANCE OF MINOR AMENDMENTS TO THE SITE PLAN, LANDSCAPE PLAN, ARCHITECTURE AND FLOOR PLAN; AMENDING THE CONDITIONS OF DEVELOPMENT ACCORDINGLY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

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 regarding 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.*

DISCUSSION AND DELIBERATION

ADJOURNMENT

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Mary Kindel, City Clerk

Title of Item:

ARTS MOMENT - PRESENTATION OF THE 1895 CHURCH OF ART BY ROBERT AND OLGA HAMILTON

Summary Explanation/Background Information on Agenda Request:

Robert and Olga Hamilton are in the process of converting the oldest church in Stuart from a commercial property to residential, making it their home and a place of art to share with the community. This Arts Moment will include a photo presentation.

Funding Source:

N/A

Recommended Action:

Enjoy!

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Ryanne Cavo

Title of Item:

VIETNAM VETERANS DAY - MARCH 29, 2020

Summary Explanation/Background Information on Agenda Request:

Vietnam Veterans Day presents the opportunity for the citizens of the City of Stuart to honor and thank our Vietnam veterans for their service to our country.

Funding Source:

N/A

Recommended Action:

Issue the Proclamation.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Proclamation - Vietnam Veterans Day 3-29-20	2/26/2020	Proclamation

PROCLAMATION
VIETNAM VETERANS DAY
MARCH 29, 2020

WHEREAS, it is an honor to recognize the many veterans who have made countless sacrifices for Florida families; Vietnam veterans contribute to our city, state and nation by offering skills, education, leadership, and dedication learned in military service; and

WHEREAS, more than 58,000 service members made the ultimate sacrifice during the Vietnam War, 304,000 were wounded, and 1,253 remain missing in action; the families and friends of missing service members continue to endure uncertainty concerning the fate of their loved ones who remain unaccounted for; and

WHEREAS, the State of Florida is home to more than 519,000 Vietnam-era veterans; and

WHEREAS, we can never fully repay our debt of gratitude to those brave men and women who served, were wounded, or died in battle; and

WHEREAS, Vietnam Veterans Day presents the opportunity for the citizens of the City of Stuart to honor and thank our Vietnam veterans for their service to our country.

NOW, THEREFORE, I, MICHAEL J. MEIER, Mayor of the City of Stuart, Florida do hereby proclaim March 29, 2020, as

VIETNAM VETERANS DAY

in the City of Stuart, Florida and encourage residents to thank and honor our Vietnam veterans and their families for their service and sacrifice to our country.

IN WITNESS WHEREOF, I have set my hand and caused the seal of the City of Stuart, Florida to be affixed this _____ day of March, 2020.

_____
MICHAEL J. MEIER
MAYOR

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** R. Cavo

Title of Item:

2020 CENSUS PARTNERSHIP

Summary Explanation/Background Information on Agenda Request:

The City of Stuart is resolved to ensure that every person residing within its borders is counted in the 2020 Census.

Funding Source:

N/A

Recommended Action:

Issue the Proclamation

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Proclamation - 2020 Census Partnership	1/17/2020	Proclamation

PROCLAMATION
2020 CENSUS PARTNERSHIP

WHEREAS, the U.S. Census Bureau, under requirements prescribed by Article 1, Section 2 of the United States Constitution, will conduct its decennial count of the U.S. population for the year 2020 thereby influencing the very future of our democratic society; and

WHEREAS, census data is a determining factor for the apportionment of seats for each state in the U.S. House of Representatives, and is necessary for the accurate and fair redistricting of the state legislature, county and municipal offices, and voting districts; and

WHEREAS, state and federal funding is allocated to communities, and critical decisions are made on matters of national and local importance based, in part, on information obtained from census data; and

WHEREAS, information from the 2020 Census and American Community Survey (ACS) are vital tools for public officials, planners, and entrepreneurs in assessing the past and planning the future; the information collected by the census is confidential and protected by law; and

WHEREAS, the City of Stuart is resolved to ensure that every person residing within its borders is counted in the 2020 Census; and

WHEREAS, a united voice from businesses, government, community and faith-based organizations, educators, the press, and others will enable the 2020 Census to reach more households and persons.

NOW, THEREFORE, I, Michael J. Meier**,** as Mayor of the City of Stuart, Florida do hereby proclaim that the City of Stuart supports the U.S. Census Bureau and the State of Florida in their efforts and will:

1. Support the goals and ideals for the 2020 Census and will disseminate 2020 Census information.
2. Encourage all city residents to participate in events and initiatives that will raise the overall awareness of the 2020 Census thereby increasing participation.
3. Provide Census advocates to speak to City and Community Organizations.
4. Support Census takers as they help our City complete an accurate count.
5. Strive to achieve a complete and accurate count of all persons residing within city limits.

IN WITNESS WHEREOF, I have hereto set my hand and caused the seal of the City of Stuart Florida to be affixed this 9th day of March, 2020.

_____

MICHAEL J. MEIER
MAYOR

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Ryanne Cavo

Title of Item:

GOVERNMENT FINANCE PROFESSIONALS WEEK - MARCH 16-20, 2020

Summary Explanation/Background Information on Agenda Request:

During this week, government finance professionals throughout the State of Florida will be acknowledged for their hard work, dedication and leadership.

Funding Source:

N/A

Recommended Action:

Issue the Proclamation

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Proclamation - Government Finance Professionals Week March 16-20, 2020	2/10/2020	Proclamation

PROCLAMATION
GOVERNMENT FINANCE PROFESSIONALS WEEK
MARCH 16-20, 2020

WHEREAS, the Florida Government Finance Officers Association (FGFOA) is a professional association founded in 1937 and serves more than 3,300 professionals from state, county and city governments, school districts, colleges and universities, special districts and private firms; and

WHEREAS, the FGFOA is dedicated to being your professional resource by providing opportunities through education, networking, leadership and information; and

WHEREAS, this inaugural Government Finance Professionals Week, sponsored by the FGFOA and all of its member governmental organizations, is a weeklong series of activities aimed at recognizing government finance professionals and the vital services that they provide to our state and our community; and

WHEREAS, during this week, government finance professionals throughout the State of Florida will be acknowledged for their hard work, dedication and leadership.

NOW, THEREFORE, I, MICHAEL J. MEIER, Mayor of the City of Stuart, Florida do hereby proclaim March 16-20, 2020, as

GOVERNMENT FINANCE PROFESSIONALS WEEK

in the City of Stuart, Florida and extend our appreciation to all government finance professionals throughout the state and here in the City of Stuart for their hard work, dedication and leadership.

IN WITNESS WHEREOF, I have set my hand and caused the seal of the City of Stuart, Florida to be affixed this 9th of March, 2020.

_____

MICHAEL J. MEIER
MAYOR

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Mary Kindel, City Clerk

Title of Item:

APPROVAL OF 02/24/2020 CCM MINUTES (RC)

Summary Explanation/Background Information on Agenda Request:

N/A

Funding Source:

N/A

Recommended Action:

Approve Minutes

ATTACHMENTS:

	Description	Upload Date	Type
🗋	02/24/2020 CCM Minutes	2/28/2020	Attachment

MINUTES
REGULAR MEETING OF THE STUART CITY COMMISSION
HELD February 24, 2020
AT 5:30 PM Commission Chambers
121 SW FLAGLER AVE.
STUART, FLORIDA 34994

CITY COMMISSION
Mayor Michael J. Meier
Vice Mayor Eula R. Clarke
Commissioner Becky Bruner
Commissioner Kelli Glass Leighton (ABSENT)
Commissioner Merritt Matheson

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

5:38 PM ROLL CALL

Present: Mayor Meier, Vice Mayor Clarke, Commissioner Bruner, Commissioner Matheson

Absent: Commissioner Glass Leighton

PLEDGE OF ALLEGIANCE

Mayor Meier recognized elected officials in the audience: former County Commissioner Elmira Gainey, current County Commissioner Stacey Hetherington, Village of Indiantown Councilwoman Jackie Clarke, and past City Commissioner and Mayor's Carol Waxler and Troy McDonald.

PROCLAMATIONS

1. BLACK HIV/AIDS AWARENESS DAY, FEBRUARY 7, 2020

Village of Indiantown Councilwoman, Jackie Clarke accepted the Proclamation and thanked the City for bringing awareness to this issue, announcing that we are all in this together.

PRESENTATIONS

2. FEBRUARY SERVICE AWARDS

Louis "Joly" Boglioli – 25 Years
David Dyess – 30 Years

3. EMPLOYEE OF THE MONTH - FEBRUARY 2020

Mike Woodside, Water Treatment Plant Team Leader II received this award in recognition for leading the team that recently won the Best Tasting Drinking Water in the State of Florida.

4. LAKE OKEECHOBEE (LOSOM) FEBRUARY UPDATE

Ben Hogarth, Community Services Communications Liaison, presented on the LOSOM Lake Okeechobee levels, current flow rates, and announced the next LOSOM web meeting on February 27th and a PDT meeting on March 31st in Okeechobee.

5:58 PM COMMENTS BY CITY COMMISSIONERS

Commissioner Matheson

- **Commented that he has been working with Ben Hogarth on historical facts on the River and has spoken with rangers in the Everglades. He provided an update on the flows.**
- **Announced upcoming events on March 7th, the Kiwanis Club will host Pancakes in the Park at 7 a.m. in Kiwanis Park and on that same day in Sewall's Point Park at 12 noon, the River Kidz will hold a family friendly no plastics event.**

Commissioner Bruner

- **No comments.**

Vice Mayor Clarke

- **Commented on her concern of the intersection at US1 and St. Lucie Crescent, feels perhaps something can be done for better pedestrian or bike safety and at US1 and the cut-off road shrubbery needs to be kept low.**
- **Feb. 28th, there will be an event at Murray Middle School at 6 p.m. in honor of Black History Month.**
- **Attended the School Board Meeting last week and announced that the Boys and Girls Club is now in the City along the MLK Blvd. area.**
- **Attended the East 10th Street Heritage Festival last weekend, commented on the concrete area and wants the City to be sure that when being used, it is safe.**
- **Commented on a public involvement program for the consultant process for the community.**
- **Announced Historic Preservation Month in May, working with Minister at Mount Calvary Missionary Baptist Church for a ribbon cutting ceremony.**

- **Moore's Cemetery**

Mayor Meier

- **Pulled Item #10 from Consent calendar.**
- **Commented on his recent trip to Tallahassee and reviewed his meetings with various representatives, provided a brief update on the Short-Term Rental Bill.**

Vice Mayor Clarke requested to pull Item #11 for additional public explanation.

COMMENTS BY CITY MANAGER

City Manager David Dyess

- **Announced that on Wednesday, February 26th Community Services staff and the Florida Festivals and Events Assoc. is holding an open session in the Commission Chambers from 9 to 10 a.m. about Sustainability Events.**
- **Congratulated the Public Worked Department on the final phase of the septic to sewer program, the 10-year program is complete in 8 years.**

APPROVAL OF AGENDA

6:10 PM MOTION: To approve the agenda.
Moved by: Commissioner Matheson
Seconded by: Vice Mayor Clarke
Motion passed unanimously.

COMMENTS FROM THE PUBLIC (5 min. max)

1) **William Rudge – Palm City Road; Read what he stated was an excerpt from an email sent to Caryn Yost-Rudge in 2009.**
2) **Jack Iarrogino – MLK Blvd.; Commented on a concern of concrete missing from the sidewalk on the corner of Delaware St. and MLK Blvd., needs cone or tape for safety. Palm Beach Road bike lanes should have reflective markings.**
3) **David Keyes – Winter Haven Ct.; Resident of Springtree and realtor, concerned about the property values of the Springtree homes.**
4) **Caryn Hall Yost-Rudge; Palm City Road; Concerned about leadership as the property on Palm City Rd. is violating code and she wants to clean it up.**

CONSENT CALENDAR

5. APPROVAL OF 01/27/2020 CCM AND 02/10/2020 CCM MINUTES

6. AMENDMENT TO APPENDIX A OF THE CITY'S CODE OF ORDINANCES:

RESOLUTION No. 20-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA ADOPTING APPENDIX "A" BY AMENDING CHAPTER 10, CHAPTER 12, CHAPTER 34. CHAPTER 36, AND CHAPTER 42 OF THE CITY'S CODE OF ORDINANCES, AND PROVIDING AN EFFECTIVE DATE.

7. FLORIDAN AQUIFER TEST PRODUCTION WELL FA-1:

RESOLUTION No. 23-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, RELATING TO THE DRINKING WATER STATE REVOLVING FUND LOAN PROGRAM; MAKING FINDINGS; APPROVING THE FORM AND AUTHORIZING EXECUTION OF THE LOAN AGREEMENT FOR CONSTRUCTION OF THE FLORIDAN AQUIFER TEST PRODUCTION W ELL FA-1 PROJECT; PROVIDING FOR CONFLICTS; SEVERABILITY, AND EFFECTIVE DATE.

8. LEASE AGREEMENT WITH WINDWARD MARINA STUART, LLC:

RESOLUTION No. 25-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA TO AUTHORIZE EXECUTION OF LEASE AGREEMENT BETWEEN THE CITY OF STUART AND W INDWARD MARINA STUART, LLC FOR A BOAT SLIP LOCATED AT 400 SW FEDERAL HIGHWAY, STUART; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

9. AWARD OF WORK FOR EAST STUART, PALM BEACH, POPPLETON SEW ER BASINS:

RESOLUTION No. 30-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA TO APPROVE THE AWARD OF WORK ORDER NO. 2019-300-W04, EAST STUART, PALM BEACH, POPPLETON SEWER BASINS TO THE LOWEST, MOST RESPONSIVE RESPONSIBLE BIDDER, FELIX AND ASSOCIATES, INC. PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

(PULLED) 10. SHEPARD PARK BOAT TRAILER PARKING FIND GRANT APPLICATION:

RESOLUTION No. 31-2020. A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE PUBLIC WORKS DEPARTMENT TO SUBMIT A GRANT APPLICATION FOR A WATERWAYS ASSISTANCE PROGRAM GRANT THROUGH THE FLORIDA INLAND NAVIGATION DISTRICT TO PROVIDE FUNDING FOR THE BOAT TRAILER PARKING AND STORMWATER IMPROVEMENTS AT SHEPARD PARK; PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

(PULLED) 11. RFP #2020-100, DESIGN OF GUY DAVIS COMMUNITY PARK IMPROVEMENTS:
RESOLUTION No. 32-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA REQUESTING AUTHORIZATION TO ENTER NEGOTIATIONS FOR THE DESIGN OF GUY DAVIS COMMUNITY PARK IMPROVEMENTS TO THE TOP RANKED FIRM, CALVIN, GIORDANO & ASSOCIATES, INC. OF PORT SAINT LUCIE, FLORIDA PURSUANT TO RFP #2020-100; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

END OF CONSENT CALENDAR

6:25 PM MOTION: Move approval of the Consent Agenda as published and pulling Items #10 and 11.
Moved by: Vice Mayor Clarke
Seconded by: Commissioner Matheson
Motion passed unanimously.

10. SHEPARD PARK BOAT TRAILER PARKING FIND GRANT APPLICATION:

RESOLUTION No. 31-2020. A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE PUBLIC WORKS DEPARTMENT TO SUBMIT A GRANT APPLICATION FOR A WATERWAYS ASSISTANCE PROGRAM GRANT THROUGH THE FLORIDA INLAND NAVIGATION DISTRICT TO PROVIDE FUNDING FOR THE BOAT TRAILER PARKING AND STORMWATER IMPROVEMENTS AT SHEPARD PARK; PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

Tim Voelker, Assistant Public Works Director and City Engineer came forward to review the grant requirements.

6:28 PM MOTION: Approve Item #10 on the Agenda.
Moved by: Commissioner Matheson
Seconded by: Commissioner Bruner
Motion passed unanimously.

11. RFP #2020-100, DESIGN OF GUY DAVIS COMMUNITY PARK IMPROVEMENTS:

RESOLUTION No. 32-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA REQUESTING AUTHORIZATION TO ENTER NEGOTIATIONS FOR THE DESIGN OF GUY DAVIS COMMUNITY PARK IMPROVEMENTS TO THE TOP RANKED FIRM, CALVIN, GIORDANO & ASSOCIATES, INC. OF PORT SAINT LUCIE, FLORIDA PURSUANT TO RFP #2020-100; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Vice Mayor Clarke noted that she would like staff to communicate between the community and company. City Manager Dyess agreed that communications will be important but this was only for negotiations at this time.

6:32 PM MOTION: Move approval.
Moved by: Vice Mayor Clarke
Seconded by: Commissioner Bruner
Motion passed unanimously.

COMMISSION ACTION

6:33 PM 12. URGING STATE ACTION TO ADDRESS THE PROLIFERATION OF SINGLE-USE PLASTICS:

RESOLUTION No. 33-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, URGING THE FLORIDA LEGISLATURE TO TAKE NECESSARY AND EXPEDIENT ACTION ADDRESSING THE PROLIFERATION OF SINGLE-USE PLASTICS INCLUDING RETAIL PLASTIC BAGS, AND THEIR SUBSEQUENT IMPACT TO BOTH THE ENVIRONMENT AND TO MARINE AND AQUATIC LIFE; FURTHER URGING THE FLORIDA LEGISLATURE TO ADOPT THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S FEBRUARY 1, 2010 RETAIL BAGS REPORT AND ASSOCIATED RECOMMENDATIONS REGARDING SINGLE-USE RETAIL PLASTIC BAGS; OPPOSING A CONTINUED STATE PREEMPTION OF LOCAL EFFORTS TO ADDRESS THE GROWING THREAT OF PLASTIC POLLUTION WITHIN LOCAL COMMUNITIES DUE IN PART TO STATE INACTION; DIRECTING THE CITY CLERK TO TRANSMIT A COPY OF THIS RESOLUTION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

6:35 PM MOTION: Move for approval.
Moved by: Vice Mayor Clarke
Seconded by: Commissioner Bruner
Motion passed unanimously.

ORDINANCE FIRST READING

13. STUART SPRINGTREE RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL):

ORDINANCE No. 2427-2020; 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 ASSIGNING A FUTURE LAND USE DESIGNATION OF "MULTI-FAMILY RESIDENTIAL" FOR THREE PARCELS EQUALING 13.59 ACRES ANNEXED BY ORDINANCE NO. 2352-2017, OWNED BY STUART 13 ACRES, LLC, TIERRA DEL LAGO, INC. AND STUART HARBOR MARINA AND YACHT CLUB, LOCATED WEST OF S.E. FEDERAL HIGHWAY, SOUTH OF S.E. HARRISON STREET, AND NORTH OF THE NATALIE ESTATES MOBILE HOME PARK WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE STUART–SPRINGTREE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF TWO HUNDRED EIGHTY (280) MULTI-FAMILY UNITS WITHIN SEVEN (7) INDIVIDUAL FOUR-STORY APARTMENT BUILDINGS; 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.

City Attorney Mortell reported that there is an Intervenor in this matter; therefore, three parties will participate in this hearing; the City of Stuart, the applicant, and Attorney David Earl on behalf of the Intervenor.

10 People sworn; Kevin Freeman and Tom Reetz of the Development Department, Shaun MacKenzie of MacKenzie Engineering, Jim Lott and Eric Hade of Waypoint REI, Michael Houston of HJA Design Studio, Howard Ehrsam of Bowman Consulting, David Earl of Ross Earl Bonan & Ensor, P.A., and Phil Jim Rusty, Environmental Planner. (1 Unknown)

Tom Reetz and Kev Freeman presented on the Springtree development, reviewing the terms of the Comprehensive Plan and Land Development Code; included were compatibility, access, traffic comments from the County, and desirable land use.

Terry McCarthy, Council to the Applicant, addressed the Commission to report on the team of developers that were in attendance and available to discuss the project. They have meet with the owners at a Town Hall Meeting as well as gone before the Local Planning Agency.

Michael Houston, HJA Design Studio, planner and landscape architect, presented the Springtree site plan including landscaping and development, site access, and sidewalks.

Jim Lott, Waypoint Investments, came forward and spoke about Waypoint and the design of the project.

Intervenor Attorney, David Earl, presented with a Power Point on the Springtree Property Owners Association and asked the City to consider the information included in the presentation such as height, buffering, density, safety, and parking.

Sean McKenzie, McKenzie Engineering, discussed the possibility of a traffic signal and the option of one or two accesses.

8:43 PM Public Comment:

1) **Stacey Hetherington – Akron Ave.; Martin County Commissioner District representative. Commented on the residents concerns and feels traffic calming is an issue with this project, which she as their District 2 County Commissioner, has zero funding to address traffic calming issues in that neighborhood.**
2) **Renee Hardie – Winter Haven Ct.; Lives in Springtree and opposed to the Project, particularly the height.**
3) **Alek Loudakis – Winter Haven Ct.; Lives in Springtree and opposed to the Project, topic has raised stress levels in community.**
4) **Mark O'Quinn – Winter Haven Ct.; Not opposed to development but feels this 4-story development stands out like a "sore thumb", asks commissioners to go out and look at the property before making decision.**
5) **Melissa Iemmolo - Harrison St.; Coral Gardens resident, opposed to the project, commented not opposed to growth but it's too big, feels it's not compatible with the area. the project.**
6) **Ray Hardisky – Harrison St.; Opposed to the project because of 4-stories and feels Alden St. will not handle the added traffic.**

7) **William Bowman – Winter Haven Ct.; Opposed to the project, commented that it is not compatible in the area.**
8) **Suzanne Bowman – Winter Haven Ct.; Resident of Springtree and is opposed to the project, has met with realtors who have stated that this project would harm her property value.**
9) **Ginny Sherlock – Madison Ave; Commented on the intentions of the commission and suggested changes such as limitations to the height, increase the buffer, ensure adequate access, and change the development name, feels the project is not ready for a vote at this time.**
10) **Helen McBride – Flamingo Ave.; In support of the Springtree project as more housing is needed.**

Mayor Meier remarked on the use of our land and the difficulty of this decision, but feels it is owed to the current and future community and environment, to make the most efficient use of it as possible. To lower the building height would increase the cost per unit. Commented on the need for housing.

Vice Mayor Clarke asked the City Attorney if there were any comparisons in the code that lead to closer compatibility that what was in the staff report.

City Attorney Mortell stated that by the time a project makes it on the agenda for commission review, it has already been reviewed by the Planner and Development Director and has been verified to meet code.

Commissioner Matheson commented that he feels this project is being rushed.

9:32 PM MOTION: Table this until the next meeting.
Moved by: Commissioner Matheson
Seconded by: Vice Mayor Clarke
Motion passed unanimously.

Matheson's noted preferences: reducing size to 270 units, irregular lake, lighting description, buildings reduced to 3 stories, sidewalks, entrance landscaping, and traffic calming.

14. SAFE AND SECURE SELF STORAGE AT STUART CPUD MINOR AMENDMENT (QUASI-JUDICIAL):

ORDINANCE No. 2430-2020; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING A MINOR AMENDMENT TO "SAFE AND SECURE SELFSTORAGE AT STUART" COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) AT 700 SW FEDERAL HIGHWAY; THEREBY AMENDING THE CONDITIONAL OF APPROVAL FOR THE ART COMPONENT, ACCEPTANCE OF MINOR AMENDMENTS TO THE SITE PLAN, LANDSCAPE PLAN, ARCHITECTURE AND FLOOR PLAN; AMENDING THE CONDITIONS OF DEVELOPMENT ACCORDINGLY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

5 People sworn; Kevin Freeman and Stephen Mayer of Development Department, Todd Troxell of HJA Design Studio, Robert Doster of Stuart Self Storage, LLC and Brandon Ulmer of Thomas Engineering Group.

Stephen Mayer briefly presented on the Safe and Secure Storage Project showing the most recent minor changes to the units and landscaping.

Todd Troxell, HJA Design Studio, came forward to propose the public art that would be visible from Palm City Road, surrounded by landscaping and lighting.

9:53 PM MOTION: Move to approve Ordinance 2430-2020.
Moved by: Commissioner Bruner
Seconded by: Vice Mayor Clarke
Motion passed unanimously.

ORDINANCE SECOND READING

15. REZONING FOR DOLPHIN DRIVE - MEDALIST BUILDING GROUP:

ORDINANCE No. 2428-2020; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, REZONING FROM COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) TO SINGLE FAMILY GENERAL (R-1) ON THE CITY'S OFFICIAL ZONING MAP FOR PROPERTY TOTALING 0.42 ACRES, OW NED BY MEDALIST BUILDING GROUP, LLC LOCATED ON THE NORTHEAST CORNER OF SE DOLPHIN DRIVE AND SE 5TH STREET; BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; DECLARING THE PROJECT TO BE CONSISTENT W ITH 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, PROVIDING FOR ACCEPTANCE BY THE APPLICANT AND FOR OTHER PURPOSES.

Stephen Mayer, Senior Planner announced the conditions directed by the Commission at First Reading to ensure the water and FPL installation was settled at the applicable properties, added recommended language onto Section 7.

City Attorney suggested language to clarify proper utilities and FPL installation, "Prior to the execution and recording of this ordinance by the City, the owner shall provide verification from FPL and the City Utilities to the City that the proper City water Utilities and FPL connections have been installed."

10:00 PM MOTION: Move Ordinance No. 2428-2020 for approval with the added FPL language from our council.
Moved by: Commissioner Bruner
Seconded by: Vice Mayor Clarke
Motion passed unanimously.

16. THE INDUSTRIAL PARK AT AVONLEA MINOR IPUD AMENDMENT (QUASI-JUDICIAL):

ORDINANCE No. 2429-2020; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING A MINOR AMENDMENT TO "THE INDUSTRIAL PARK AT AVONLEA" INDUSTRIAL PLANNED UNIT DEVELOPMENT (IPUD) ON PROPERTY LOCATED ON THE SOUTH CORNER OF SR 707 AND SAVANNAH ROAD; THEREBY AMENDING THE ARCHITECTURAL GUIDELINES OF THE BUILDINGS FACING SAVANNAH ROAD; AMENDING THE CONDITIONS OF DEVELOPMENT ACCORDINGLY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

10:03 PM MOTION: Approval for Ordinance No. 2429-2020.
Moved by: Commissioner Bruner
Seconded by: Vice Mayor Clarke
Motion passed unanimously.

DISCUSSION AND DELIBERATION

10:03 PM ADJOURNMENT

Mary R. Kindel, City Clerk **Michael J. Meier, Mayor**

Minutes to be approved at the Regular Commission Meeting this 9th day of March, 2020.

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** jchrulski

Title of Item:

ANNUAL CHILDREN'S SERVICES COUNCIL GRANT APPLICATION (RC):

RESOLUTION No. 34-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE APPLICATION, AS THE LEAD AGENCY, WITH THE CHILDREN'S SERVICES COUNCIL OF MARTIN COUNTY FOR THE EAST STUART YOUTH INITIATIVE; IF APPROVED, AUTHORIZING THE ACCEPTANCE AND EXPENDITURE OF THIS GRANT, AND EMERGENCY FUNDING, PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

Request to apply and expend for annual Children's Services Grant (CSC) in the amount of $323,820 for the East Stuart Youth Initiative program.

Funding Source:

Children's Services Grant (CSC). This item has been adopted in the FY20 budget.

Recommended Action:

Approve R34-2020

ATTACHMENTS:

Description	Upload Date	Type

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Pinal Gandhi-Savdas

Title of Item:

FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY (FDEO) COMMUNITY DEVELOPMENT BLOCK GRANTS (CDBG) (RC):

RESOLUTION No. 35-2020; A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM AND ECONOMIC DEVELOPMENT PROGRAM AND ESTABLISH A REQUEST FOR PROPOSAL TO HIRE A CONSULTANT FOR COMMUNITY DEVELOPMENT BLOCK GRANT WRITING AND GRANT ADMINISTRATION SERVICES; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

The Community Development Block Grant (CDBG) is a federal grant program that provides funding for a variety of projects and programs to serve low- and moderate-income residents and areas.

The City is considering applying for the Florida Department of Economic Opportunity (FDEO) for one or more Small Cities Community Development Block Grants (CDBG) for up to Seven Hundred Fifty Thousand Dollars ($750,000.00) in the Regular (Neighborhood or Housing or Commercial) Category and in the Economic Development Category for up to one million five- hundred thousand ($1,500,000) or more. These funds must be used for one of the following purposes:

1. To benefit low- and moderate- income persons; or
2. To aid in the prevention or elimination of slums or blight; or
3. To meet other community development needs of a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community

The categories of activities for which these grant funds may be used are in the areas of housing, neighborhood revitalization, commercial revitalization and/or economic development. Specific improvements can include such activities as acquisition of real property, construction of public infrastructure such as roads, parks or sewer mains, rehabilitation of houses and commercial buildings and/or energy conservation.

Due to the complexities and depth of the grant application and grant administration, the City will be seeking grant writing, planning and grants administration including grant and contract management through a Request for Proposal (RFP) process.

Payment of funds for grant writing and grant administration services is contingent on receiving the grant. Typically, the firm earns percentage of the amount awarded in the grant.

There is a match requirement to receive the maximum of 25 points for matching contribution on the CDBG application. Staff will be requesting a CRA budget amendment to appropriate TIF funding in the amount of $50,000 as a match if the board authorizes to apply for the CDBG grant.

There will be two public meetings scheduled to receive input from residents concerning the community's economic and community development needs.

Funding Source:

N/A

Recommended Action:

Approve Resolution No. 35-2020.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Resolution No. 36-2020 Authorization to apply for CDBG and establish a RFP	2/27/2020	Resolution add to Y drive
🗋	Public Hearing Notice	2/27/2020	Resolution add to Y drive

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

RESOLUTION NUMBER 35-2020

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA AUTHORIZING THE CITY MANAGER TO APPLY FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM AND ECONOMIC DEVELOPMENT PROGRAM AND ESTABLISH A REQUEST FOR PROPOSAL TO HIRE A CONSULTANT FOR COMMUNITY DEVELOPMENT BLOCK GRANT WRITING AND GRANT ADMINISTRATION SERVICES; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City of Stuart is interested in applying for the Florida Department of Economic Opportunity (FDEO) for one or more Small Cities Community Development Block Grant (CDBG) for up to $750,000 in the Regular (Neighborhood and Housing or Commercial) Category and in the Economic Development Category for up to $1,500,000.

WHEREAS, the grant funds may be used for housing, neighborhood revitalization, commercial revitalization and/or economic development.

WHEREAS, the funds shall benefit low-to moderate- income persons; prevent or eliminate slum and blight conditions; or meet other 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, a match is required in the amount of $50,000 to receive the maximum points for a matching contribution on the CDBG application.

WHEREAS, the CDBG grant is intended to benefit the low- and moderate-income residents by providing funding assistance to improve housing, the living environment, and economic opportunities.

WHEREAS, the City is in need of professional services for grant writing, planning and grants administration including grant and/or contract management on a consultant basis in order to secure the grant.

WHEREAS, the City Commission believes it is in the best interest of the City of Stuart to pursue consultant through the Request for Proposal and authorize them to apply for the Community Development Block Grant.

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 seek grant writing and grant administration service for the Community Development Block Grant.

SECTION 2: Further staff is authorized to pursue the Community Development Block Grant for housing, neighborhood revitalization, commercial revitalization and/or 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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED this _____ day of _____, 2020.

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL MORTELL
CITY ATTORNEY

FIRST PUBLIC HEARING NOTICE
FFY 2019-20 COMMUNITY DEVELOPMENT BLOCK GRANTS

The City of Stuart is considering applying to the Florida Department of Economic Opportunity (FDEO) for one or more Small Cities Community Development Block Grants (CDBG) for up to Seven Hundred Fifty Thousand Dollars ($750,000.00) in the Regular (Neighborhood or Housing or Commercial) Category and in the Economic Development Category for up to one million five-hundred thousand ($1,500,000) or more. These funds must be used for one of the following purposes:

1. To benefit low- and moderate- income persons; or
2. To aid in the prevention or elimination of slums or blight; or
3. To meet other community development needs of a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community

The categories of activities for which these grant funds may be used are in the areas of housing, neighborhood revitalization, commercial revitalization and/or economic development. Specific improvements can include such activities as acquisition of real property, construction of public infrastructure such as roads, parks or sewer mains, rehabilitation of houses and commercial buildings and/or energy conservation. Additional information regarding the range of activities that may be undertaken will be provided at the public hearing. **The City is seeking public input into CDBG eligible needs in the City limits. The categories and options shall be presented to the public and Commission, and public comments heard before the recommendations of staff or consultants may be heard.**

In developing an application for submission to FDEO, the City of Stuart must plan to minimize displacement of persons as a result of planned CDBG activities. In addition, the City of Stuart is required to develop a plan to assist displaced persons.

The public hearing to receive citizen views concerning the community's economic and community development needs will be held at the City Hall, 121 SW Flagler Ave., Stuart, Florida on **Monday, March 23, 2020 at 5:30 p.m.,** or as soon thereafter as possible. For information concerning the public hearing or to submit written comments contact Ms. Pinal Gandhi-Savdas, CRA Administrator, at phone: (772) 283-2532 or email: pgandhi@ci.stuart.fl.us.

NOTICE: A SHORT FAIR HOUSING TRAINING FOR LOCAL OFFICIALS AND THE PUBLIC WILL BE HELD JUST AFTER THE PUBLIC HEARING. ANYONE INTERESTED IN FAIR HOUSING IS INVITED TO ATTEND.

In compliance with the Americans with Disabilities Act (ADA), anyone who needs a special accommodation for 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.

Fair Housing/Disability Access Jurisdiction and Equal Opportunity Employer

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To be advertised March 12, 2020 (or at least 5 days prior to meeting, but no greater than 20 days prior to the meeting, not including the day of the meeting)

PLEASE PROVIDE CERTIFICATION OF PUBLICATION IMMEDIATELY FOLLOWING PUBLICATION

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Stephen Mayer

Title of Item:

INTENTION TO ABANDON A PORTION OF OSCEOLA STREET RIGHT-OF-WAY (RC):

RESOLUTION No. 16-2020; 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 23, 2020, AND APRIL 13, 2020, AT 5:30 P.M. IN THE CITY COMMISSION CHAMBERS TO CONSIDER THE ABANDONMENT OF A 50' WIDE PUBLIC RIGHT-OF-WAY WITHIN THE CITY, BEING THE PORTION OF S.E. OSCEOLA STREET, MORE CLEARLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

The applicant, Richard Baron, owner of real property at 181 SE Monterey Avenue, has requested the abandonment of a 50-foot unutilized portion of Osceola Street public Right-of-Way. The 50-foot right of way is located north of 181 SE Monterey Avenue, east of Monterey Road and between PCN# 02-38-41-001-003-00150-1 and 03-38-41-006-006-00010-7.
The City's Public Works Department has determined that the use of the Right of Way 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 $26,000.

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 $26,000, prior to the abandonment of the City's interest.

The procedure for abandonment of City owned Right-Of-Way is set out in Section 36-3 of The City's Code of Ordinances which requires the city commission to first pass a resolution declaring intent to abandon right-of-way.

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:

Move to approve Resolution No.16-2020, declaration of intent to abandon certain Right-of-Way within the City's limits.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Resolution 16-2020	2/27/2020	Resolution add to Y drive
🗋	Sketch of Right of Way	2/27/2020	Exhibit
🗋	Krueger Park Plat	2/27/2020	Attachment

Return to:

City Attorney's Office
City of Stuart
121 SW Flagler Street
Stuart, FL 34994

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

RESOLUTION NUMBER 16-2020

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 23, 2020, AND APRIL 13, 2020, AT 5:30 P.M. IN THE CITY COMMISSION CHAMBERS TO CONSIDER THE ABANDONMENT OF A 50' WIDE PUBLIC RIGHT-OF-WAY WITHIN THE CITY, BEING THE PORTION OF S.E. OSCEOLA STREET, MORE CLEARLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FOR OTHER PURPOSES.

* * * * * * *

WHEREAS, the City has received a petition for abandonment relating to the public right-of-way described below that conforms to the requirements of Chapter 36 of the Code of Ordinances of the City of Stuart, Florida.

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

SECTION 1: The purpose of this resolution is to state the intention of the City Commission to abandon a portion of public right-of-way and to set public hearings before the City Commission at its regular meeting on March 23, 2020 and April 13 2020 at 5.30 p.m. in the City Commission Chambers to consider the abandonment of the subject property within Martin County, Florida:

SECTION 2: A legal description and sketch depicting the subject right-of-way are attached hereto

as Exhibit "A".

SECTION 3: This resolution shall take effect upon adoption.

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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED this ___ day of _____, 2020.

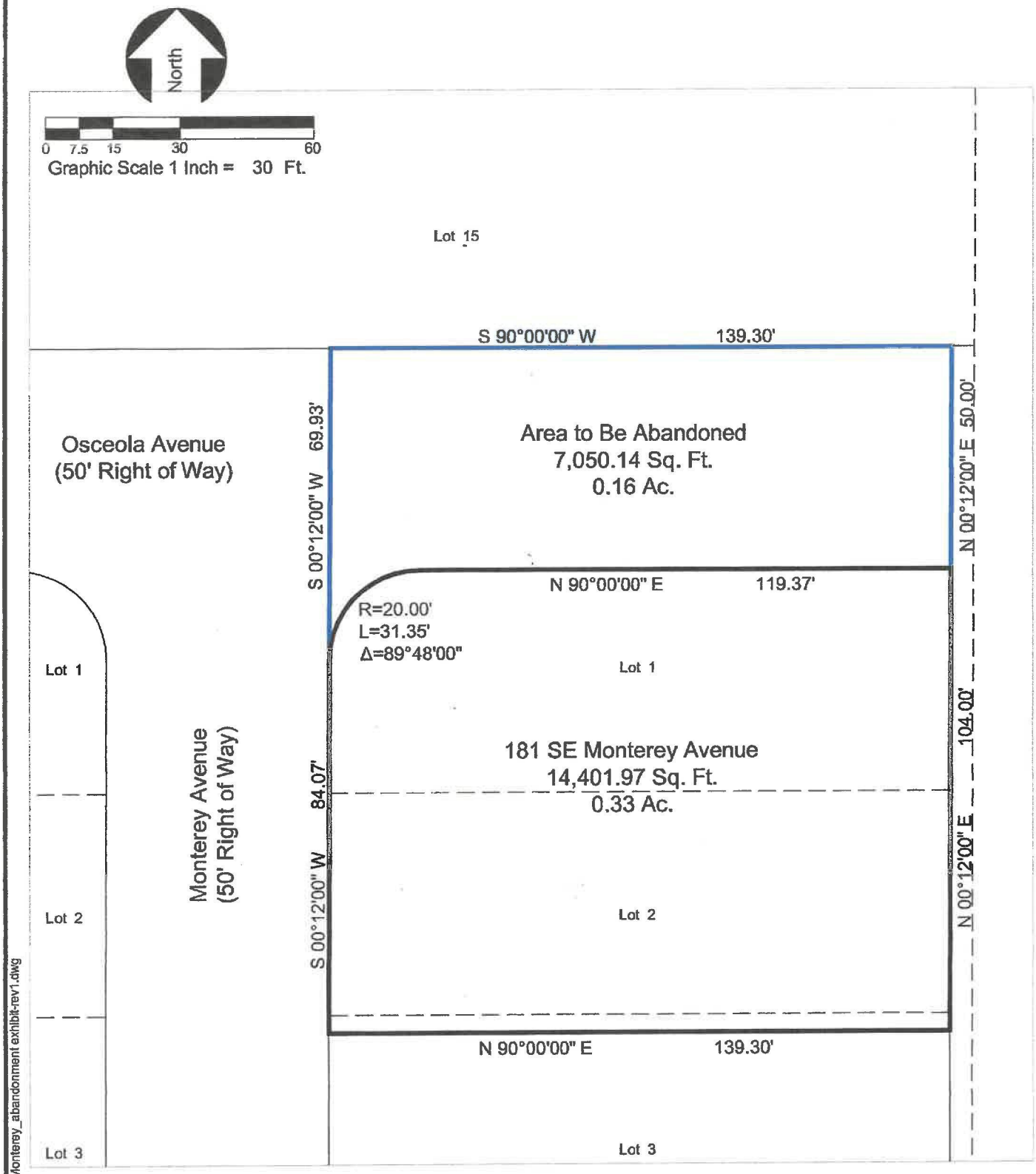
ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL
CITY ATTORNEY



Baron-Monterey_abandonment exhibit-rev1.dwg

SOUTH POINT
LAND COMPANY
CONSULTING • LAND PLANNING
GEOGRAPHIC INFORMATION SYSTEMS
163 S. SEWALL'S POINT ROAD
STUART, FL 34996
(772) 528-4137 FAX (772) 600-4550

Richard Baron

Right-of-Way Abandonment Exhibit

181 SE Monterey Avenue

Stuart, Florida 34996

12.18.2012

SHEET 1 OF 1

KRUEGER PARK

STUART, FLORIDA

MARTIN COUNTY

STATE OF FLORIDA } ss
COUNTY OF MARTIN }
This instrument was filed for Record at 2:30 P.M. this 9 day of Jan. 1926 and duly recorded on the 6th day of January 1926 in Book 1 of Plats on Page 25, Record Verified

J.R. Emery
CLERK CIRCUIT COURT
By:
DEPUTY CLERK

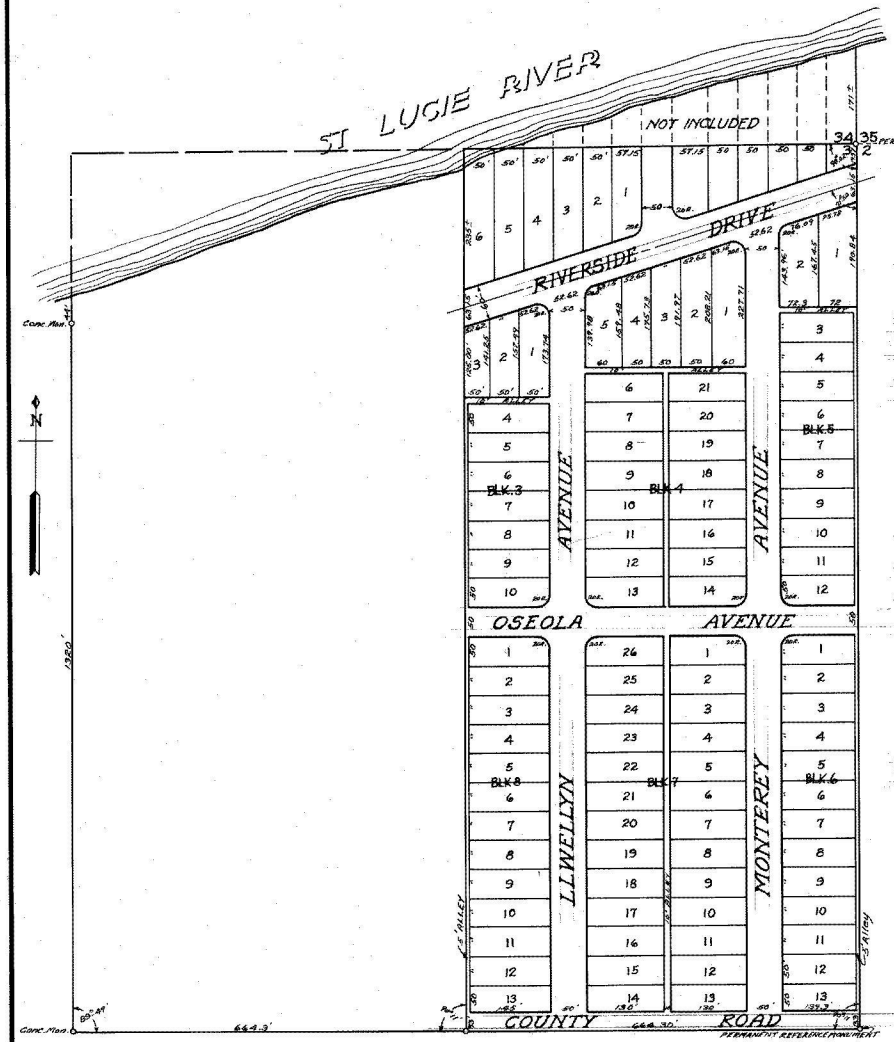
EXAMINED AND CHECKED AND RECOMMENDED FOR APPROVAL

R. T. Emery
STUART FLA. Dec. 30 1925 CITY ENGINEER

APPROVED AS RECOMMENDED
CHAIRMAN J. E. Taylor
STUART CITY COMMISSION
ATTEST
Florida H. S. Peirs
CITY CLERK

APPROVED John H. Rust
STUART FLA. January 6th 1926 COUNTY SURVEYOR MARTIN CO.

RECOMMENDED TO CITY COMMISION FOR APPROVAL
STUART FLA. Jan. 4th 1926 CITY PLAN BOARD
W. Kaspenwall
CHAIRMAN
W. J. Farley
SECRETARY



LOCATION

Being the Subdivision of the E½ of the N½ of government Lot #1, Section 3, Township 38 South, Range 41 East.

This is a true Copy of the Original Plat of Record of "KRUEGER PARK" Plat Book 1, Page 25, Martin County, Florida.

Joseph Frenlin
Registered Land Surveyor
Florida Certificate No. 665

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:-

That Albert P. Krueger and Karl Krueger, both single the fee simple owners of the above described land have caused said land to be surveyed and platted as shown hereon, according to the Engineers Certificate attached and does hereby dedicate to the perpetual use of the Public, the Roads and Streets shown hereon reserving unto themselves the reversions of same whenever discontinued by law.

In Witness Whereof the said Albert P. Krueger and Karl Krueger have signed these presents and affixed their seal this 13th day of June, A.D. 1925

Witness: K. E. Mitchard
J. P. Ward

Albert P. Krueger L.S.
Karl Krueger L.S.

ACKNOWLEDGEMENT

STATE OF FLORIDA
COUNTY OF MARTIN

Before me a Notary Public for the state of large personally appeared Albert P. Krueger and Karl Krueger to me well known and known to be the persons who signed the foregoing dedication.

In witness whereof I have set my hand and affixed my official Seal this 13th day of June, A.D. 1925.

A. J. Williams
Notary Public
My Commission Expires April 5th 1929

ENGINEERS CERTICATE

We certify that the location, measurements and angles of the boundary lines of the Plat shown hereon are taken from actual data found on the ground by Survey under our direction that the Subdivision into lots of the Plat shown, and as platted by the above mentioned survey was made under our direction and that the information shown hereon is true and accurate to the best of our knowledge and belief.

C. B. Barnett
Florida State Certificate No. 14

Subscribed and Sworn to before me this 13th day of June, A.D. 1925

A. J. Williams
Notary Public
My Commission Expires April 5th 1929

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Kev Freeman

Title of Item:

AMENDMENT TO CITY TREE REPLACEMENT CODE TO COMPLY WITH STATE STATUTE AND TO INCORPORATE INNOVATIVE STORMWATER DESIGN. (RC):

ORDINANCE No. 2432-2020; AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING CHAPTER V OF THE CITY'S LAND DEVELOPMENT CODE ENTITLED 'RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS' TO COMPLY WITH STATE STATUTE REGARDING TREE REMOVAL PERMITS AND TO PROMOTE INNOVATIVE STORMWATER TREATMENT AND LOW IMPACT DEVELOPMENT PRACTICES AND TO ALLOW THE CITY'S TREE REPLACEMENT FUND TO BE UTILIZED FOR INNOVATIVE STORMWATER TREATMENT SYSTEMS ON PUBLIC LANDS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

This amendment to the land development code sets out the following changes:

1. Compliance with HB1159 (adopted as Florida Statute Section 163.45) which prevents a municipality from requiring a tree removal permit on residential properties when an arborist or landscape architect provides documentation that the tree presents a danger to persons or property.

2. Promote the implementation of Innovative Stormwater Design. This amendment allows credits to the required tree mitigation to be allowed subject to the removal of certain percentages of Nitrates and Phosphates on site. The higher the amount of removal the higher the potential credit. The amount of credit is based on the probable cost of construction of the additional stormwater treatment installation.

3. Promote the use of Low Impact Development (LID) practices that incorporate practices such as bio-swales, rain gardens and pervious pavements. This amendment allows credits to the required tree mitigation. Reference material published by the University of Florida IFAS and entitled Field Guide to Low Impact Development (2008) is attached.

4. Promote additional tree canopy coverage by the use of shade trees within landscape design. This amendment allows credits to the required tree replacement fund based on the proportion of tree canopy coverage provided.

5. Promote a natural habitat environment by providing that additional inches required under the tree replacement calculation may be credited through the planting of native understory shrubs that are made in addition to landscaping code requirements. Credit is calculated based on shrub size.

6. Extend the use of the City's Tree Replacement fund to include potential use of the fund for innovative stormwater treatment and living shoreline projects within the City's right of way and City property.

This item was heard by the Local Planning Agency on February 20, 2020, and was recommended for approval The LPA had comments regarding the use of palms to replace slash pine. The ordinance has been amended to expand the potential to use additional trees and shrub species.

Funding Source:

N/A

Recommended Action:

Motion to Approve

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ord 2432-2020; Amendment to Tree Removal and Tree Replacement	2/27/2020	Ordinance add to Y drive
🗋	House of Representatives Memo HB1159	1/24/2020	Backup Material
🗋	Florida Statutes addopting HB 1159	3/2/2020	Backup Material
🗋	LID- IFAS Bio Swales	1/29/2020	Backup Material
🗋	LID- IFAS Bio Retention	1/29/2020	Backup Material
🗋	LID- IFAS Cisterns	1/29/2020	Backup Material
🗋	LID- IFAS Stormwater Basins	1/29/2020	Backup Material
🗋	LID- IFAS Exfiltration	1/29/2020	Backup Material
🗋	LID- IFAS Eco Roofs	1/29/2020	Backup Material
🗋	LID- IFAS Site Preparation	1/29/2020	Backup Material
🗋	LID- IFAS Permeable Surfaces	1/29/2020	Backup Material
🗋	LID- IFAS Resoure Efficiency	1/29/2020	Backup Material
🗋	LID- IFAS Moisture Sensors	1/29/2020	Backup Material
🗋	LID- IFAS Stormwater Reuse	1/29/2020	Backup Material

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2432-2020

AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING CHAPTER V OF THE CITY'S LAND DEVELOPMENT CODE ENTITLED 'RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS' TO COMPLY WITH STATE STATUTE REGARDING TREE REMOVAL PERMITS AND TO PROMOTE INNOVATIVE STORMWATER TREATMENT AND LOW IMPACT DEVELOPMENT PRACTICES AND TO ALLOW THE CITY'S TREE REPLACEMENT FUND TO BE UTILIZED FOR INNOVATIVE STORMWATER TREATMENT SYSTEMS ON PUBLIC LANDS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the purpose of this Land Development Code amendment is to support the objectives of the City's Comprehensive Plan to encourage Low Impact Development (LID) practices in development projects to reduce, treat, infiltrate, and manage runoff flows caused by storms, urban run-off and impervious surfaces; and

WHEREAS, the purpose of this Land Development Code amendment is to promote the implementation of innovative stormwater treatment methodologies on development sites, City property and within the City owned Right of Way; and

WHEREAS, the purpose of this Land Development Code amendment is to promote landscaping which supports a variety of native habitat and which promotes tree canopy coverage; and

WHEREAS, the purpose of this Land Development Code amendment is to comply with State Statute (HB1159) regarding issuance of tree removal permits; and

WHEREAS, the Land Planning Agency reviewed the proposed amendments to the Land Development Code at a public hearing on February 20th, 2020 and

WHEREAS, the City Commission duly scheduled, advertised, and held a public hearing on _____, 2020, to consider this ordinance and provide for full public participation in the Land Development Code amendment process.

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

SECTION 1: The Stuart Land Development Code is hereby amended as follows:

Chapter V - RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS

*****

Sec. 5.05.02. - Tree replacement and protection requirements.

A. *Historic trees and specimen trees.* Historic trees and specimen trees located within that portion of a development site to be developed shall be protected or replaced in accordance

with the following criteria. No historic or specimen trees shall be removed without a tree removal permit, unless:

a. The tree is located on residential property and an arborist or landscape architect has provided documentation that the tree presents a danger to persons or property; or

b. The removal is in conjunction with an approved development order where a tree survey was submitted.

B. If required ~~A~~ a tree removal permit must be issued by the city development department for work undertaken pursuant to this section. Application for such permit shall be on forms prescribed by the city development director. The fee for such permit shall be set by the city manager.

C. Specimen trees. Unless the Specimen tree is located on a residential property where an arborist or landscape architect provides documentation that the tree presents a danger to persons or property, then ~~All~~ all practical measures shall be taken to leave specimen trees in place and preserved within development sites.

a. Specimen trees within parking areas shall be preserved with tree wells or other appropriate measures, if practical. Any parking space requirement that would require the removal of a specimen tree may be waived by the city development director if no fewer than 90 percent of the required parking spaces will be provided. Otherwise, specimen trees shall be relocated within the development site.

b. Specimen trees within building envelopes or for which there is no practical alternative for preservation shall be relocated within the development site.

c. Specimen trees, excluding Slash Pine trees, for which relocation is not possible or is not expected to be successful, shall be replaced with like species within the development site. Replacement trees shall have a combined DBH of 2.5 times the DBH of the trees replaced. The minimum size for replacement trees is 4.5 inches DBH. Determination of the number of replacement trees or contribution to city tree fund shall be calculated in accordance with Table 1 below. Replacement trees shall be native to Florida or not documented as an invasive species.

d. Specimen trees, specifically and only Slash Pines, for which relocation is not possible or is not expected to be successful, shall be replaced with like species within the development site. Replacement trees shall have a combined DBH of 1.5 times the DBH of the trees replaced. The minimum size for replacement trees is 2.5 inches DBH. Determination of the number of slash pines or contribution to city tree fund shall be calculated in accordance with Table 1 below.

e. When not feasible to replant with like species of Slash Pine, replacement trees may be substituted with the following ~~palm~~ trees (or other approved native shade trees) on a 1:1 ratio:

- Alexander Palm.
- Coconut Palm.
- Chinese Fan Palm.
- Date Palm.

- Majesty Palm.
- Royal Palm.
- Christmas Palm.
- Washington Palm.

Shade Trees (may count towards canopy coverage calculations)

- American Holly
- Dahoon Holly
- Laurel Oak
- Live Oak
- Mahogany
- Red Bay
- Red Maple
- Slash Pine
- Southern Magnolia
- Sweet Bay
- Sweet Gum
- Sycamore
- Variegated Mahoe.

For every one foot of clear trunk of palm tree exceeding minimum palm tree size per section 6.04.02.A.2 and for each additional inch of DBH of canopy or specimen trees of the landscape code, credit will be given for one inch of replacement.

f. Additional preservation of native habitat beyond that required by section 5.04.00 may be substituted for a proportion of the tree replacement requirements of this section as approved by the city development director. Such preservation is additional to requirements for wetlands and preserve areas and shall include sufficient native trees to meet the DBH replacement requirements in subsection A.1.c of this section.

g. Credit towards tree replacement requirements shall be provided for landscaping required by section 6.04.00 only if all required trees are planted at a minimum DBH of 4.5 inches and all required palms are planted at a minimum of 14 feet clear trunk. If required trees or palms, as proposed for a development site in accordance with the landscape code, are planted at minimum landscape code requirements, then no credit is obtainable.

h. As determined by the city development director, monies may be contributed as part of tree replacement requirements. This tree replacement mitigation, through payment into the city tree replacement fund, shall only provide for a 50 percent mitigation of the required number of trees to be replaced. The city development director shall coordinate the recovery and disbursement of said funds in accordance with the general provisions of this chapter.

i. Innovative stormwater treatment design which is demonstrated to exceed water quality treatment above that required in section 6.03.00 and South Florida Water Management

District best management practice and reduces post-development stormwater pollutant loading of total nitrates and phosphates by 81 or more percent may be substituted for a proportion of the tree replacement fund payment in accordance with Table 2 of this section and as approved by the city development director.

j. Proposals that incorporate Low Impact Development (LID) practices that include, but are not limited to, a combination of sustainable drainage design, preservation of open space above code requirement, bio-swales and pervious pavement may be substituted for a proportion of the tree replacement requirements of this section and as approved by the city development director.

k. Proposals that demonstrate a tree canopy coverage greater than 30% of the site area may qualify for a reduction in a proportion of the City Tree Replacement Fund payment in accordance with the provisions of Table 3 of this section and as approved by the city development director. Tree canopy coverage is calculated as the area of shade generated by tree foliage at ground level.

l. Additional inches required under the tree replacement calculation may be credited through the planting of native understory shrubs that are made in addition to landscaping code requirements and listed here; credit will be at a proportion in accordance with Table 4 of this section and as approved by the city development director.

Native Shrub and Ground Cover List:

- Beach Sunflower
- Blue Eyed Grass
- Buttonwood
- Carolina Jessamine
- Cherry Laurel
- Cocoplum
- Coontie
- Coral Honeysuckle
- Cordgrass
- Dwarf Firebush
- Dwarf Schillings Holly
- Erect Swordfern
- Fakahatchee Grass
- Firebush
- Florida Privet
- Gallberry
- Lantana species
- Myrsine

- Periwinkle
- Pink Muhly
- Sand Cord Grass
- Shiny Blueberry
- Silver Buttonwood
- Simpson's Stopper
- Spider Lily
- Swamp Fern
- Swamp Lilly
- Trumpet Honeysuckle
- Walter's Virburnum
- Wax Myrtle
- Wild Allamanda

m. Relocated trees that do not survive at least two years shall, in turn, be replaced. A mechanism for financial assurance that relocated, and replacement trees will meet survival criteria shall be provided.

n. Wherever feasible, tree removal within single family and duplex properties shall substitute replacement trees with like species on a 1:1 ratio~~, if feasible~~.

Table 1

Proposed Formulas for Tree Replacement and Contribution into City 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

Table 2

Credit for providing additional Nitrate and Phosphate removal

Percentage of Nitrate and Phosphate loading reduction from stormwater	Maximum Pollutant Removal Factor for construction value of additional stormwater treatment[a]
81% to 85%	1.25
86% to 89%	1.5
90% +	2.0

Table 2 Notes:

a. The value of additional stormwater treatment measures as provided by an engineer's probable cost of construction is multiplied by the Pollutant Removal Factor to provide an equivalent $ amount, which may only be credited to offset all or part of the required City Tree Replacement fund.

Table 3

Credit for providing additional tree canopy

Total Site Tree Canopy Coverage	Maximum Credit Reduction to the required City Tree Replacement Fund
30% to 35%	15%
36% to 40%	30%
40% +	50%

Table 4

Credit for providing additional understory native planting

Size of Native Shrub	Maximum Credit Inches
1 Gallon Plant	1 inch per 24 plants
3 Gallon Plant	1 inch per 12 plants

(Ord. No. 1788-01, § 1, 6-25-01)

2. *Historic trees.* Unless the historic tree is located on a residential property where an arborist or landscape architect provides documentation that the tree presents a danger to

persons or property ~~A all historic trees located within a proposed site~~ the tree shall be preserved.

a. A site plan, development permit, or plat application shall indicate the preservation of all historic trees in all areas proposed for development. The site application shall indicate protective measures to ensure the preservation and longevity of all historic trees, such as tree wells, construction barricades or fencing, or relocation.

b. Any parking space requirement or building envelope which would require the removal of a historic tree may be waived by the city development director if no fewer than 90 percent of the required parking spaces are provided.

In the event no practical alternative exists to locating structures on the site so as to accommodate a historic tree, the applicant for development may submit for major development plan approval or planned unit development (PUD) to consider the removal and replacement of the historic tree. The city commission shall be guided by a consideration of the environmental as well as aesthetic and economic value of the historic tree to be replaced in deciding the appropriate means and manner of its removal and replacement.

c. Wherever feasible, tree removal within single family and duplex properties shall substitute replacement trees with like species on a 1:1 ratio~~, if feasible~~.

(Ord. No. 2165-08, § 2, 11-24-08)

*****

Sec. 5.05.07. - City tree replacement fund.

A. *Establishment of the city tree replacement fund.* The city tree replacement fund is created in association with the City of Stuart department of financial services for the purpose of accepting and disbursing payments made to the city as part of tree replacement mitigation and other monies deposited from penalties for tree removal, illegal grading, or illegal clearing. These monies shall be placed in an account and shall be used for funding tree planting and replacement on private or public property within the city, exotic vegetation removal and native habitat enhancement on private or public property within the city, acquisition of land within the city for preservation purposes, matches for habitat management related grants.

B. *Term of existence.* The city tree replacement fund account shall be self-perpetuating from year to year unless specifically terminated by the city commission.

C. *Purpose.* Funds received shall be utilized for acquiring and planting trees for public purposes within the city or for creating innovative stormwater treatment systems or living shoreline installations within public lands. Acquired trees shall be suitable to the site conditions and listed within the city tree list. Public lands selected for plantings, living shoreline installations or innovative stormwater treatment systems shall be publicly owned or managed lands in public right-of-way.

D. *Source of funds.* Fund monies may consist of the following:

1. All monies collected pursuant to the penalties outlined in section this Code and the Code of Ordinances.
2. All monies collected as part of tree replacement mitigation allowances.

E. *Fund administration.*

1. Funds shall be expended, utilized and disbursed only for the purposes designated herein.
2. The fund shall be a separate set of self-balancing accounts established and maintained by the City of Stuart.
3. Funds shall be managed in accordance with the city's Code of Ordinances as they relate to financial matters.
4. Monies obtained pursuant to this section may be accepted on behalf of the City of Stuart by the city development director or their designee, and upon receipt shall be delivered to the City of Stuart department of financial services, which shall cause the same to be credited to the trust.

(Ord. No. 1788-01, § 1, 6-25-01; Ord. No. 1966-04, § 2, 1-26-04; Ord. No. 2165-08, § 2, 11-24-08)

SECTION 2: All ordinances or parts of ordinances herewith are hereby repealed to the extent of such conflict.

SECTION 3: 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 4: The provision of Sections 1 of this ordinance shall be codified.

SECTION 5: This ordinance shall take effect upon adoption

Passed on first reading the ___ day of _____, 2020

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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				

KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				
REBECCA S. BRUNER, COMMISSIONER				

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL
CITY ATTORNEY

2432-2020

The Florida House of Representatives

Office of the Speaker

MEMORANDUM

To: Local Government Officials

From: Jose R. Oliva, Speaker
Florida House of Representatives

Date: January 07, 2020

Re: Private Property Rights, Chapter 2019-155, Laws of Florida

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Please take note of legislation passed in the 2019 session and signed into law by Governor Ron DeSantis. CS/HB 1159 prohibits a local government from requiring a notice, application, approval, permit, fee, or mitigation for the pruning, trimming, or removal of a tree on residential property when an arborist or landscape architect documents that the tree presents a danger to persons or property.

Continued enforcement of local regulations in conflict with this provision will constitute illegal requirements under this new law. I strongly encourage you to review your local ordinances that may restrict property owners' ability to remove or prune trees. Staff of the House of Representatives are available to discuss any questions you may have about the bill.

Please expect the House to be diligent in executing its oversight responsibilities in order to protect the rights of property owners and prevent any illegal governmental actions that interfere with these rights.

Thank you for your attention to this important issue.

RECEIVED
JAN 21 2020
CITY OF STUART-CITY MGR.

An act relating to private property rights; creating s. 163.045, F.S.; prohibiting local governments from requiring notices, applications, approvals, permits, fees, or mitigation for the pruning, trimming, or removal of trees on residential property if a property owner obtains specified documentation; prohibiting local governments from requiring property owners to replant such trees; providing an exception for mangrove protection actions; amending s. 163.3209, F.S.; deleting a provision that authorizes electric utilities to perform certain right-of-way tree maintenance only if a property owner has received local government approval; creating s. 70.002, F.S.; creating a Property Owner Bill of Rights; requiring county property appraisers to provide specified information on their websites; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Section 163.045, Florida Statutes, is created to read:

163.045 Tree pruning, trimming, or removal on residential property.—

CODING: Words ~~stricken~~ are deletions; words underlined are additions.

(1) A local government may not require a notice, application, approval, permit, fee, or mitigation for the pruning, trimming, or removal of a tree on residential property if the property owner obtains documentation from an arborist certified by the International Society of Arboriculture or a Florida licensed landscape architect that the tree presents a danger to persons or property.

(2) A local government may not require a property owner to replant a tree that was pruned, trimmed, or removed in accordance with this section.

(3) This section does not apply to the exercise of specifically delegated authority for mangrove protection pursuant to ss. 403.9321-403.9333.

Section 2. Section 163.3209, Florida Statutes, is amended to read:

163.3209 Electric transmission and distribution line right-of-way maintenance.—After a right-of-way for any electric transmission or distribution line has been established and constructed, no local government shall require or apply any permits or other approvals or code provisions for or related to vegetation maintenance and tree pruning or trimming within the established right-of-way. The term "vegetation maintenance and tree pruning or trimming" means the mowing of vegetation within the right-of-way, removal of trees or brush within the right-of-way, and selective removal of tree branches that extend within

the right-of-way. The provisions of this section do not include the removal of trees outside the right-of-way, which may be allowed in compliance with applicable local ordinances. Prior to conducting scheduled routine vegetation maintenance and tree pruning or trimming activities within an established right-of-way, the utility shall provide the official designated by the local government with a minimum of 5 business days' advance notice. Such advance notice is not required for vegetation maintenance and tree pruning or trimming required to restore electric service or to avoid an imminent vegetation-caused outage or when performed at the request of the property owner adjacent to the right-of-way~~, provided that the owner has approval of the local government, if needed~~. Upon the request of the local government, the electric utility shall meet with the local government to discuss and submit the utility's vegetation maintenance plan, including the utility's trimming specifications and maintenance practices. Vegetation maintenance and tree pruning or trimming conducted by utilities shall conform to ANSI A300 (Part I)—2001 pruning standards and ANSI Z133.1-2000 Pruning, Repairing, Maintaining, and Removing Trees, and Cutting Brush—Safety Requirements. Vegetation maintenance and tree pruning or trimming conducted by utilities must be supervised by qualified electric utility personnel or licensed contractors trained to conduct vegetation maintenance and tree trimming or pruning consistent with this section or by Certified

Arborists certified by the Certification Program of the International Society of Arboriculture. A local government shall not adopt an ordinance or land development regulation that requires the planting of a tree or other vegetation that will achieve a height greater than 14 feet in an established electric utility right-of-way or intrude from the side closer than the clearance distance specified in Table 2 of ANSI Z133.1-2000 for lines affected by the North American Electric Reliability Council Standard, FAC 003.1 requirement R1.2. This section does not supersede or nullify the terms of specific franchise agreements between an electric utility and a local government and shall not be construed to limit a local government's franchising authority. This section does not supersede local government ordinances or regulations governing planting, pruning, trimming, or removal of specimen trees or historical trees, as defined in a local government's ordinances or regulations, or trees within designated canopied protection areas. This section shall not apply if a local government develops, with input from the utility, and the local government adopts, a written plan specifically for vegetation maintenance, tree pruning, tree removal, and tree trimming by the utility within the local government's established rights-of-way and the plan is not inconsistent with the minimum requirements of the National Electrical Safety Code as adopted by the Public Service Commission; provided, however, such a plan shall not require the

planting of a tree or other vegetation that will achieve a height greater than 14 feet in an established electric right-of-way. Vegetation maintenance costs shall be considered recoverable costs.

Section 3. Section 70.002, Florida Statutes, is created to read:

70.002 Property Owner Bill of Rights.-Each county property appraiser office shall provide on its website a Property Owner Bill of Rights. The purpose of the bill of rights is to identify certain existing rights afforded to property owners but is not a comprehensive guide. The Property Owner Bill of Rights does not create a civil cause of action. The Property Owner Bill of Rights must state:

PROPERTY OWNER

BILL OF RIGHTS

This Bill of Rights does not represent all of your rights under Florida law regarding your property and should not be viewed as a comprehensive guide to property rights. This document does not create a civil cause of action and neither expands nor limits any rights or remedies provided under any other law. This document does not replace the need to seek legal advice in matters relating to property law. Laws relating to your rights are found in the State Constitution, Florida Statutes, local ordinances, and court decisions. Your rights and protections

include:

1. The right to acquire, possess, and protect your property.

2. The right to use and enjoy your property.

3. The right to exclude others from your property.

4. The right to dispose of your property.

5. The right to due process.

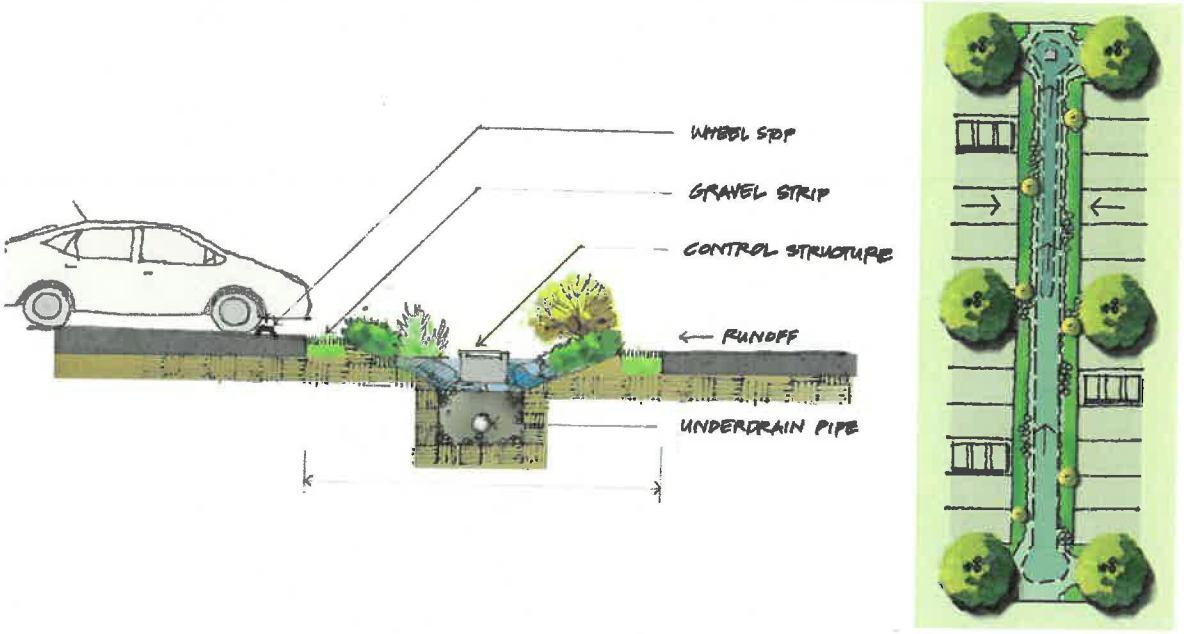
6. The right to just compensation for property taken for a public purpose.

7. The right to relief, or payment of compensation, when a new law, rule, regulation, or ordinance of the state or a political entity unfairly affects your property.

Section 4. This act shall take effect July 1, 2019.

UF UNIVERSITY of FLORIDA
IFAS Extension

Bioswales/Vegetated Swales



This bioswale cross section (left) depicts the swale with an underdrain, which may not be necessary in naturally well drained soils. Surface runoff from the adjacent impervious area enters the swale diffusely through an energy reducing gravel strip and then flows through vegetative buffers along the edge of the bioswale. Swales can be designed with swale blocks (dashed lines perpendicular to flow arrows in plat view (right)) if there is a significant slope or by setting the discharge elevation of the control structure higher than the swale bottom if the swale has little relief.

Definition:

A bioswale or vegetated swale is a form of bioretention used to partially treat water quality, attenuate flooding potential and convey stormwater away from critical infrastructure. These systems are linear, with length to width dimensions much greater than the more typical 2:1 applied to bioretention cells.

Applications

- **Parking lot island and medians**
- **Residential roadside swales**
- **Highway medians**
- **Landscape buff**

Objectives:

The function of these open-channel (broad) drainageways is to convey stormwater runoff. They are often used as an alternative to, or an enhancement of, traditional stormwater piping. Bioswales are often integrated into parking lot and road medians and parallel to roadways to infiltrate and treat a portion of the stormwater volume. These systems can often be integrated into existing ditch and swale systems to increase their treatment function. Where soils are well drained, infiltration can also be facilitated in the swale by placing ditch blocks or weirs perpendicular to the flow path, causing small volumes of water to be captured in the swale and allowing more time for infiltration.

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Overview:

Conveyance systems are often required to move stormwater away from critical infrastructure. The purpose of a bioswale is to increase the function of these conveyance systems by integrating features that improve water quality, reduce runoff volume and enhance landscape aesthetics. By creating in-swale storage opportunities, small storm volumes can be captured and allowed to infiltrate within the bioswale. Where soils are poorly drained, under drain systems may be used to attenuate peak flows and force water stored within the swale through a soil filter media before continuing downstream. For larger flow events, vegetation within the swale and ditch blocks helps to stabilize soils and increase sedimentation potential. The shape and location of the bioswale and selection of vegetation can also be integrated into the site's overall landscaping design to create a multifunctional system. The size of the bioswale will determine the volume of runoff that can be stored or reduced, as well as the treatment benefits. Where the volume of runoff exceeds that of the bioswale(s), further stormwater devices will be required to handle the design storm.

Bioswales can be found in an open area or within a restricted area like a parking lot. Two types of vegetated swales are commonly used. Dry swales provide both quantity (volume) and quality control by facilitating stormwater infiltration. Wet swales use residence time and natural growth to reduce peak discharge and provide water quality treatment. A wet swale typically has water tolerant vegetation permanently growing in the retained body of water. Swales are most effective when used in conjunction with other IMPs, such as bioretention basins and infiltration trenches.

Water Protection Benefits:

Water conservation implications – Like bioretention basins/rain gardens, vegetated swales are designed to capture and retain stormwater in recessed drainageways, which typically do not need irrigation beyond plant establishment. These areas can provide significant aesthetic benefit while avoiding water requirements associated with other landscape types. They can also conserve biodiversity when native plants are used.

Stormwater implications – Bioretention swales provide both stormwater treatment and conveyance functions. The swale component provides pre-treatment of stormwater to remove coarse to medium sediments, while the bioretention system removes finer particulates and associated contaminants. Bioretention swales filter stormwater via the following processes: 1) passing through surface vegetation; 2) percolating through prescribed filter media, which provides treatment through fine filtration, extended detention treatment and some biological uptake; 3) disconnecting impervious areas from downstream waterways; and 4) providing protection to natural wetland systems from frequent storm events by reducing storm flow velocities when compared to pipe systems.

Benefits:

- Treat water quality using soil, vegetation and microbes
- Reduce total volume of stormwater runoff
- Increase infiltration and groundwater recharge
- Multifunctional conveyance system
- Can be aesthetic part of landscape and improve biodiversity

Design Considerations:

This is an infiltration dependent practice affected by soil type, groundwater table, size of the area serviced, imperviousness of the contributing watershed, and dimensions and slope of the swale system. Swales are impractical for areas with very flat grades or steep slopes, and should be used to serve areas of less than 10 acres with slopes no greater than 5%. As a simple rule of thumb, the total surface area of the swale should be one percent of the area from which it is receiving stormwater. Large areas should be divided and treated using multiple swales. Vegetated swales should not be installed in areas with high water tables where groundwater reaches the bottom of the swale.

Plant material selection and location are critical design choices. Additional considerations include the following:

- Bioswale function and treatment is improved when applied in areas with well drained soils.

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Design Keys:

- **The design of a bioswale is a balance of stormwater conveyance function with storage, infiltration and soil and biological treatment processes. That means there must be consideration of:**
- **Swale design, including outlet design**
- **Location in the treatment train**
- **Plant material selection**
- **Soil composition**
- **On-going managemen**

- Poorly drained sites require an underdrain system.
- Slopes greater than 5% require multiple ditch blocks or weirs perpendicular to the flow to facilitate storage volume and extend time for infiltration.
- Where phosphorus control is important, soils used in construction should have a low phosphorus content and high phosphorous sorption capacity.
- Where nitrogen control is important, mulch and organic matter incorporated into the soil should have a high carbon to nitrogen ratio.
- A high flow bypass (outlet or control structure) should be included to safely convey high flows.

Vegetation is ideally a fine, close-growing water-tolerant species that provides high amounts of vegetative surface area for contact with stormwater. Plants should be selected specifically for their nutrient uptake ability and site appropriateness. Where possible, use native plants to improve biodiversity.

Check dams, slight slopes, permeable soils, dense vegetative cover, increased contact time, and small storm events all aid pollutant removal. On the other hand, compacted soils, short runoff contact time, large storm events, steep slopes, and high runoff velocities and discharge rates reduce the effectiveness of swales.

Operations and Maintenance:

It is important that the storage capacity and functional integrity of the bioswale be maintained through regular monitoring and maintenance of vegetation, infiltration capacity, and structures. Regular inspection of bioswales should be conducted to identify signs of erosion, accumulation of debris around structures and signs of excessive sedimentation. Soil infiltration capacity should be tested annually to determine if soils are becoming clogged. Maintenance requirements include seasonal trimming of vegetation and removal of debris and trash that may foul downstream structures.

HOA or Regulatory Considerations:

To receive permit credit for a bioswale under Florida's current stormwater regulations requires infiltration of 80% of the runoff from a 3-year, 1 hour storm (2.5 inches).

Credits in Green Building Certification Programs:

- FGBC-Home Standard (waterfront prerequisite: use of terraces, swales or berms to slow stormwater)
- Florida Yards & Neighborhoods (stormwater runoff: swales, terraces and/or rain gardens created to catch and filter stormwater; all rain and storm water drains away from the building foundation using legal drainage conveyance systems on-site)
- LEED for Homes (SS 4.3 management of runoff from roof)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Swales are inexpensive relative to traditional curb and gutter treatment or underground stormwater systems. Maintenance is required more frequently but is considerably less costly than curb and gutter system maintenance. Cost of this practice compares favorably to other LID practices. In a U.S. Army Corps of Engineers study from 2004, costs per square foot were $0.50 (source: www.wbdg.org).

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References and Resources:

EPA Stormwater BMP Fact Sheet: Grassed Swales http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=75

EPA Storm Water Technology Fact Sheet: Vegetated Swales http://www.epa.gov/owm/mtb/vegswale.pdf

California Stormwater BMP Handbook – Vegetated Swales http://www.cabmphandbooks.com/Documents/Development/TC-30.pdf

Massachusetts LID Toolkit – LID Factsheet – Vegetated Swales

http://www.mapc.org/regional_planning/LID/swales.html

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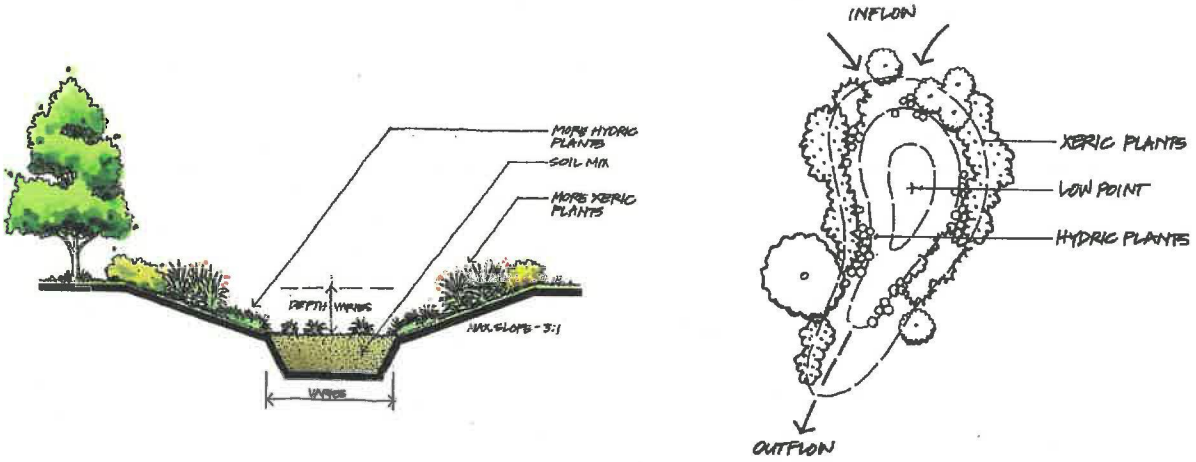
Bioretention Basins/Rain Gardens



Depiction of typical bioretention area design illustrating shallow slopes, well drained soil profile and location of plant material along hydrologic gradient. Basins with large catchments should include an over drain or provide a spillway in case of high flow event, and underdrains can be used in areas with low conductivity soils.

Definition:

A bioretention area or rain garden is a shallow planted depression designed to retain or detain stormwater before it is infiltrated or discharged downstream. While the terms "rain garden" and "bioretention basin" may be used interchangeably, they can be considered along a continuum of size, where the term "rain garden" is typically used to describe a planted depression on an individual homeowner's lot, where the lot comprises the extent of the catchment area. Bioretention basins serve the same purpose but that more technical term typically describes larger projects in community common areas as well as non-residential applications.

Applications

- Residential yards (most common in smaller, urban sites)
- Commercial developments
- Parking lot islands
- Roadways (off-line cells adjacent to roadways accessed by curb cut)

Objectives:

Bioretention basins/rain gardens retain, filter, and treat stormwater runoff using a shallow depression of conditioned soil topped with a layer of mulch or high carbon soil layer and vegetation tolerant of short-term flooding. Depending on the design, they can provide retention or detention of runoff water and will trap and remove suspended solids and filter or absorb pollutants to soils and plant material.

Overview:

Bioretention basins can be installed at various scales, for example, integrated with traffic calming measures in suburban parks and in retarding basins. In larger applications, it is considered good practice to have pretreatment measures (e.g. vegetated strips and swales) upstream of the basin to capture sediment and reduce the maintenance frequency of a bioretention basin.

The size of the rain garden or bioretention area will determine the volume of runoff that can be stored or reduced, as well as the treatment benefits. Where the volume of runoff exceeds that of the bioretention area, additional stormwater devices will be required in the treatment train to handle the design storm.

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Benefits

- Pollutant removal through infiltration and plant absorption
- Reduction of water runoff from site
- Reduced irrigation for planting beds
- Increased biodiversity in the landscape with wildlife and aesthetic values

Water Protection Benefits:

Bioretention basins use vegetation in retention areas to reduce nutrient export through plant uptake, filtering and sorption. The vegetation also improves soil infiltration.

Water conservation implications – Biorention basins are designed to capture and retain stormwater in recessed gardens that typically do not need irrigation beyond plant establishment.

Stormwater implications – Infiltration processes and adsorption to plant roots remove pollutants from the flow stream. This is a key practice in the LID suite for improving stormwater quality. This also reduces the quantity of water flowing off-site into the larger municipal stormwater system.

Design Considerations:

This is an infiltration dependent practice affected by soil type and groundwater table. Where soils are well drained and groundwater tables are well below the surface, an under drain is not required. Where soils have low conductivity, underdrains can be used to reduce ponding time and increase treated volume. There is no specific slope requirement for bioretention, although size of the basin will typically decrease or become narrower and follow the elevation contour as slopes increase above 5%.

Determination of ponding depth should consider inflow characteristics (inflow rate, total volume, etc.), soil infiltration rate, and total ponding volume available. The ponding depth should not be greater than 12 inches, with 6-8 inch depths preferred. The duration of ponding after a storm should also not exceed 24 hours to reduce the likelihood of mosquito breeding or safety hazards.

A bioretention area/rain garden is used to encourage infiltration, so place it in an area where infiltration is good, not where water normally pools. It should be at least 10 ft. from any building, to avoid moisture around the building's foundation. Don't place a rain garden over a septic system. Consider how it can be integrated into existing and future landscaping. When adding plant material, do not place woody plants in the inflow path. Use native plants to improve the site's biodiversity.

Operations and Maintenance:

When rain gardens are installed on individual lots, it is important to implement educational programming to homeowners on proper maintenance. It is also important that the storage capacity of the rain garden/bioretention area be maintained through regular maintenance of vegetation and removal of debris that may compromise any structures during a high flow event. Regular visual inspection of the basin, looking for signs of erosion, excessive sediment deposits or dead and diseased vegetation, should be conducted. Mulch in the bioretention area should also be monitored for bare spots and should be replaced every 2-3 years. Plant selection is critical to aid operation, and other considerations may include gravel or stone to limit volunteer growth that can reduce storage area.

Design Keys

- The design of a bioretention area/rain garden is a balance of stormwater function with biological functions. That means there must be consideration of:
- Basin design (soil type, drainage, groundwater table, slope, outfall device)
- Location in the treatment train
- Plant material selection and placement
- On-going management

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HOA or Regulatory Considerations:

There is presently no regulatory "presumption of compliance" granted to rain gardens or bioretention basins in stormwater permits. Although not significantly different than a conventional dry retention basin except for size, spatial distribution and landscape integration of this practice requires them to be submitted as an "alternative" management practice during the permitting process. Water management districts are also cautious about giving credit toward volume storage for any structure installed on a homeowner's property without sufficient guarantee that the structure will be adequately maintained in the long-term.

Credits in Green Building Certification Programs:

- FGBC-Home Standard (S-15 onsite designated retention areas)
- Florida Yards & Neighborhoods (stormwater runoff: swales, terraces and/or rain gardens created to catch and filter stormwater)
- LEED for Homes (SS 4.3 management of runoff from roof)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

While this practice may create additional site work costs as compared to conventional practices, it can be offset by reduced infrastructure such as stormwater pipes, storm drains and stormwater ponds. Costs per acre of development range from $5,000 to $10,000 for larger areas and costs per square foot range from $3 to $15. In some cases it has been found that bioretention can yield a 50% savings over conventional systems for overall site drainage. In most cases the area would have been landscaped, so the cost of installing and maintaining a bioretention area should be compared to the cost of otherwise landscaping the area.

References and Resources:

Bannerman, R. and E. Considine. 2003. *Rain Gardens, A How-To Manual for Homeowners.* University of Wisconsin. http://clean-water.uwex.edu/pubs/pdf/home.rgmanual.pdf

Bioretention Basins Factsheet (Lake Superior Streams.Org) http://www.lakesuperiorstreams.org/stormwater/toolkit/bioretention.html

Bioretention (Rain Gardens) Fact Sheet (EPA) http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=72

Clar, M., A.P. Davis, W.F. Hunt, and R.G.Traver, 2007. Bioretention Technology: An Overview of Current Practice and Future Needs, Paper presented at the 2nd National Low Impact Development (LID) Conference, sponsored by North Carolina State University, Wilmington, NC.

Engineering Technologies Associates and Biohabitats. 1993. *Design Manual for Use of Bioretention in Stormwater Management.* Prepared for Prince George's County Government, Watershed Protection Branch, Landover, MD.

LID BMP Fact Sheet – Bioretention Basins (Fairfax County) http://www.lowimpactdevelopment.org/ffxcty/1-1_bioretentionbasin_draft.pdf

Winogradoff, Derek A. 2002. *Bioretention Manual.* Programs & Planning Division,

Department of Environmental Resources, Prince George's County, Maryland. http://www.princegeorgescountymd.gov/Government/AgencyIndex/DER/ESG/Bioretention/bioretention.asp

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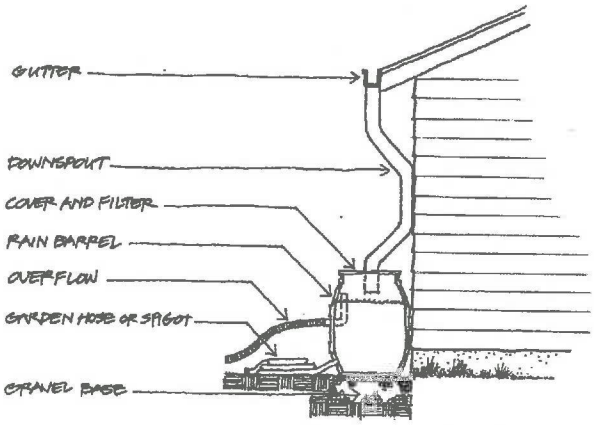
Cisterns/Rain Barrels



Rainbarrel rainfall harvesting system fitted with overflow pipe, spigot and hose for watering. To increase pressure, the rainbarrel can be elevated above the ground, but it must be secured. A rainbarrel full of water weighs over 400 lbs.

Definition:

Cisterns and rain barrels are storage tanks that capture runoff water from a catchment area such as a rooftop. Cisterns are essentially large-scale rain barrels.

Objectives:

Cisterns are typically used as commercial or industrial catchment devices for rainwater harvesting, storage, and reuse. Rain barrels are used for the same purposes by homeowners. Cisterns are more costly but can hold significantly more water.

Benefits

- Reduces use of potable water for irrigation
- On site reuse reduces quantity of stormwater runoff

Applications

- New construction
- Retrofits
- Commercial
- Residential communities

Overview:

Cisterns can be located above or below ground, depending on site conditions and the preferred use of the harvested rainwater. Runoff collected from roof tops is often relatively clean and can be used for irrigation or for flushing toilets. Rain barrels, often made from 55-gallon plastic drums, are becoming popular with homeowners as a supplemental irrigation source. The University of Florida's Florida Yards & Neighborhoods program offers rain barrel workshops in a growing number of counties (find your county's Extension office at http://solutionsforyourlife.ufl.edu/map/.

Water Protection Benefits:

Water conservation implications – When cistern-harvested rainwater is used for landscape irrigation, which can account for as much as 50% of household potable water use in Florida, the potential to offset potable water demands is significant. The quality of water harvested by cisterns is dependent on a variety of factors, including rainfall quality, catchment debris that may have accumulated on the roof since the last rain, and inclusion of a first flush diversion devise. The amount of water captured and therefore the amount of water available for use will depend on the size of the cistern and rainfall pattern. Cistern size can range from hundreds to thousands of gallons. A typical size for residential application in Florida is around 5,000 gallons.

Stormwater implications – Similar to the benefits of green roofs, rainwater harvesting with cisterns reduces stormwater runoff through interception, reducing stress on downstream management and treatment systems.

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Design Considerations:

Cisterns or rain barrels can be applied across various site conditions. Because they function independent of soil types and site slopes, the possibilities for residential and commercial application of cisterns throughout Florida are widespread. Their sizing is based on expected water demands, rainfall pattern, and cistern system cost. A general rule of thumb is that 1" of rain on 1000 sq. ft. of roof will yield approximately 600 gallons. Rain barrels are often elevated on stands to improve water pressure of the outflow. Cisterns and rain barrels are placed near the catchment site. Cisterns should not be placed near trees whose roots may damage the cistern walls. A spigot is usually attached to the rain barrel or cistern for use and drainage. Submersible or surface pumps can also be used with cisterns to increase pressure for use in most irrigation systems.

Design Keys

- Size of roof
- Water demand
- Rainfall pattern
- Cistern capacity
- Overflow device
- First flush bypass

Operations and Maintenance:

Rain barrels and cisterns require minimal maintenance. The tank should be cleaned out about once a year if debris is present. Gutters and downspouts should be inspected regularly and kept clear. If a first flush bypass system is used, remove debris from the bypass and make sure drain holes are kept open so that the system functions properly. No maintenance is required to prevent mosquito breeding in a rain barrel if all surfaces at the downspout entrance are sealed. However, the seals should be inspected periodically, and if mosquitoes become a problem, mosquito dunks [floating donut-shaped briquettes containing the biological insecticide *Bacillus thuringiensis* (Bt)] can be used.

Credits in Green Building Certification Programs:

- FGBC-Home Standard (W10-11 rainwater harvesting)
- Florida Yards & Neighborhoods (stormwater runoff: storage provided for harvested water in a rain barrel, cistern or above ground tank; underground distribution tanks installed to collect stormwater)
- LEED for Homes (SS 4.3 management of runoff from roof)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible; 4.1 indoor/outdoor water use)

Relative Costs:

Materials and installation costs vary substantially across cistern applications, depending on the source (e.g., manufactured or pre-fabricated vs. constructed on site), storage capacity (size), location (above or below ground), and structural material. A single residential rain barrel with typical attachments and accessories costs around $50 for the parts for self assembly and $200 assembled, whereas cisterns costs can start at about $1,500 and a large commercial cistern can cost thousands or tens of thousands of dollars. These upfront costs can be partially offset by reduced demand for potable water, but they do not directly offset regularly incurred materials and installation costs of conventional stormwater system components.

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Two 1,550 gallon cisterns are used to harvest rainwater that has filtered through the Perry Construction Yard green roof at the University of Florida in Gainesville

References and Resources:

Bucklin, Ray. 2003. Cisterns To Collect Non-Potable Water For Domestic Use. University of Florida/ IFAS, Agricultural and Biological Engineering Department. EDIS # AE64.

Hillsborough County UF Extension. *Rain Barrels.* http://hillsborough_fyn.ifas.ufl.edu/RainBarrels.html

Rainwater Harvesting from Rooftop Catchments (Organization of American States Department of Sustainable Development): www.oas.org/dsd/publications/Unit/oea59e/ch10.htm.

Southwest Florida Water Management District. *Recycle the Rain: A How-to For Installing a Rain Barrel:* http://www.swfwmd.state.fl.us/conservation/rainbarrel/

Specifications of Rain Barrels and Cisterns (Low Impact Development Center, Inc.): www.lid-stormwater.net/raincist/raincist_specs.htm.

Tampa Bay Water. 2007. *A Review of Applicable Policies and Permitting Requirements For Non-Potable Use of Cisterns.* http://www.tampabaywater.org/documents/conservation/cisterns.pdf

Texas Water Development Board. 2005. *The Texas Manual on Rainwater Harvesting.* http://www.twdb.state.tx.us/publications/reports/RainwaterHarvestingManual_3rdedition.pdf

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Enhanced Stormwater Basins



The Stormwater Ecological Enhancement Project (SEEP) on the University of Florida campus in Gainesville was created by re-contouring and introducing new vegetation to a 3-acre retention pond. Over a period of seven years, the number of vegetative species on the site increased four-fold, and pollutant treatment has improved.



Definition:

Stormwater basins are designed to store stormwater runoff temporarily (detention) or permanently (retention) to reduce flooding potential and to improve water quality. Also known as stormwater wetlands, enhanced stormwater basin designs facilitate increased vegetative diversity and complexity of biogeochemical processes to improve water treatment, biodiversity, aesthetics. Enhanced stormwater basins can be considered along the same continuum of biophysically enhanced stormwater practices where rain gardens are followed by bioretention basins, with enhanced stormwater basins falling at the highest end of the continuum.

Applications

- Common areas in residential communities
- Commercial development

Objectives:

An enhanced basin design creates a multipurpose area serving the need to reduce flooding while adding vital wetland functions such as unique plant and wildlife habitat, recreational opportunities, aesthetics and the potential to treat stormwater to a higher level of quality. By adding lower topographic areas for open-water habitat and berms to temporarily impound entering stormwater, a greater hydrologic diversity within the basin is created. Planting species known to take up heavy metals and remove nutrients as well as introducing a wide range of species that can become established within the basin increases the viability of the basin and its ability to optimize natural processes and resources.

Overview:

Enhanced stormwater basins are engineered to mimic the treatment and runoff attenuation properties of natural wetlands. This is done by integrating two essential elements into a stormwater basin design: increased topographic relief and vegetative diversity. Irregular perimeters, varying basin depths, meandering internal conveyance channels, multiple cells and undulating bottom contours are key features that increase the topographic variability of a retention basin, improving stormwater retention and treatment capacity. Introduction of diverse plantings suited

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to site conditions (i.e., inundation tolerant native species) improve the stormwater treatment performance while simultaneously providing ecological, wildlife, and aesthetic amenities. Enhanced stormwater basins typically use berms to partition the main basin in to multiple zones or cells. Cells can be designed in series resulting in each zone having a different depth, duration and frequency of flooding. These varied hydrologic characteristics result in different treatment processes and long-term development of different vegetative communities.

Benefits

- Retention
- Detention
- Sedimentation
- Metals and nutrient retention
- Increases wildlife habitat and biodiversity
- Community amenity
- Passive recreation
- Educational opportunity
- Aesthetics

Water Protection Benefits:

Water conservation implications – Enhanced stormwater basins do not provide direct potable water benefits, although they do facilitate groundwater recharge and improve downstream water quality.

Stormwater implications -

Quantity

Because these basins use conventional design volume specifications they are as effective as conventional basins at controlling volume.

Quality

As the name implies, the modified design of these stormwater basins enhances and improves upon the pollutant treatment and runoff attenuation properties of traditional retention ponds. Pollutant uptake is increased and peak discharges are reduced. Construction of a forebay and creation of multiple cells within the basin slows water movement and increases particulate settling in designated areas. Planting of species known to assimilate contaminants and creating longer duration flooding conditions in these areas facilitates sediment accumulation, trapping contaminants in the soil. Establishing a variety of plant species and hydrologic conditions diversifies the biogeochemical processes within the basin, increasing the system's ability to reduce contaminants and respond to dynamic environmental conditions.

Design Considerations:

If a site has low permeability, is prone to flooding, or is sensitive to groundwater input, a conventional stormwater basin might be the only viable management option. However, increasing research has developed methods for more naturally-mimicked systems. As with traditional stormwater retention basins, the treatment and volume control performance of ecologically enhanced stormwater ponds is dependent upon the infiltration capacity of site soils. Relatively large land areas are required to construct a suitable treatment basin, but the principles of enhanced stormwater basins can be applied to existing retention ponds of varying sizes and locations. When designing an enhanced stormwater basin, the goal is to optimize multiple functions so that under varying conditions the basin can continue to protect water quality.

Enhanced stormwater basins can become effective teaching opportunities to educate people about the relationship between their activities and water quality, stormwater and ultimately the natural environment. By integrating trails around the edge of the basin or a boardwalk through the basin, these educational opportunities can be enhanced and should be incorporated where possible into the management of these systems. As such, enhanced stormwater basins can become valued community amenities.

Design Keys

- Infiltration capacity of site soils
- Large land area
- Type of plant material
- Construction equipment
- Limit compaction
- Types of soils

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Diagram of enhanced stormwater basin design depicting varied water depth, internal partition, vegetative planting zones and integrated boardwalk and trail to facilitate public access. The "birds eye view" (right) illustrates irregular and elongated basin edge, extended flow path facilitated by internal berm and complex basin topography resulting in multiple cells in series and a wide range in hydrologic conditions within the basin.

Operations and Maintenance:

Increased trapping of sediments and other contaminants within the basin may need to be removed periodically at inlets. By creating multiple cells within the basin, increased detention time and sedimentation in a small portion of the basin is facilitated. This allows for any periodic maintenance requirements to disturb only a small portion of the basin. Care of plantings, especially during initial establishment may also be required depending on aesthetic expectations, including management of invasive plants.

Credits in Green Building Certification Programs:

- LEED for Neighborhood Development Pilot (SLL Credit 10: Restoration of Habitat or Wetlands; GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Although costs and benefits will vary depending upon site conditions, local climate and topography, etc., the Center for Watershed Protection (www.cwp.org) estimates that average construction costs for an enhanced stormwater basin range from $0.60 to $1.25 per cubic foot. Maintenance costs are relatively low compared to those for conventional stormwater retention basins.

References and Resources:

EPA Stormwater BMP Fact Sheet: Stormwater Wetland http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=74

Stormwater Ecological Enhancement Project (University of Florida Natural Area Teaching Laboratory): http://natl.ifas.ufl.edu/seep.htm

Stormwater Wetland Fact Sheet (Stormwater Manager's Resource Center) http://www.stormwatercenter.net/Assorted%20Fact%20Sheets/Tool6_Stormwater_Practices/Wetland/Wetland.htm

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Exfiltration Tanks/Trenches





The modular system shown here was installed at the Madera *subdivision in Gainesville in 2003; together with permeable pavers, this system captures and exfiltrates, on average, one-third of the roof's runoff.*

Definition:

Exfiltration tanks and trenches (or dry wells) are sub-surface engineered detention and infiltration cells with significant volume or pore space to store and control site runoff. They are sometimes referred to as subsurface detention or retention, infiltration or percolation tanks, soakaways or underground infiltration basins. While infiltration trenches are usually rock filled ditches into which stormwater enters from the top, exfiltration trenches often involve a pipe in the middle of the trench through which stormwater enters.

Objectives:

These structures capture and discharge stormwater at a controlled rate. They function in concert with pervious surfaces by enhancing the infiltration and storage capacity of on-site soils and treating runoff before it recharges the groundwater. Exfiltration systems act as small, distributed, underground stormwater retention ponds.

Overview:

Exfiltration tanks and trenches can be used to convey and distribute captured runoff across a lot or subdivision. These exfiltration structures provide a storage area for rapid runoff during a storm, then allow it to infiltrate gradually through the soil into the groundwater. Runoff water enters the underground chamber at the inlet and a physical filtration process removes pollutants as the exfiltrate enters the surrounding soil. However, some pollutants can remain in the exfiltrate water, so additional source control is needed where groundwater contamination is a concern.

Exfiltration tanks and trenches can vary considerably in size. Large underground exfiltration designs generally utilize concrete and large pipe systems. Modular products are available that are usually constructed of lightweight but durable plastic wrapped in a geo-textile. Modular

Applications

- Residential lots
- Commercial development
- Parking lots
- Green spaces
- Golf courses

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Benefits

- Detention
- Infiltration
- Stormwater reuse
- Groundwater recharge
- Runoff attenuation
- Reduction in peak velocity
- Reduction in stormwater runoff volume
- Possible reduction in size of centralized stormwater retention ponds

products are the best option for individual homes, which on a per lot basis, typically have very small stormwater volumes. These products take up little space and can be buried under the lawn areas. The modular design allows for flexibility in applications and integration with existing site features. They are lightweight and easy to install and are engineered to be resistant to very high loads.

Water Protection Benefits:

Water conservation implications – Exfiltration systems do not benefit potable water supplies directly, but do assist in groundwater recharge and reducing some demand by on site vegetation.

Stormwater implications – Sub-surface infiltration systems such as exfiltration tanks reduce peak velocity and volume of stormwater runoff. When significant storage volumes and mitigation of peak runoff velocity are attained, zero stormwater discharge from the lot may be achieved. This in turn can reduce the size of centralized stormwater retention ponds..

Design Considerations:

Underground exfiltration is infiltration dependant and can be incorporated into most site designs having well drained soils. Application of this practice is particularly beneficial where land costs are high or space availability is low. This practice can also be applied in high water table conditions, but the effective vertical storage volume is reduced requiring greater area coverage for similar volume capacity.

Operations and Maintenance:

Exfiltration trenches can become clogged, so it is important to prevent sediments and materials from entering the system as much as possible and periodically remove those that accumulate. Access for maintenance should be considered in the design, potentially including an observation well of PVC pipe leading to the bottom of the trench to allow for monitoring of the drawdown rate. Some systems incorporate an underdrain below the filtering system, which can be used as an overflow should clogging occur.

Credits in Green Building Certification Programs:

- LEED for Homes (SS 4.3 management of runoff from roof)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Materials are the highest percentage of the overall exfiltration system costs. The modular system installed at *Madera* for a single-family residential lot cost just over $1000 and is part of an LID treatment train at both the lot and community scales. When evaluating costs, consider that the use of exfiltration tanks or trenches can reduce or eliminate the costs of monitoring effluent because of reductions in runoff/discharge.

Design Keys

- Good where land costs are high or space availability is low
- Well-drained soils
- Low water table

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References and Resources:

Atlantis® Infiltration Tank System (Atlantis Corp – Australia): http://www.atlantiscorp.com.au/applications/infiltration_tank

EPA Stormwater BMP Fact Sheet: Infiltration Trench http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=70

Livingston, Eric H., Robert Baldwin, and Brian Clevenger. "Lessons Learned About Successfully Using Infiltration Practices." National Conference on Tools for Urban Water Resource Management and Protection Proceedings. Chicago, IL, February 7-10, 2000. EPA/625/R-00/001, pp. 141-161. July 2000.

Sub-Surface Infiltration Areas (Pennsylvania Association of Conservation Districts' Best Management Practices Fact Sheet): http://www.pacd.org/resources/pollution_solutions/Dauphin/InfiltrationArea.pdf

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Green Roofs/Eco-roofs

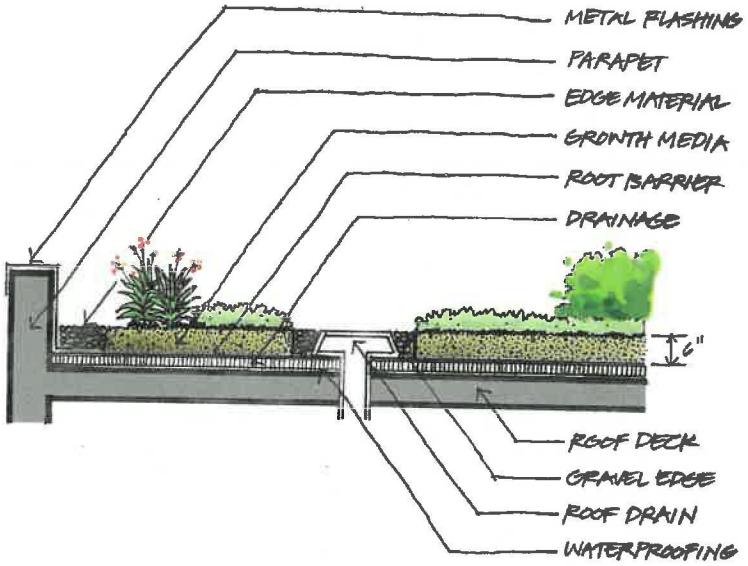

Diagram illustrates layered components of a typical green roof.

Definition:

A green roof or eco-roof is a planted roof top that provides benefits of water harvesting, stormwater management, energy conservation, pollution abatement, and aesthetic value.

Green roofs vary in depth of growing media, types of plants (climate-dependent), infrastructure, and intended use.

Objectives:

Green roofs reduce total stormwater runoff volume and peak flows, improve building insulation properties (reducing heat island effects), and extend the expected life of the roof's base material.

Applications

- Commercial buildings
- Industrial buildings
- Residential buildings

Overview:

Green roofs are generally categorized into two types: extensive and intensive. Extensive green roofs have a shallow (<6" depth) growing media and are light-weight structures (approximately 10-35 lbs./sq.ft. when wet) that cover large expanses of rooftop, requiring minimal maintenance. Intensive green roofs, or "rooftop gardens," use deeper growing media (>6") and can include small trees and shrubs, creating park-like settings that are more accessible. They tend to be more expensive and their heavier weight on the roof (approx. 50-300 lbs./sq.ft. when wet) must be considered in the design. Intensive green roofs are more common in tropical climates than extensive green roofs.

Examples of Florida applications of green roofs include: a 2400 ft² storage facility in the Bonita Bay Group's master-planned community Shadow Wood Preserve (Lee County); the University of Central Florida Student Union roof (1600 ft²); and the University of Florida Charles R. Perry Construction Yard roof (2600 ft²) in Gainesville. The University of Central Florida has monitored pollutants in roof filtrate water on a green roof designed for stormwater treatment and found that the green roof effectively reduced pollutants, including nitrate and ammonia, relative to a conventional roof.

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Benefits

- Reduces stormwater volume (50% to 85%)
- Improves stormwater quality through load reduction
- Saves water by harvesting rain
- Reduces heat island effect
- Lowers surface temperatures by 40°-50° F
- Energy savings can reach 15%-30%
- Reduces noise for building occupants
- Increases the life of the roof and reduces roof maintenance costs
- Contributes to biodiversity and creates habitats for birds and invertebrates
- Filters air pollutants and captures airborne particles

Water Protection Benefits:

Water conservation implications – When used in conjunction with cisterns for stormwater management, green roofs can allow for more consistent capture and provision of harvested rainwater, with the potential to indirectly reduce potable water demands for landscape irrigation.

Stormwater implications – By intercepting, retaining, detaining, and filtering rainwater at the beginning of the stormwater treatment train, green roofs can play an important role in source control stormwater management, reducing stress on downstream treatment systems.

Design Keys

- Infrastructure
- Type of growing media
- Depth of growing media
- Species of plants
- Rainwater collection
- Irrigation
- Intended purpose

Design Considerations:

Green roofs function independent of the infiltration capacity of the site soils and can be applied to residential buildings, although they are most appropriate for commercial and industrial use. Extensive and intensive green roofs require a minimum slope of 2%; those with slopes less than 2% require additional drainage measures to avoid water logging. Additional requirements include good drainage, lightweight growth media, good waterproofing, additional structural support, rainwater harvesting and the use of drought/heat tolerant plants. While it may be challenging, it is important to engineer for proper drainage, which will avoid root rot on the plants. A thicker substrate needed if drainage is not adequate will also mean higher load bearing, which adds to the cost.

Components of green roofs include: 1.) waterproofing membranes; 2.) insulation (if the building is heated or cooled); 3.) a root barrier to protect the membrane (made of gravel, impervious concrete, pvc, tpo, hdpe, or copper); 4.) a drainage system; 5.) a filter cloth (polyester fiber mats, polypropylene mats or non-biodegradable fabrics); 6.) a growing medium, consisting of inorganic matter (expanded slate, pumice, vermiculite, volcanic rock, etc.), organic material (straw, peat, wood, grass, sawdust, etc.), and air (cavities); 7.) plants.

There are several considerations when choosing the plant material. Overall, plants should be selected for their ability to thrive with minimal to no inputs (water, fertilizers, etc.) after establishment. Appropriate natives are recommended, and all should prefer full-sun and be drought tolerant. Plants should also be cold tolerant and have no severe pest susceptibility or maintenance needs. Root systems should be shallow. Use pollen/nectar producers when possible, which will help not only in pollination but also to attract beneficial insects for biological pest management.

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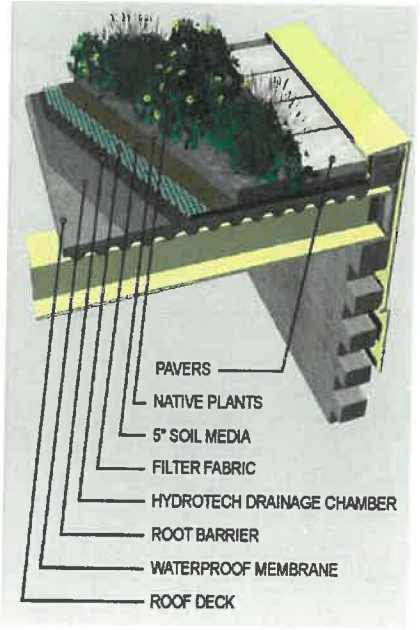

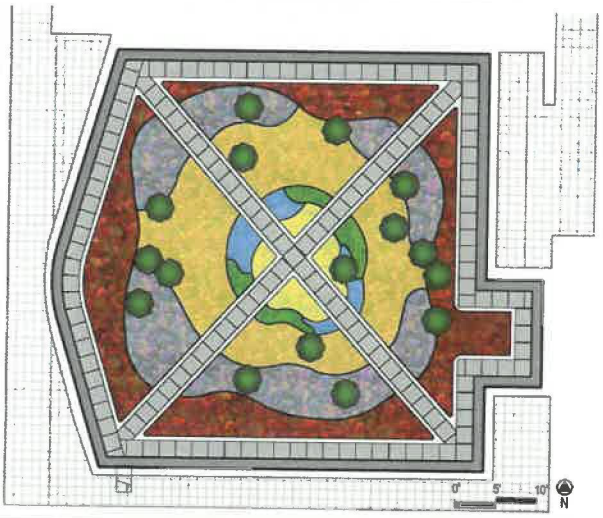



Operations and Maintenance:

Although plants should be chosen to be maintenance free after establishment, plants will need some maintenance, particularly during establishment, including irrigation system inspections. Annual maintenance walks should be performed until plants fill in.

Credits in Green Building Certification Programs:

- LEED for Homes (SS 4.3 management of runoff from roof)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Materials and installation of a typical green roof in the U.S. cost between $15 and $20 per square foot, with the soil substrate, growing medium, and planting materials accounting for the largest portion of these costs. When considering the cost of a green roof, it is important to compare it to the cost of a conventional roof and consider energy cost savings. As a result of the improved insulation properties of a building with a green roof, most applications result in cost savings from improved energy efficiency. A one-story building with a green roof can be expected to save 20%-30% in cooling costs.

References and Resources:

EPA Stormwater BMP Fact Sheet: Green Roof: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=114

Green Roofs for Healthy Cities: www.greenroofs.org.

Green Roofs 101 (The Greenroof Industry Research Portal): http://www.greenroofs.com/Greenroofs101/index.html.

The green roof on the Perry Construction Yard building at the University of Florida is an extensive green roof of 2,600 square feet with a media depth of 5". All plants are less than 30" tall. Two 1,550 gallon cisterns harvest rainwater and serve as the main source of the roof's drip irrigation system, with the campus' reclaimed water system as a backup

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Wanielista, Marty, Mike Hardin, and Matt Kelly. 2007. *The Effectiveness of Green Roof Stormwater Treatment Systems Irrigated With Reclycled Green Roof Filtrate to Achieve Polluant Removal With Peak and Volume Reduction in Florida*. Final Report to FDEP, Project Number WM 864. University of Central Florida, Stormwater Management Academy.

Worden, Eva, Diana Guidry, Annabel Alonso Ng, and Alex Schore. 2004. *Green Roofs in Urban Landscapes*. UF/IFAS EDIS Publication ENH 984, Department of Environmental Horticulture. http://edis.ifas.ufl.edu/pdffiles/EP/EP24000.pdf

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Low Impact Site Preparation

Definition:

Low impact site preparation is a suite of practices that seek to preserve the site's natural hydrological and biological characteristics.

Benefits

- Lower irrigation and fertilizer requirements
- Reduction in runoff volume
- Preserving quality of stormwater
- Enhanced biodiversity

Objectives:

The overall goal is to conserve natural areas, minimize development impacts and maintain site runoff rate and volume so that post-development conditions match pre-development conditions to the greatest extent possible. Therefore, low impact site preparation focuses on four main objectives. First, existing rainfall interception should be retained and new interception should be promoted. Second, infiltration capacity should be preserved, which requires minimized compaction and impervious surface area. Third, existing depressional storage should be retained, and new depressional storage should be created in conjunction with infiltration. Finally, stormwater treatment by soils and vegetation should be promoted through maximization of contact area and time.

Overview:

Conventional development processes often drastically alter natural landscapes and their capacity to treat and infiltrate stormwater. Removing trees or replacing large ones with smaller ones, leveling and grading topography, disturbing soil profiles and compacting soils all are common land development activities that significantly affect the functioning of important natural hydrological services in the landscape. Low impact site preparation requires comprehensive development planning, ranging from thoughtful site layout to strict land clearing practices on the ground.

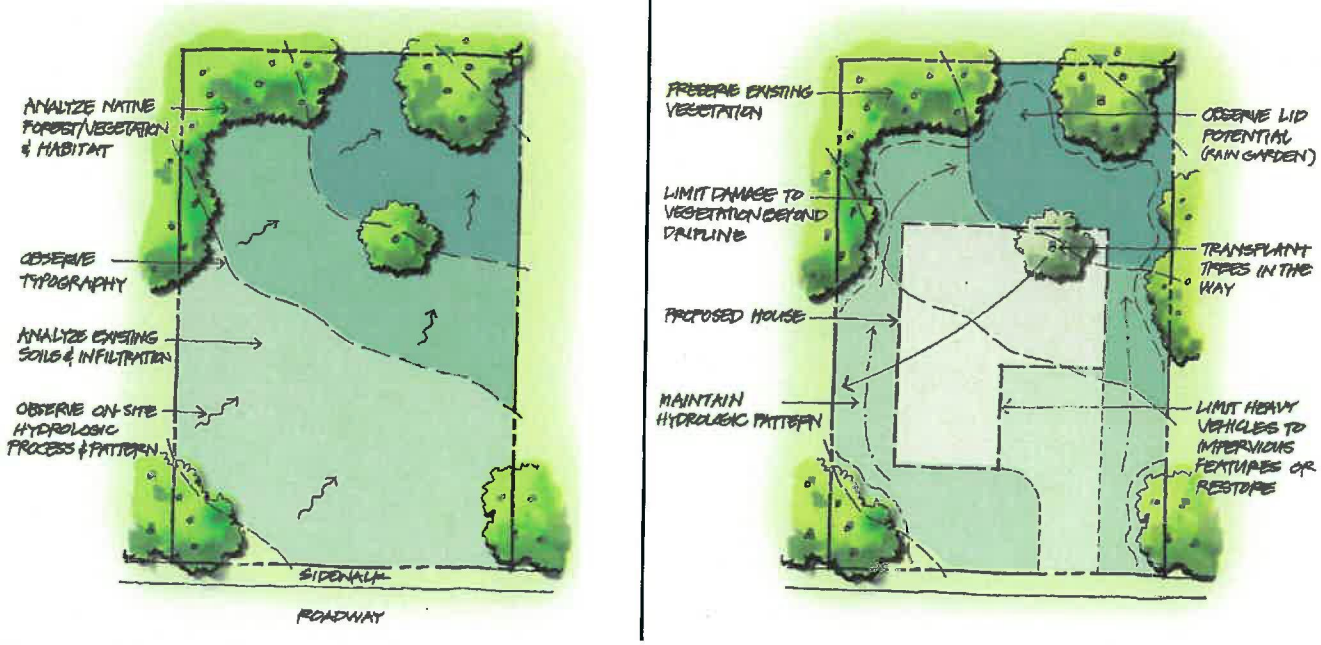

Diagram of site considerations before and after placement of house on site. Integrity of drainage pattern and canopy cover are maintained and soils are evaluated for placement of on-site LID practices such as a rain garden, permeable surfaces or exfiltration system.

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These principles require non-conventional land development practices such as minimized clearing, minimized grading, preservation of high infiltration soils, and limited lot-level disturbance. Practices should be integrated into a holistic process that begins with definition of the development envelope and protected areas. Ultimately, it is ideal to reduce the total area that is cleared and graded and the number and size of structure footprints on the site. This process begins with identifying, mapping, and avoiding wetlands and floodplains and using stem wall or pier construction. Implementing these practices as an alternative to site grading and slab on grade construction complements floodplain avoidance and reduces the amount of excavation and fill required during site preparation and construction.

Specific LID site preparation practices include:

- Minimal paving and compaction of permeable soils (including limiting movement of construction equipment to specific areas)
- Reduced size of construction easements and material storage areas
- Stockpiles sited within the development envelope during the construction phase of a project
- Siting the building layout and clearing and grading to avoid removal of existing trees
- Marking off tree protection areas to prevent compaction and mounding around roots during construction
- Disconnected impervious areas to increase opportunities for infiltration and reduce stormwater runoff flows
- Maintenance of existing topography and associated drainage divides to encourage dispersed flow paths
- Using hydrology/drainage as a design element
- Saving topsoil for reapplication before landscape planting, and applying soil amendments before planting

Applications

- **New construction**
- **Residential communities**
- **Commercial**

Water Protection Benefits:

Water conservation implications –Minimal site disturbance that retains existing vegetation and soil characteristics can result in lower irrigation requirements. Retention of existing trees leads to higher moisture levels throughout the landscape and less need for irrigation.

Stormwater implications – Preserving and promoting interception, infiltration, depressional storage, and on-site treatment are essential elements to reducing the runoff quantity and preserving the quality of stormwater.

Quantity

Minimal impervious area, retention of infiltration capacities, preservation of depressional storage and other benefits from LID site preparation greatly increase the ability of the landscape to manage stormwater at the source. This reduces dependence on the conventional stormwater system, and if done correctly, LID site preparation can reduce piping size and length as well as the land area allocated to conventional stormwater ponds.

Quality

By reducing and treating stormwater at the source, there is significant improvement of water quality percolating into the aquifer or running into downstream water bodies. Retained vegetation preserves natural interception processes and helps cleanse water. In addition, soil compaction can make establishing new landscapes very difficult and can substantially decrease infiltration rates (up to 99% in one north central Florida study). Removing or burying topsoil can have similar impacts on infiltration and provides poor soil quality for establishment of new landscape plant material. By maintaining native, uncompacted soils, plant stress is lower and less fertilizer is likely to be applied or run off, resulting in greater source control.

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Design Keys

- **Preservation of:**
- **Interception**
- **Infiltration**
- **Depressional storage**
- **Soil and vegetation treatment**

Design Considerations:

Pre-development site preparation options are determined largely by existing site constraints. LID site preparation practices are designed to preserve existing natural features. A site with streams, floodplains, wetlands, or steep slopes will require very careful land development planning. Because there can be no single strategy of low impact site preparation, it is important to focus on preservation of four key features: interception; infiltration; depressional storage; and soil and vegetation treatment.

Operations and Maintenance:

By applying the concept of low impact site preparation, long term maintenance costs of stormwater infrastructure and landscaping can be significantly reduced. For example, grading and applying disturbed fill soil to a site often results in poor establishment and quality of installed plants, requiring replacement and resulting in perpetual maintenance problems. By preserving native soils and minimizing compaction, plant stress is reduced and the need for added water, fertilizer and pesticides can be significantly reduced. Similarly, creating protection zones around existing trees during construction can reduce or eliminate the incidence of damage to tree roots that often results in tree death later on. Implementing invasive exotic control when needed will provide biodiversity benefits.

Credits in Green Building Certification Programs:

- FGBC Home Standard (S-2 maximize tree survivability; S-3 minimize soil compaction; S-4 25% of site protected from mechanical soils compaction via barrier; saving and reusing topsoil)
- Florida Water StarSM (preservation of existing vegetation)
- LEED for Homes (SS 1.2 minimize disturbed area of site)
- LEED for Neighborhood Development Pilot (GCT Prerequisite 1: Construction Activity Pollution Prevention; GCT Credit 6: Minimize Site Disturbance Through Site Design; GCT Credit 7: Minimize Site Disturbance During Construction)
- NAHB Model Green Home Building Guidelines (1.3.4 Minimize soil disturbance and erosion; 1.3.5 Manage storm water using low-impact development when possible; 1.4 Minimize environmental intrusion during onsite construction)

Relative Costs:

Costs for LID site preparation practices are typically lower than those for conventional practices. In an example from the Madera subdivision in Gainesville, FL, grading and clearing costs were $1,612 for a LID lot, compared to $2,016 for a similar-sized conventionally-cleared lot. Labor is spent on more careful clearing of smaller areas instead of rapid clearing of large areas. These two strategies tend to balance out, resulting in similar clearing costs. Less cleared area, however, can result in lower overall costs.

References and Resources:

EPA Stormwater BMP Fact Sheet: Preserving Natural Vegetation http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=34

Gregory, J.H., M.D. Dukes,P.H. Jones, and G.L. Miller. 2006. Effect of urban soil compaction on infiltration rate. *Journal of Soil and Water Conservation* 61(3):117-124.

Low Impact Development (LID) Practices for Storm Water Management (Toolbase Services): http://toolbase.org/Techinventory/TechDetails.aspx?ContentDetailID=909&BucketID=6&CategoryID=11

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Permeable Surfaces

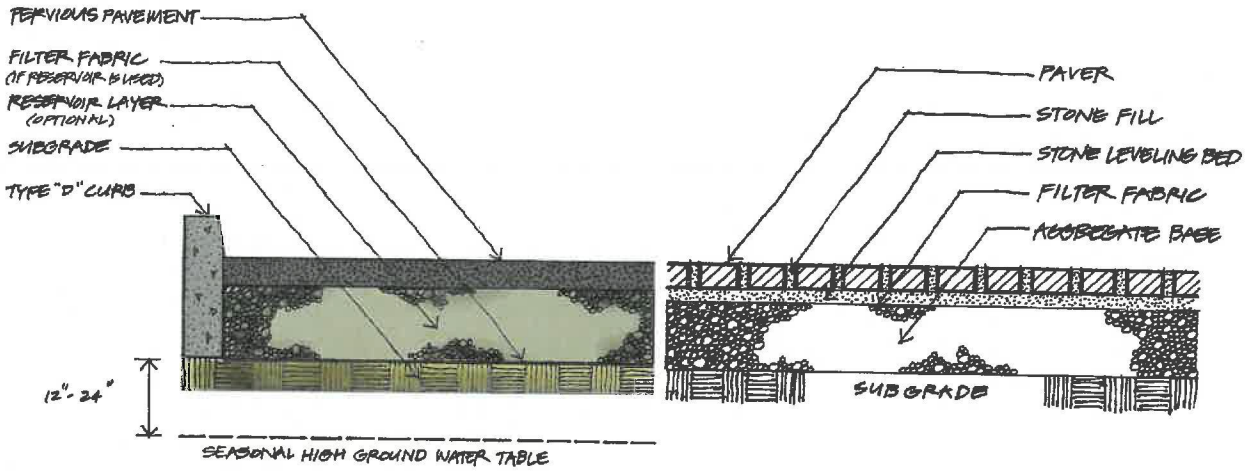

Illustration of two types of pervious surfaces, pervious paving (left) and pervious pavers (right). Although the permeable surfaces are different, they are each layered on the same type of aggregate base and underlying sub base.

Definition:

Permeable surfaces consist of a variety of types of pavement, pavers and other devices that provide stormwater infiltration while serving as a structural surface.

Objectives:

Permeable pavements function similarly to sand filters, in that they filter the water by forcing it to pass through different aggregate sizes and typically some sort of filter fabric. Therefore, most of the treatment is through physical (or mechanical) processes. As precipitation falls on the pavement, it infiltrates down into the storage basin where it slowly is released into the surrounding soil.

Overview:

Permeable, or pervious, pavers refer to unit (block, plastic grid) or poured (concrete) paving systems that incorporate permeable or semi-permeable materials overlaying a gravel storage layer. They are infiltration-based, volume control IMPs that substitute pervious for impervious surfaces, minimizing flooding and pollutant loads in stormwater runoff. They can be used for roads, driveways, walkways, patios, etc. and rainwater can be conveyed to exfiltration tanks or cisterns beneath the permeable pavers. Permeable pavers are most effective when used in conjunction with other LID treatment train IMPs (e.g., vegetated swales, cisterns, or exfiltration tanks).

There are several types of pervious paving materials, including permeable interlocking concrete pavers (PICP), concrete grid pavers (CGP), pervious (porous) pavements (PC & PA), and plastic reinforcing grids (PRG). According to the Florida Concrete Products Association, Florida has been a leader in the adoption of pervious pavement, with hundreds of applications across the state. Installation and maintenance of permeable pavers tends to be more labor and time intensive than that for concrete or asphalt paving. Additionally, vacuum sweeping is required as part of routine maintenance to prevent void space clogging.

Applications

- **Parking lots**
- **Low traffic streets**
- **Walkways**
- **Driveways**

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Water Protection Benefits:

Water conservation implications – As with green roofs and cisterns, permeable pavers can reduce stress on potable water resources by acting as a component of a treatment train for capture, storage, and reuse of stormwater.

Stormwater implications – Interconnected void spaces in permeable paving materials (surface, base, and subsurface) allow for infiltration and stormwater percolation to underlying soils, reducing runoff volumes, peak flows, and pollutant loads and facilitating groundwater recharge.

Design Keys

- Low traffic areas
- Sandy soils
- Shallow slopes (<5˚)
- Low water table
- Retention
- Detention
- Reduce runoff volume
- Reduce pollutant loads

Design Considerations:

Permeable surfaces are appropriate for both residential and commercial land uses and new construction and retrofit projects. Permeable pavers are most suitable for use in low traffic areas with sandy soils, shallow slopes (<5˚), and a low water table (i.e., seasonal highs 24" or more beneath paver base). Water will only fill the permeable pavers to the lowest elevation of the surface, and on a slope it could exit the pavement cell through the lower end. Permeable pavers are therefore not recommended for slopes.

Permeable pavements are typically not as strong as traditional cement or asphalt pavements. Permeable pavement is composed of asphalt or concrete without the finer particles that are normally found in the cement mix. The finished product is a strong pavement with a matrix of large pore spaces. The pavement can be designed to provide percolation rates from 5.6 to 18.5 gallons per minute per square foot. Before the pavement is installed, the soil surface is over-laid with a layer of geo-textile fabric and then a layer of stone aggregate. The aggregate forms a reservoir for retention and enhances infiltration capacity. It is crucial for underlying soils to have an infiltration capacity of >0.5 in/hr. for the pavement to function properly. It is also important to restrict heavy truck traffic to avoid damage. Although traffic of heavy weight vehicles (garbage trucks, fire engines, tractor-trailers) can be accommodated, construction due to excavation and materials increases substantially.

Operations and Maintenance:

Clogging is the main source of permeable pavements not functioning as well as they should. Large particles trap smaller and smaller particles, reducing the infiltration rate. Sediments can be deposited by vehicle traffic, foot traffic, wind blown sediments, or be transported by runoff.

If clogging occurs in porous pavement and the surface infiltration rate is reduced lower than the rainfall rate, then either water will pond or runoff will be produced. Therefore, periodic maintenance is required for continued functioning. Maintenance should include vacuum sweeping at least four times a year, followed by high-pressure hosing to free pores in the top layer from clogging. Potholes and cracks can be filled with patching mixes unless more than 10% of the surface area needs repair. Spot-clogging may be fixed by drilling half-inch holes through the porous pavement layer every few feet. Estimated cost of maintenance is approximately $200 per acre per year, which would include four inspections with appropriate jet hosing and vacuum sweeping treatments.

HOA or Regulatory Considerations:

The porosity of the paving material does not determine the amount of credit received in stormwater permitting, so selection is generally based on cost and aesthetics.

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These interlocking concrete pavers were used on the driveway at the model home of the Madera subdivision in Gainesville.

Credits in Green Building Certification Programs:

- FGBC-Home Standard (S-17 maintain pervious surface area)
- Florida Yards & Neighborhoods (stormwater runoff: mulch, bricks, flagstones, gravel, or other porous surfaces used on walkways, patios or drives)
- LEED for Homes (SS 4.1 permeable lot)
- LEED for Neighborhood Development Pilot (GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

The amount and type of materials as well as site preparation largely determine the final cost of paver installations. Typical construction costs vary from $5 to $10 per square foot. The necessity for deeper drainage/storage basins (typically driven by increased load or frequency of vehicles use) will increase the cost substantially. Though permeable pavement is more expensive than conventional pavement, it can be cost competitive when it reduces the size of, or eliminates, the need for curb and gutter conveyance systems and large stormwater retention ponds.

References and Resources:

Pervious Concrete Pavements: The Environmentally Friendly Choice (Concrete Network):

http://www.concretenetwork.com/pervious

Watershed Benefits of Permeable Pavers (Low Impact Development Center, Inc.)

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Resource Efficient Landscapes and Irrigation

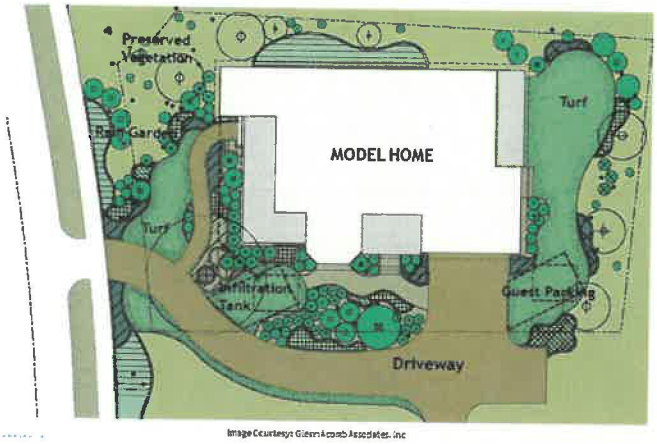

Image Courtesy of Glenn Acomb Associates, Inc



Landscape design for a resource efficient landscape in the Madera subdivision in Gainesville, FL. Photo illustrates the front yard portion of the installed landscape.

Definition:

Resource efficient landscapes in Florida are those Florida-friendly landscapes that minimize environmental impacts to the greatest extent possible. According to the Florida Statutes (FS 373.185), " 'Xeriscape' or 'Florida-friendly landscape' means quality landscapes that conserve water and protect the environment and are adaptable to local conditions and which are drought tolerant. The principles of Xeriscape include planning and design, appropriate choice of plants, soil analysis which may include the use of solid waste compost, efficient irrigation, practical use of turf, appropriate use of mulches, and proper maintenance."

Objectives:

Resource efficient landscaping entails use of a number of principles and practices that reduce the nutrient, water, and energy inputs and outputs resulting from residential landscapes. The two core goals of resource efficient landscaping and irrigation are nutrient source control and efficient irrigation application.

Overview:

A principal component of resource efficient landscapes is the adoption of the highest standard (gold level) of the Florida Yards and Neighborhoods (FYN) program, which requires practices such as appropriate fertilization and use of the "right plant, right place" philosophy. In the last few years, FYN's target audience has expanded to include builders, developers, landscape architects, landscape maintenance professionals and real estate professionals. Currently, FYN has coordinators working (either full or part-time) with builders and developers in nearly two dozen counties, and the state office provides support for those counties that currently do not have a staff person formally in the Builder/Developer Coordinator role.

Additional principles that can help reduce the water quality and quantity impact from landscapes are preservation or planting of tree canopy, reduction of high maintenance turfgrass, use of appropriately sited native plants, and use of reclaimed water for irrigation. All of these integrate with the "reduce, reuse, recycle" philosophy. Technologies such as soil moisture sensors and micro-irrigation can help reduce overwatering. Stormwater and graywater reuse systems can replace potable water use and help mimic natural

Applications

- **New construction**
- **Retrofits**
- **Commercial**
- **Residential communities**

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hydrological function. Dual metered and piped reclaimed water systems recycle treated wastewater back onto urban landscapes in a controlled and distributed pattern.

Benefits

- Reduction of pollutant load
- Reduced water consumption

Water Protection Benefits:

Water conservation implications – The average Florida household uses approximately 50% of its water for outdoor irrigation. In most cases this is potable water, which is of a quality far above that required for landscape irrigation. Matching landscape design and installation to local soils and natural hydrology can significantly reduce, or eliminate, potable water consumption.

Stormwater implications - Quantity

Reducing excessive landscape irrigation minimizes the amount of water running off of the landscape into the stormwater management system. This can translate to reduced nutrient and contaminant concentrations in stormwater runoff.

Stormwater implications - Quality

Nutrients added to urban landscapes are likely to be one of the greatest contributors to non-point source nutrient pollution in Florida. For example, high nutrient loading from urban fertilizer use has been implicated as a driving factor contributing to the algal blooms in 2004 and 2005 in the St. Johns River. Limiting or eliminating fertilizer in residential landscapes and applying it correctly when used can help to preserve existing water quality. Additionally, reducing excessive landscape irrigation can translate to reduced nutrient and contaminant concentrations in stormwater runoff.

Design Considerations:

Landscape plant suitability is integrally connected to groundwater elevation, slope, soil composition, and a variety of other localized characteristics. Resource efficient landscaping and irrigation can be applied to any home site. The plant palette available depends on climate and varies widely from the Panhandle to south Florida and from coastal to interior regions. Numerous resources exist for assistance in selecting the right plants for a landscape. Additionally, plant water requirements vary, being lower in cooler northern areas and higher in warmer southern areas.

Under ideal conditions, a resource efficient landscape and irrigation system would far exceed performance of a traditional landscape. This type of "gold standard" landscape is designed and maintained to exist predominantly on rainfall once plants are established. In this case minimal to no supplemental fertilization is used in the landscape and no pesticides are use in the landscape or only biological and biorational pesticides are used when needed. Meeting these standards achieves the highest recognition level from the Florida Yards & Neighborhoods program. This can be achieved in part by starting with adequate soil conditions (avoiding compaction and not planting on fill soil) and preserving existing vegetation or installing drought tolerant, hardy plants that are highly adapted to the site's conditions.

Design Keys

- Selection of plants appropriate to site conditions
- Maintenance practices

Operations and Maintenance:

The principles related to resource efficient or Florida friendly landscapes include putting the right plant in the right place, watering efficiently, fertilizing appropriately, mulching, attracting wildlife, managing yard pests responsibly, recycling, reducing stormwater runoff and protecting the waterfront. See the University of Florida's *A Guide to Florida-Friendly Landscaping: Florida Yards & Neighborhoods Handbook* for detailed information on designing and maintaining a low maintenance landscape using those nine principles.

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HOA or Regulatory Considerations:

F.S. 373.185 requires that "A deed restriction or covenant entered after October 1, 2001, or local government ordinance may not prohibit any property owner from implementing Xeriscape or Florida-friendly landscape on his or her land." This statute also directs the state's water management districts to design and implement incentive programs for local governments to adopt or amend existing ordinances to require Florida friendly landscaping in new developments, including providing a model Florida friendly landscaping code.

In 2002, the Florida Department of Environmental Protection, together with Florida's nursery and landscape industry and the University of Florida, created the *Guidelines for Model Ordinance Language for the Protection of Water Resources in Florida*, which provides example landscape ordinance language for local governments.

In 2006, the University of Florida's Conservation Law Clinic created model CCR language for the FYN program, which was made available as a tool for developers.

Credits in Green Building Certification Programs:

- FGBC-Home Standard (waterfront prerequisites: use of native, aquatic vegetation on shoreline, no turf adjacent to water, use of terraces, swales or berms to slow stormwater; W16 drought tolerant turf; W17 drought tolerant plants; W-18 plants compatible with local conditions; W-19 turf less than 50% of landscape; W-20 evenly shaped turf and no turf on berms; W-21 plants with similar maintenance requirements grouped together; W-22 mulch 3-4 inches deep; W-23 non-cypress mulch used; W-24 soil tested and amended where necessary; W-25 no permanent irrigation system; W-26 innovative irrigation technology; W-27 meet or exceed Water Star standards; W-28 irrigated land according to FGBC standard)
- FGBC-Development Standard (A-4 compost or mulch facility; A6 drought resistant landscape material in non-recreational common areas; CDR-2 no language in CCRs that prohibits green practices)
- Florida Yards & Neighborhoods New Construction Certification and Homeowner Recognition (points are earned for using various specific resource efficient landscaping practices)
- Florida Water Star℠ (points are earned for using various specific resource efficient landscaping practices)
- LEED for Homes (SS-2 landscaping)
- LEED for Neighborhood Development Pilot (GCT Credit 3: Reduced Water Use, no permanent irrigation system; GCT Credit 9: Stormwater Management)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible; 1.3.6 Devise landscape plans to limit water and energy demand while preserving or enhancing the natural environment; 4.1 indoor/outdoor water use)

Relative Costs:

Costs for resource efficient landscapes can vary greatly depending on homeowner preferences. There is evidence that both upfront and maintenance costs for these practices can be lower when compared to those for conventional practices, particularly over time.

References and Resources:

Florida Department of Environmental Protection. 2002. *Guidelines for Model Ordinance Language for the Protection of Water Resources in Florida*. http://fyn.ifas.ufl.edu/materials/fdep%20model%20ordinance%20language%20for%20florida%20friendly%20landscapes.pdf

Florida Department of Environmental Protection. 2006. *Landscape Irrigation and Florida Friendly Design Standards*. http://www.dep.state.fl.us/water/waterpolicy/docs/landscapeirrigationfloridafriendlydesign.pdf

Florida Yards and Neighborhoods. 2006. *A Guide to Florida-Friendly Landscaping: Florida Yards & Neighborhoods Handbook*. University of Florida, IFAS. 104 pp. http://fyn.ifas.ufl.edu/materials/handbook.pdf

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Fraga, G.M. and Pagidipati, Srujani. 2006. Florida Friendly Landscaping Covenants, Conditions and Restrictions. Prepared for Florida Yards & Neighborhoods by the Conservation Clinic, University of Florida Levin College of Law. http://fyn.ifas.ufl.edu/materials/florida-friendly%20covenants,%20conditions%20and%20restrictions.doc

University of Florida IFAS – Florida Yards & Neighborhoods: http://fyn.ifas.ufl.edu

Florida Yards.Org – Florida Friendly Landscaping: The Smart Way to Grow: www.FloridaYards.org

Credits

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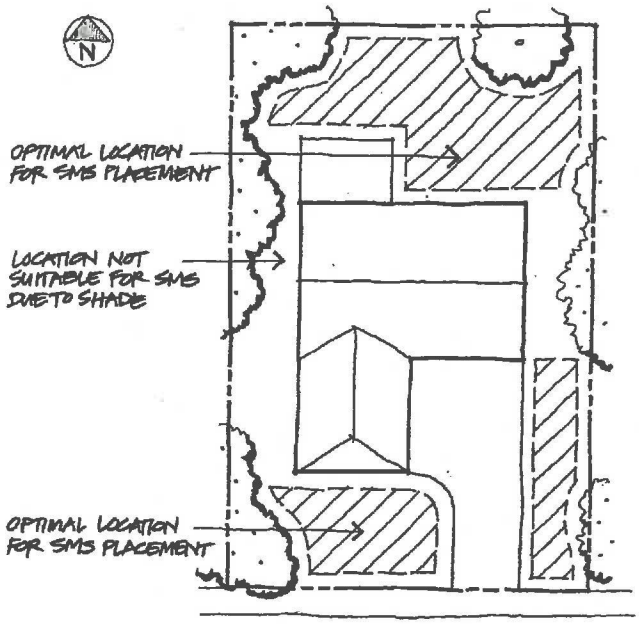
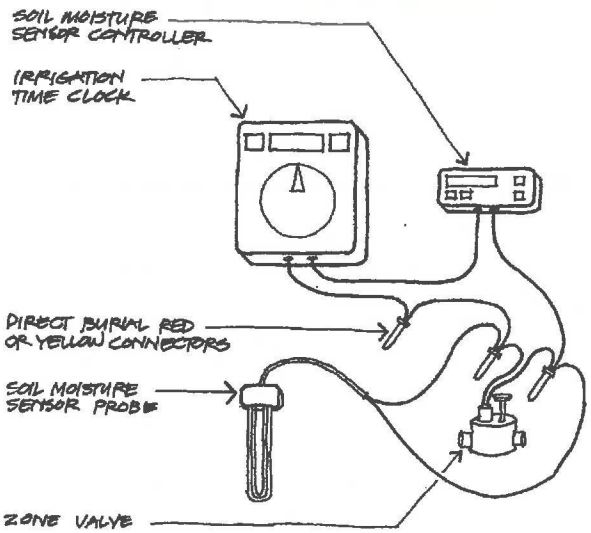
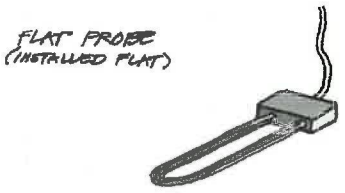
Soil Moisture Sensors









(Above left) Layout of irrigated areas showing optimal and unsuitable locations for sensor placement.

(Above right) Components of an installed soil moisture sensor system. Distances between components are not representative of final installation and are meant to illustrate the connections between the sensor, the zone valve, the controller and the irrigation time clock.

(Right) Two types of soil moisture probes used in typical soil moisture sensor systems.

Definition:

The soil moisture sensor (SMS) is a sensor connected to an irrigation system controller that measures soil moisture content in the active root zone before each scheduled irrigation event and bypasses the cycle if soil moisture is above a user-defined set point. Soil moisture sensors, like rain sensors, are considered rain shut off devices, but while rain sensors measure evapotranspiration rates, soil moisture sensors measure real time soil moisture.

Objectives:

Soil moisture sensors (SMSs) measure soil moisture at the root zone and regulate the existing conventional irrigation timer, resulting in considerable water savings when installed and used properly. A customized soil water content threshold is set, allowing for dryer or wetter soil condition. SMSs function similarly to rain sensors by bypassing irrigation events under rainy conditions, but by measuring soil moisture at the root zone they are more effective at minimizing irrigation when plants do not need additional water.

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Applications

- New construction
- Retrofits
- Commercial
- Residential communities

Overview:

When connected to conventional irrigation system time clocks, soil-moisture sensors can override scheduled watering events by interrupting the irrigation controller circuit when adequate moisture is detected in the soil. The sensors have user-adjustable moisture content set-points that allow unique watering regimes based on plant species, soil type, and/or seasonal rainfall. Though each device manufacturer uses their own method, all soil-moisture sensors detect the electrical conductivity of the soil and convert it to moisture units.

Water Protection Benefits:

Water conservation implications – University of Florida research shows that SMSs can reduce residential irrigation application by 50%. Water savings have been measured between 5% to 88% over typical timer-based irrigation systems, with 59% average savings in one University of Florida study. In another University of Florida study comparing SMSs to water use with and without a rain sensor, the rain sensor resulted in a 34% reduction in water use while the SMS savings ranged from 69-92% for three of the four SMSs tested. In Florida, approximately 50% of residential water use goes to irrigation, meaning that SMSs can reduce overall residential water use by 25%. Use of soil moisture sensors results in greatest water savings during rainy periods.

Stormwater implications – The significant reduction in unneeded landscape irrigation translates to reduced runoff. As a result, fewer nutrients from fertilizers and chemicals from pesticides are carried off individual lots and landscaped areas. Additionally, there is a reduction in the overall burden placed on the stormwater conveyance system.

Design Considerations:

SMSs appear to be effective in all soil types. However, there is a range in effectiveness, and uniform performance across soil types should not be assumed. There is no strong variance for application and use of SMSs across soil types in Florida. SMSs can be used regardless of slope in Florida.

A SMS should be placed in a location that is representative of the water requirements in the zone(s) it is controlling. Where there are variations due to shade, topography, etc., the sensor should be placed in the driest location (ie., in full sun, on high elevation points). In larger landscapes, use of multiple sensors is most effective, with one sensor per irrigation zone (hydrozone). If one sensor is used for the entire landscape, it should be placed in a turfgrass hydrozone and in a location where it is most representative of the average water requirements of that zone.

SMSs should be placed at least 5 ft. from any structure, from impervious surfaces, from depressions/swales, from the property line (to avoid overspray from neighboring irrigation systems), and from septic tanks/drainfields, and at least 3 ft. from plant beds. They should also be placed to avoid high moisture areas, and so should be at least 5 ft. from downspouts, overhangs, hose bibs, air conditioning condensate lines, tree canopy drip lines, and shade on the north side of a home. Sensors are installed in the root zone, in undisturbed soil when possible. Refer to the *Field Guide to Soil Moisture Use in Florida* for detailed installation and calibration instructions.

Benefits

- Reduced water consumption
- Can be set to lower and upper thresholds to maintain optimum soil moisture saturation and minimize plant wilting.
- Can contribute to deeper plant root growth, reduced soil runoff/leaching, and less favorable conditions for insects and fungal diseases.

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Operations and Maintenance:

The SMS overrides the controller's scheduled irrigation events when they are not needed but it does not control the duration of those events. To achieve maximum water use efficiency, the irrigation run time must be set appropriately on the irrigation controller according to application rate, season, region and plant needs.

If the system is applying excessive amounts of irrigation, an irrigation contractor trained in the installation and operation of soil moisture sensors should be called in for an inspection. If the system is running properly, an annual recalibration is recommended along with an inspection. More frequent recalibration may be needed due to changing plant needs (site changes or termination of establishment period), seasonal weather variation, or if the sensors were placed improperly.

When a landscape maintenance company or homeowner makes fertilization or pesticide applications, they may temporarily turn off the SMS controller to allow a watering-in application. The technician or homeowner must make sure that the SMS controller is turned back on following that event.

HOA or Regulatory Considerations:

Florida Statute 373.62 states that "Any person who purchases and installs an automatic lawn sprinkler system after May 1, 1991, shall install, and must maintain and operate, a rain sensor device or switch that will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred." Soil moisture sensors are considered rain sensor devices.

The SMS reduces water use by having irrigation events determined by soil moisture conditions rather than a predetermined irrigation schedule. However, watering restrictions in many parts of the state limit irrigation to specific days of the week. Be sure to follow local watering restrictions when inputting timer settings.

Credits in Green Building Certification Programs:

- FGBC-Development Standard (A-6 water conserving irrigation in common areas)
- FGBC-Home Standard (W-26 innovative irrigation technology)
- Florida Water Star[SM]
- Florida Yards and Neighborhoods
- LEED for Homes (WE 2.1 high efficiency irrigation system)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Relative costs for a SMS system are low compared to the quantity of potable saved over the lifetime of the technology. Materials and installation costs currently, range from $150 to $400. This is likely the simplest, most cost-effective, and socially acceptable water-efficiency LID practice in Florida. Complex landscapes with multiple hydrozones and plant watering needs may require numerous sensors and increase costs. SMSs can often pay for themselves in as little as 12 months or less as a result of water savings (depending on water use fees and residential consumption).

References and Resources:

Baum, Melissa C., Dukes, Michael D., Miller, Grady L. 2005. "Analysis of Residential Irrigation Distribution Uniformity." *Journal of Irrigation and Drainage Engineering*, July/August 2005, 336-341.

Cardenas-Lailhacar, B., M.D. Dukes, and G.L. Miller. 2008. Sensor-based automation of irrigation on bermudagrass, during wet weather conditions. *Journal of Irrigation and Drainage Engineering* 134(2): 120-128.

Dukes, Michael D., Cardenas-Lailhacar, Bernardo, and Miller, Grady L. 2005. "Residential Irrigation Based on Soil Moisture." *Resource*, June/July 2005, 4-6.

Philpot, Brent. 2008. *Field Guide to Soil Moisture Use in Florida*. Produced for the St. Johns River Water Management District by the Program for Resource Efficient Communities, University of Florida. 40 pp.

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"Sensors of today...Savings for tomorrow." http://www.igin.com/Irrigation/pageSensorsToday.htm

Soil Moisture Sensor page at the homepage of Dr. Michael Dukes at UF: http://irrigation.ifas.ufl.edu/SMS/publications.htm

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IFAS Extension

Stormwater Reuse



Stormwater reuse retrofit project in Cocoa, FL serving a 12-acre downtown drainage basin. Photos courtesy of Eric Livingston.

Definition:

Although similar in concept to rainwater harvesting using rainbarrels and cisterns, stormwater reuse systems are typically much large in size using a surface detention pond or other water storage system to capture water and recycle that water for non-potable needs, especially irrigation.

Objectives:

This practice can significantly reduce demand on higher quality water sources, but is also considered part of a treatment train by allowing stormwater runoff a second chance to infiltrate into the ground and water is treated by landscape vegetation and soils.

Overview:

Stormwater reuse entails storing stormwater runoff from a surface pond or underground catchment device and then using it as a source of irrigation water. The philosophy behind the practice is that the lowest quality water should be used for the lowest quality need.

Applications

- **New construction**
- **Retrofits**
- **Commercial**
- **Residential communities**

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Benefits

- **Conservation of potable water**
- **Maintains hydrologic balance**
- **Improved water treatment**

Water Protection Benefits:

Water conservation implications – Potable water is directly conserved because stormwater acts as an alternative water source through direct substitution in landscape irrigation.

Stormwater implications – By redistributing captured stormwater across an extensive landscape area in a controlled fashion, this practice helps maintain the hydrologic balance and uses natural cleansing processes for improved water treatment.

Design Considerations:

This practice is somewhat infiltration dependent in the sense that water is applied to the landscape and then infiltrates naturally. Water intake systems should use horizontal wells placed in the subsoil below the storage basin or utilize a post pump filtration system to remove particulate matter. Although water conservation during irrigation should still be practiced, the type of emitter used should take into account the lower quality water supply and increased likelihood of particulate fouling. A backup source of water should be identified and factored into the design of the system.

Operations and Maintenance:

Stormwater reuse has relatively low requirements for maintenance. Irrigation pumps, filtration system, pipes and other components should be inspected and repaired as needed.

Credits in Green Building Certification Programs:

- FGBC-Development Standard (Category U-3: supply irrigation system with storm or reuse water)
- LEED for Homes (WE 1.1 rainwater harvesting system)
- LEED for Neighborhood Development Pilot (GCT Credit 3: Reduced Water Use)
- NAHB Model Green Home Building Guidelines (1.3.5 Manage storm water using low-impact development when possible)

Relative Costs:

Stormwater reuse is very cost effective for consumers and water utilities. Water costs for stormwater reuse range from $0.12 - $0.50 per kgal (thousand gallons) versus $2.00 - $5.00 per kgal for potable water. Many Florida-specific examples exist where utilities have profited from selling stormwater for irrigation to both residential and commercial consumers. For utilities, costs are low because of low energy requirements due to reduced stormwater treatment requirements.

References and Resources:

Shukla, Sanjay and Fouad H. Jaber. 2006. *Stormwater as an Alternative Source of Water Supply: Feasibility and Implications for Watershed Management*. UF/IFAS EDIS Circular 1493, Agricultural and Biological Engineering Department. http://edis.ifas.ufl.edu/pdffiles/AE/AE39800.pdf

Stormwater Reuse (Marty Wanielista) www.stormwater.ucf.edu/FILES/StC-P_Wanielista.B104.doc

Design Keys

- **Storage volume**
- **Irrigation demand**
- **Supplemental water source**
- **Water intake, pump, filtration and irrigation emitter selection**

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Stormwater Reuse: The Utility Business Practice (Gerry Hartman and Marty Wanielista) http://www.stormwater.ucf.edu/conferences/9thstormwaterCD/documents/StormwaterReuse.pdf

Stormwater Reuse: Why? And Examples (Marty Wanielista)

http://www.stormwater.ucf.edu/research/presentations/Reuse,%20Why%20and%20Examples.pdf

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CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Stephen Mayer

Title of Item:

AVONLEA PUD AMENDMENT PARCEL B (PARCEL 16) (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2434-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, BEING THE THIRD AMENDMENT OF ORDINANCE NO. 2307-2015, ALSO KNOWN AS THE "NEW AVONLEA PLANNED UNIT DEVELOPMENT (PUD)" CONSISTING OF 12.40 ACRES ZONED RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD), 16.24 ACRES ZONED COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD), AND 20.4 ACRES OF WETLAND/UPLAND PRESERVE ZONED RPUD, FOR A TOTAL OF 49.04 ACRES; SAID PUD BEING GENERALLY LOCATED BETWEEN NE DIXIE HIGHWAY TO THE SOUTH, LAND ON BOTH SIDES OF GREEN RIVER PARKWAY ON THE WEST, LAND ON BOTH SIDES OF CARDINAL AVENUE ON THE EAST AND THE CITY BOUNDARY TO THE NORTH, BEING MORE FULLY DESCRIBED BY EXHIBIT "A" ATTACHED; AMENDING SAID PUD TO PROVIDE FOR THE APPROVAL OF THE MASTER PARCEL SITE PLAN FOR THE AVONLEA CROSSINGS PARCEL B (PARCEL 16); PROVIDING FOR A MASTER OFF-SITE INFRASTRUCTURE PLAN FOR THE ENTIRE PUD; PROVIDING FOR REVISED AND ADDITIONAL DEVELOPMENT CONDITIONS OF APPROVAL; PROVIDING FOR AMENDED AND NEW TIMETABLES 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:

The vacant subject property is approximately 4.14 acres and is a part of the New Avonlea PUD. The New Avonlea PUD was approved by the City Commission on June 8, 2015, via Ordinance 2307-2015, and consists of multiple parcels that are zoned CPUD and RPUD as shown on a Master Parcel Plan. The Master Parcel Plan also consisted of development maximum approvals. This request represents the third amendment and is specific to Parcel 16 of the Master PUD.

The Master Parcel Plan (Exhibit D) of the original New Avonlea PUD orginally delineated this parcel to be a Commercial Planned Unit Development, allowing for up to 75 residential units and 65,000 square feet of commercial development. The applicant would like to build 69 residential units and no commercial development on the site.

The site is approximately 4.14 acres in size. The property is adjacent to the Haney Creek Natural Area. To the east and across from Green River Parkway are undeveloped parcels of the New Avonlea PUD. To the north and across Baker Road is an unincorporated undeveloped site.

The proposed development for Avonlea Crossings Parcel B – (Parcel 16) consists of 47 two-story, two-bedroom townhouses in 12 buildings and 22 two-story, three-bedroom detached, single-family cottage homes. The New Avonlea Masterplan allows for up to 75 units on Parcel 16, a site density of 18.1 du per acre. The proposed 69

units reduces the site density to 16.7 du per acre.

The stated desire from the developer, New Urban Communities, is to meet a market need for middle-income families who may otherwise have a hard time finding housing in a location in Stuart. With close proximity to downtown Stuart, Jensen Beach, quality schools, and commercial amenities, many middle-income families appear in large numbers to be priced out of the market. The developer seeks to meet this need by providing smaller, efficiently designed cottage units with superior site and landscape design. The site plan and building siting and massing combines to create a unique, intimate community with a real sense of place. The two distinct product types offered will allow a broader spectrum of households to live in the community, consistent with the original concept of Avonlea.

The application has been reviewed for consistency with the City's LDC. Approval of the rezoning to RPUD would allow for attached housing to be constructed at the site. The Master Parcel Plan approved up to 75 units on the CPUD, based on available density. The applicant is proposing 69 units, which is less than the Master Parcel Plan permits. The applicant shall continue to maintain an appropriate mix of Commercial and Residential uses within the entire Master Parcel Plan, by maintaining not less than 10% of the entire PUD as commercial, which is a requirement of the Special Neighborhood Future Land Use designation.

This parcel is included in an existing Avonlea Real Estate Development Accelerator (REDA) agreement which was previously established by a Resolution of the Community Redevelopment Agency. That agreement is currently under review and is linked to the required offsite infrastructure plan.

The Local Planning Agency (LPA) voted to recommend approval of Ordinance 2434-2020 with three additional conditions. 1) Provision of crosswalks at the internal intersections, 2) allow for a portion or all of the off-street parking to be reserved for a bus stop, as needed and 3) add a barrier to the playground area, either fence or foliage. The draft LPA minutes are attached. Staff has included conditions of approval to reflect the LPA recommendations. Staff has added these new conditions to apply for the entire PUD: #41, 42, and 59.

Funding Source:

N/A

Recommended Action:

Motion to recommend approval of Ordinance 2434-2020 and move to forward to the City Commission for First Reading.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ordinance 2434-2020 Avonlea Crossing Parcel B - Parcel 16	2/28/2020	Ordinance add to Y drive
🗋	Staff Report	2/28/2020	Staff Report
🗋	Landscape Plan	2/10/2020	Exhibit
🗋	Site Plan Page 1	2/10/2020	Exhibit
🗋	Site Plan Page 2	2/10/2020	Exhibit
🗋	Design Guidelines	2/10/2020	Exhibit
🗋	Architectural Elevations and footprint	2/10/2020	Exhibit

Survey Page 1	2/10/2020	Exhibit
Survey Page 2	2/10/2020	Exhibit
Auto Turn Plan	2/10/2020	Backup Material
Preliminary Engineering page 1	2/10/2020	Backup Material
Preliminary Engineering Page 2	2/10/2020	Backup Material
Master Parcel Plan for Avonlea	2/10/2020	Backup Material
PUD Checklist 1	2/13/2020	Cover Memo
PUD Checklist 2	2/13/2020	Cover Memo
LPA Minutes 2-20-2020	2/28/2020	Attachment

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2434-2020

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, BEING THE THIRD AMENDMENT OF ORDINANCE NO. 2307-2015, ALSO KNOWN AS THE "NEW AVONLEA PLANNED UNIT DEVELOPMENT (PUD)" CONSISTING OF 12.40 ACRES ZONED RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD), 16.24 ACRES ZONED COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD), AND 20.4 ACRES OF WETLAND/UPLAND PRESERVE ZONED RPUD, FOR A TOTAL OF 49.04 ACRES; SAID PUD BEING GENERALLY LOCATED BETWEEN NE DIXIE HIGHWAY TO THE SOUTH, LAND ON BOTH SIDES OF GREEN RIVER PARKWAY ON THE WEST, LAND ON BOTH SIDES OF CARDINAL AVENUE ON THE EAST AND THE CITY BOUNDARY TO THE NORTH, BEING MORE FULLY DESCRIBED BY EXHIBIT "A" ATTACHED; AMENDING SAID CPUD TO PROVIDE FOR THE APPROVAL OF THE MASTER PARCEL SITE PLAN FOR THE AVONLEA CROSSINGS PARCEL B (PARCEL 16); REZONING SAID CPUD TO A RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD); PROVIDING FOR A MASTER OFF-SITE INFRASTRUCTURE PLAN FOR THE ENTIRE PUD; PROVIDING FOR REVISED AND ADDITIONAL DEVELOPMENT CONDITIONS OF APPROVAL; PROVIDING FOR AMENDED AND NEW TIMETABLES 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, on June 8, 2015, the City Commission adopted Ordinance No. 2307-2015, whereby establishing the "New Avonlea PUD" which consists of a Master Parcel Plan and provides

that any future development activities on any of the project's multiple parcels (with the exception of Phase II of an existing Avonlea Commerce Center Parcel) shall require a master site plan approval thru a major PUD amendment, further requiring that an off-site infrastructure plan be added to the Master Parcel Plan at the time of first amendment.

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 Avonlea Crossings Parcel B (Parcel 16) RPUD development, including the New Avonlea Off-Site Infrastructure Plan are consistent with the master PUD and anticipated development;

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

WHEREAS, the New Avonlea PUD is legally described in **"Exhibit A"** of this ordinance. A map depicting the New Avonlea PUD is attached hereto as **Exhibit "B"** and made a part hereof by reference; and amended development conditions including revised timetables for development 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 items consisting of documents already approved by Ordinance 2305-2015 and the first Amendment (Ordinance 2366-2018), as well as revised and new documents adopted hereby are on file as public records at the office of the City Clerk in City Hall and are attached hereto as **Exhibit "D"**, hereinafter the "Development Documents", which shall be deemed a part of this Ordinance:

The following are General New Avonlea PUD Plans and Documents (reinstated by Ordinance 2420-2019:

1. The Master Parcel Plan, Sheet 1 of 1 by Lucido and Associates, dated 5.27.18 (existing)
2. South Florida Water Management District Permit #43-01387-P, issued 6.9.16. (existing)
3. Department of the Army Permit #SAJ-1998-03203. (existing)
4. Drainage Statement, by Grzelka Engineering, Inc. and as built plans for master drainage. (existing)
5. Master Drainage Plan, by DLS Environmental Services, Inc. dated March 2016 (revised)
6. Environmental Assessment Report, prepared by DLS Environmental Services, Inc. dated July 2014 (existing)
7. Preserve Area Management Plan, prepared by DLS Environmental Services, Inc., dated March 2017 (existing)
8. Traffic Impact Analysis prepared by MacKenzie Engineering and Planning, dated October 2014 (existing)
9. 2015 Pattern Book for Avonlea Commerce Center Phase II (existing)
10. PUD Boundary Survey prepared by Velcon Group, Inc., dated 01.08.14 (existing)
11. Avonlea PUD Off-Site Infrastructure Plan, by HJA Design Studio, Sheet 1 and 2 of 2, dated 1.11.16 (existing)
12. Avonlea Typical Cross Section, by Cotleur and Hearing, Inc., dated 4.19.18 (existing)
13. Amended and Restated Declaration of Covenants and Restrictions for the New Avonlea P.U.D., dated 11.30.16. (existing)

Master Parcel Plans for Avonlea Crossings Parcel A (Parcel 1)

14. Site Plan for Avonlea Crossing A, by Kuoppala & Associates, dated 9.30.19 (existing)
15. Landscape Plan for Avonlea Crossing A, by Litterick Landscape Architecture, dated 9.30.19 (existing)
16. Architectural Elevations and Floor Plans for Avonlea Crossing A, by Kuoppala & Associates, dated 9.30.19 (existing)

17. Boundary Survey for Avonlea Crossing A, by Velcon Engineering and Surveying, dated 4.30.19 (existing)

The following documents are established by Ordinance 2366-2018 and are not being replaced:

Master Parcel Plans for Avonlea Preserve Parcel A (Parcel 2) and B (Parcel 12)

18. Site Plan for Avonlea Preserve A, by Cotleur and Hearing, Inc, dated 11.20.17 (existing)
19. Site Plan for Avonlea Preserve B, by Cotleur and Hearing, Inc., dated 11.20.17 (existing)
20. Lot Plan for Avonlea Preserve A and B, by Cotleur and Hearing, Inc., dated 4.24.18 (existing)
21. Landscape Plan for Avonlea Preserve A, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
22. Landscape Plan for Avonlea Preserve B, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
23. Landscape Plan details for Avonlea Preserve A and B, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
24. Boundary Survey for Avonlea Preserve A, by Velcon Group, Inc., dated 1.27.17 (existing)
25. Boundary Survey for Avonlea Preserve B, by Velcon Group, Inc., dated 2.6.17 (existing)
26. Amenity Package, dated 2.2.18 (existing)

The following documents are being established by Ordinance 2434-2020:

Master Parcel Plans for Avonlea Crossings Parcel B (Parcel 16)

27. Site Plan for Avonlea Lot 16, by Peter Wayne Aquart, P.E., SP-1 and SP-2, dated 1.23.20 (new)
28. Landscape Plan for Avonlea New Urban Communities, by Cotleur and Hearing, sheets 1 thru 4, dated 1.23.20 (new)
29. Architectural Elevations and Floor Plans, prepared by Architectural Studio, Inc., Sheets A1-5, dated 1.1.20 (new)
30. Boundary and Topographic Survey, by Richard H Smith, Inc., sheets 1 and 2, dated 8.1.19 (new)
31. Design Guidelines, prepared by New Urban Communities (new)

SECTION 2: 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 and with the aforesaid Development Documents. The failure of an Owner to complete their 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 owners 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 Owners to seek administrative or judicial redress.

SECTION 3: Following the adoption and acceptance of this ordinance by the Owners, and in addition to any other action for failure by an owner 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 Owners 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 the portion of this or any other ordinance pertaining to the portion of the development in breach.
b. Direct the City Development Director to initiate the process to rezone the PUD property or any portion of the PUD property in breach.

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 Owner 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 4: 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 Owner of the site, this ordinance shall prevail.

SECTION 5: 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 6: This ordinance and agreement shall be effective upon the last of the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owners.

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 this approval, failing which this ordinance shall be void.

SECTION 8: 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 this ____ day of _____, 2020.

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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED on second and final reading this __ day of _____, 2020.

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL
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: _____

Frank A. Wacha Jr., Trustee

By: _____

Frank A. Wacha Jr.

WITNESSES:

_____

Print Name: _____

_____

STB Outdoors, LLC

A Florida Limited Liability Company

By: _____

Nikolas Schroth, Member

Print Name: _____

_____

Print Name: _____

Parcel 1 of Avonlea

By: _____

Melissa C. Kindig, Owner

(Continued to next page)

WITNESSES

Print Name: _____

_____

Parcel 16 of Avonea

By:_____

Tim Hernandez, New Urban Communities, LLC

OWNERS' ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by Frank Wacha, Owner.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by Nikolas Schroth.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

(Continued to next page)

OWNERS' ACKNOWLEDGMENT

(Continued)

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by Melissa C Kindig.

_____

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 me this _____day of _____, 2020, by BECKY BRUNER, Mayor, and Mary R. Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

EXHIBIT "A" – LEGAL DESCRIPTION

AND LESS, HOWEVER, THAT PART THAT LIES SOUTH OF THE SOUTHERLY RIGHT-OF-WAY OF STATE ROAD #707 AND NE SAVANNAH ROAD.

AND LESS, HOWEVER, THAT PART OF THE NE 1/4 OF THE SE 1/4 OF THE SW 1/4 IN SECTION 28, TOWNSHIP 37 SOUTH, RANGE 41 EAST LYING NORTH OF THE NORTHERLY RIGHT-OF-WAY OF NE SAVANNAH ROAD AND THE EXTENSION OF BAKER ROAD.

AND LESS, HOWEVER, THE EAST 202.00 FEET OF THE NORTHWEST ONE-QUARTER (NW 1/4) OF THE SOUTHEAST ONE-QUARTER (SE 1/4) OF THE SOUTHWEST ONE-QUARTER (SW 1/4) OF SECTION 28, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, LYING NORTH ON THE NORTH RIGHT-OF-WAY LINE OF NE BAKER ROAD ACCORDING TO THE PLANS FOR BAKER ROAD EXTENSION (MARTIN COUNTY PROJECT NO. 55-R-5). THE AREA OF THIS PARCEL IS 1.65 ACRES, MORE OR LESS.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHT-OF-WAYS OF RECORD, IF ANY.

TOGETHER WITH

AVONLEA COMMECIAL CENTER
A PARCEL OF LAND LYING IN SECTION 28, T37S, R41E, MARTIN COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGIN AT THE POINT OF INTERSECTION OF THE WEST LINE OF THE EAST 202.00' OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 SAID SECTION 28, T37S, R41E OF PARCEL 6 AS DESCRIBED IN OFFICIAL RECORDS BOOK 895, PAGE 19, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA AND THE NORTHERLY RIGHT OF WAY LINE OF BAKER ROAD EXTENTION AS DESCRIBED IN OFFICIAL RECORDS BOOK 726, PAGE 1921, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA FOR THE POINT OF BEGINNING; THENCE N89°28'19"W ALONG SAID NORTHERLY RIGHT OF WAY LINE OF BAKER ROAD EXTENTION, 348.92' TO THE POINT OF INTERSECTION WITH THE EASTERLY RIGHT OF WAY LINE OF N.E.CARDINAL WAY BEING A 60.00' RIGHT OF WAY AS NOW LAID OUT AND IN USE; THENCE N10°56'26"W ALONG SAID EASTERLY RIGHT OF WAY LINE OF N.E.CARDINAL WAY, 381.26' TO THE POINT OF INTERSECTION WITH THE SOUTH LINE OF A PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 895, PAGE 25 AND 19, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA AND PHYSICALLY DESCRIBED BY MONUMENTS AND OCCUPATION; THENCE S89°15'48"E ALONG SAID OCCUPIED LINE, 426.24' TO THE POINT OF INTERSECTION WITH THE AFORESAID PARCEL 6; THENCE S00°45'39"W ALONG SAID WEST LINE OF THE EAST 202.00' OF PARCEL 6 A DISTANCE OF 372.11' TO THE POINT OF BEGINNING.

TOGETHER WITH

JENSEN INDUSTRIAL PARK SITE

A PARCEL OF LAND LYING IN SECTION 28, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 28, THENCE, NORTH 00° 15' 38" EAST, ALONG THE WEST LINE OF SAID SECTION 28, A DISTANCE 861.35 FEET, MORE OR LESS, TO THE INTERSECTION THEREOF WITH SOUTHERLY RIGHT-OF-WAY LINE OF BAKER ROAD EXTENSION; THENCE SOUTH 89° 58' 55" EAST, ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE 1545.39 FEET FOR A POINT OF BEGINNING (P.O.B.);

THENCE, SOUTH 89° 58' 55" EAST, CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 520.27 FEET; THENCE, SOUTH 20° 06' 54" EAST CONTINUING ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 142.51 FEET MORE OR LESS, TO THE INTERSECTION THEREOF WITH THE NORTHERLY RIGHT-OF-WAY LINE FOR SAVANNAH ROAD; THENCE, SOUTH 49° 53' 54" WEST, ALONG NORTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 412.74 FEET, MORE OR LESS, TO THE POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF CARDINAL AVENUE, SAID POINT BEING THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 75.00 FEET, THENCE, SOUTHERLY, WESTERLY, AND NORTHERLY ALONG SAID CURVE AND SAID EASTERLY RIGHT-OF-WAY LINE, THROUGH A CENTRAL ANGLE OF 78° 51' 33", A DISTANCE OF 103.23 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE EASTERLY HAVING A RADIUS OF 585.00 FEET AND WHOSE RADIUS POINT BEARS NORTH 38° 45' 27" EAST, THENCE, NORTHWESTERLY ALONG SAID CURVE AND CONTINUING ALONG SAID EASTERLY RIGHT-OF-WAY LINE, THROUGH A CENTRAL ANGLE OF 39° 47' 31", A DISTANCE OF 406.28 FEET TO THE POINT OF

EXHIBIT "A" – LEGAL DESCRIPTION (con't.)

TANGENCY, THENCE, NORTH 11° 27' 12" WEST, CONTINUING ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 1.01 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT HAVING A RADIUS OF 50.00 FEET; THENCE, NORTHEASTERLY ALONG SAID CURVE AND CONTINUING ALONG SAID EASTERLY RIGHT-OF-WAY LINE, THROUGH A CENTRAL ANGLE OF 101° 28' 07", A DISTANCE OF 88.55 FEET TO THE POINT OF BEGINNING.

CONTAINING; 4.06 ACRES, MORE OR LESS.

SUBJECT TO EASEMENTS, RESERVATIONS, AND RIGHTS-OF-WAY OF RECORD.

THE BEARINGS AS STATED HEREIN ARE BASED ON AN ASSUMED BEARING OF NORTH 00° 15' 38" EAST ALONG THE WEST LINE OF SAID SECTION 28.

LESS, HOWEVER,

LEGAL DESCRIPTION OF A PORTION OF PROPOSED
GREEN RIVER PARKWAY RIGHT-OF-WAY

A PARCEL OF LAND LYING IN SECTION 28 AND SECTION 29, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 29; THENCE, NORTH 88° 48' 22" WEST, ALONG THE SOUTH LINE OF SAID SECTION 29, A DISTANCE OF 500.00 FEET; THENCE, NORTH 00° 15' 52" EAST DEPARTING SAID SECTION LINE, A DISTANCE OF 55.02 FEET; THENCE, NORTH 33° 12' 44" EAST, A DISTANCE OF 172.02 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 2028.75 FEET; THENCE, NORTHERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 27° 30' 11", A DISTANCE OF 973.84 FEET, MORE OR LESS, TO THE INTERSECTION THEREOF WITH THE EASTERLY RIGHT-OF-WAY LINE OF BASELINE ROAD; THENCE, NORTH 30° 40' 07" EAST, ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 238.43 FEET, MORE OR LESS, TO THE INTERSECTION THEREOF WITH THE SOUTH PLAT BOUNDARY LINE OF NORTHWOOD SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN THE PLAT BOOK 1, PAGE 55, PUBLIC RECORDS, MARTIN COUNTY, FLORIDA; THENCE , SOUTH 89° 58' 55" EAST, ALONG SAID SOUTH PLAT BOUNDARY LINE, A DISTANCE OF 10.00 FEET, MORE OR LESS, TO A POINT 40.00 FEET EASTERLY OF THE SOUTHWEST CORNER OF SAID PLAT OF NORTHWOOD SUBDIVISION, THENCE, SOUTH 00° 15' 15" WEST, DEPARTING SAID SOUTH PLAT BOUNDARY LINE, A DISTANCE OF 10.21 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 2148.75 FEET; THENCE, SOUTHERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 28° 34' 54", A DISTANCE OF 1071.89 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 180.00 FEET; THENCE, SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 117°38'31", A DISTANCE OF 307.99 FEET TO A POINT OF TANGENCY; THENCE, SOUTH 88° 48' 22" EAST, ALONG A LINE 60.00 FEET NORTH OF, AS MEASURED AT RIGHT ANGLES TO, THE SOUTH LINE OF SAID SECTION 29, A DISTANCE OF 92.47 FEET TO THE INTERSECTION THEREOF WITH THE EAST LINE OF SAID SECTION 29; THENCE, SOUTH 00° 15' 38" WEST ALONG SAID EAST SECTION LINE, A DISTANCE OF 60.00 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 29 AND THE POINT OF BEGINNING.

EXCEPTING THE WEST 50 FEET OF THE EAST 420 FEET OF THE NORTH 100 FEET OF THE SOUTH 133 FEET OF SAID SECTION 29 AND EXCEPTING THE RIGHTS-OF-WAY FOR BAKER ROAD EXTENSION AND STATE ROAD NO. 707.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS OF WAY OF RECORD

EXHIBIT B – LOCATION MAP



EXHIBIT C – DEVELOPMENT CONDITIONS

All conditions adopted under Ordinance No. 2305-2015 shall remain in effect unless revised or superseded by the conditions below:

Approved Plans and Documents (Exhibit "D")

1. All development approved hereby and the use thereof shall comply with the following documents and drawings:

The following are General New Avonlea PUD Plans and Documents (reinstated by Ordinance 2420-2019:

a. The Master Parcel Plan, Sheet 1 of 1 by Lucido and Associates, dated 5.27.18 (existing)
b. South Florida Water Management District Permit #43-01387-P, issued 6.9.16. (existing)
c. Department of the Army Permit #SAJ-1998-03203. (existing)
d. Drainage Statement, by Grzelka Engineering, Inc. and as built plans for master drainage. (existing)
e. Master Drainage Plan, by DLS Environmental Services, Inc. dated March 2016 (revised)
f. Environmental Assessment Report, prepared by DLS Environmental Services, Inc. dated July 2014 (existing)
g. Preserve Area Management Plan, prepared by DLS Environmental Services, Inc., dated March 2017 (existing)
h. Traffic Impact Analysis prepared by MacKenzie Engineering and Planning, dated October 2014 (existing)
i. 2015 Pattern Book for Avonlea Commerce Center Phase II (existing)
j. PUD Boundary Survey prepared by Velcon Group, Inc., dated 01.08.14 (existing)
k. Avonlea PUD Off-Site Infrastructure Plan, by HJA Design Studio, Sheet 1 and 2 of 2, dated 1.11.16 (existing)
l. Avonlea Typical Cross Section, by Cotleur and Hearing, Inc., dated 4.19.18 (existing)
m. Amended and Restated Declaration of Covenants and Restrictions for the New Avonlea P.U.D., dated 11.30.16. (existing)

Master Parcel Plans for Avonlea Crossings Parcel A (Parcel 1)

n. Site Plan for Avonlea Crossing A, by Kuoppala & Associates, dated 9.30.19 (existing)
o. Landscape Plan for Avonlea Crossing A, by Litterick Landscape Architecture, dated 9.30.19 (existing)
p. Architectural Elevations and Floor Plans for Avonlea Crossing A, by Kuoppala & Associates, dated 9.30.19 (existing)
q. Boundary Survey for Avonlea Crossing A, by Velcon Engineering and Surveying, dated 4.30.19 (existing)

The following documents are established by Ordinance 2366-2018 and are not being replaced:

Master Parcel Plans for Avonlea Preserve Parcel A (Parcel 2) and B (Parcel 12)

r. Site Plan for Avonlea Preserve A, by Cotleur and Hearing, Inc, dated 11.20.17 (existing)
s. Site Plan for Avonlea Preserve B, by Cotleur and Hearing, Inc., dated 11.20.17 (existing)
t. Lot Plan for Avonlea Preserve A and B, by Cotleur and Hearing, Inc., dated 4.24.18 (existing)
u. Landscape Plan for Avonlea Preserve A, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
v. Landscape Plan for Avonlea Preserve B, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
w. Landscape Plan details for Avonlea Preserve A and B, by Cotleur and Hearing, Inc., dated 5.25.18 (existing)
x. Boundary Survey for Avonlea Preserve A, by Velcon Group, Inc., dated 1.27.17 (existing)
y. Boundary Survey for Avonlea Preserve B, by Velcon Group, Inc., dated 2.6.17 (existing)
z. Amenity Package, dated 2.2.18 (existing)

The following documents are being established by Ordinance 2434-2020:

Master Parcel Plans for Avonlea Crossings Parcel B (Parcel 16)

aa. Site Plan for Avonlea Lot 16, by Peter Wayne Aquart, P.E., SP-1 and SP-2, dated 1.23.20 (new)
bb. Landscape Plan for Avonlea New Urban Communities, by Cotleur and Hearing, sheets 1 thru 4, dated 1.23.20 (new)

cc. Architectural Elevations and Floor Plans, prepared by Architectural Studio, Inc., Sheets A1-5, dated 1.1.20 (new)

dd. Boundary and Topographic Survey, by Richard H Smith, Inc., sheets 1 and 2, dated 8.1.19 (new)

ee. Design Guidelines, prepared by New Urban Communities (new)

General PUD Conditions

2. Any modifications to the Master Parcel Plan and individual Master Site Plans of the PUD that does not exceed 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 public hearing. (existing)

3. This ordinance constitutes a revised Master Parcel Plan which extends development approval to Parcels 1, 2, 12, and 16, and off-site infrastructure improvements only. Development of remaining Parcels shall require future amendments to Ordinance No. 2305-2015. More specifically, Avonlea Crossings A (Parcel 1) shall be built in two phases: Phase 1 is a 4,389 square foot medical office building, Phase 2 is a 4,992 square foot medical or professional office building; Avonlea Preserve A (Parcel 2) shall consist of 30 residential dwelling units and Avonlea Preserve B (Parcel 12) shall consist of 32 residential dwelling units; Parcel 16 shall consist of a single phase: 47 townhomes and 22 single family cottages. (revised)

4. The City may elect at any time to assign a future land use designation of "Conservation" to the PUD's preserve areas without objection by the Owners. Said preserve areas shall be identified in the Preserve Area Maintenance Plan (PAMP), as more particularly set forth in condition #6. (existing)

Environmental and Landscaping

5. To ensure the integrity and viability of the preserved and restored/enhanced wetland and upland areas on a regular basis, including the submittal of an updated Annual Monitoring and Maintenance Plan, the master property owners association (the "POA"), as formed through the Amended and Restated Declaration of Covenants and Restrictions for the New Avonlea P.U.D. shall be singularly responsible for the perpetual maintenance of wetland and upland areas governed by SFWMD permit #43-01387-P, as well as all other common area improvements. The separate parcels (hereinafter referred to as "Parcel" or collectively as "Parcels) as shown on the Master Parcel Plan shall have the ability to establish separate homeowner's associations for the purpose of maintaining on site infrastructure and common areas within such Parcels. (existing)

6. Except as follows, the project shall comply with Section 5.05.02 of the "Tree replacement and protection requirements" of the City's Land Development Code.

    a. In the event the developer chooses to address tree mitigation by planting in the project's preserve area or elsewhere on the site, an estimated budget shall be provided to the city at the time of permitting. For plantings in the preserve area, not less than 50% shall consist of pines or hardwoods and 50% of palms. Of the 50% palms which may include Sabal palms, the developer may be permitted to plant half mature palms and half saw palmetto no less than 7 gallons in size. (existing)

7. The preserve Area shall be maintained in perpetuity in accordance with the Preserve Area Maintenance Plan prepared by DLS Environmental Services, Inc., dated 03.17. Any trash, debris, and exotics shall be removed from the preserve area. (existing)

8. Not less than 25% of the PUD shall be open space as defined in the City Land Development Regulations. Required open space may include native vegetation areas, excluding wetlands defined by the SFWMD, and landscape buffers between the PUD and adjacent property. (existing)

9. Plantings in upland preserve areas shall count toward tree replacement in accordance with Section 5.05.02 of the City's Land Development Code. (existing)

10. "Hat racking" of trees is prohibited on the property. (existing)

11. Prior to any site clearing or development activities, compliance with all applicable federal, state and local regulations, including U.S. Army Corps of Engineers, SFWMD, and Florida Fish and Wildlife Conservation Commission (FFWCC) regulations, shall be demonstrated to the City. (existing)

12. Clearing of invasive species, including any required filling incidental to said clearing activities, as per SFWMD Permit #43-01387-P, shall be permitted at any time provided a permit is first obtained from the City. Further, the Owners shall demonstrate to the city coordination with the FFWCC with regard to relocation/conservation permits of protected species. (existing)

13. A tree mitigation plan and tree survey depicting the proposed tree impact and mitigation including preservation, relocation and replacement, shall be submitted with each master parcel site plan approval. A tree removal permit will be required prior to the removal or relocation of existing specimen or historic trees and in the case of the removal of trees in the process of utility construction, such as lift stations, etc. (existing)

14. Subject to Development Department approval, trees planted in public spaces and public rights-of-way may be credited towards tree replacement requirements. The cost of the trees may be deducted from the total amount owed to the City's Tree Trust Fund. (existing)

15. A final landscape plan for each Parcel shall be provided with a master site plan application for such Parcel except the Avonlea Commerce Center Parcels 3 thru 9 and shall be consistent with the SFWMD Permit #43-01387-P. The landscape plan for each Parcel shall include a streetscape plan for public roads adjacent to that Parcel consistent with the approved Off-Site Infrastructure Plan. (existing)

16. A landscape maintenance agreement for each Parcel, executed in accordance with the Land Development Regulations, shall be submitted prior to the issuance of the first Certificate of

Occupancy for such Parcel shown on the Master Parcel Plan. In order to monitor the proper installation of landscape material, material quality and long term maintenance of the site, a Letter of Credit, Certificate of Deposit or bond in the amount of 125% of the fair market value of the new landscape material shall be provided to the city for each Parcel shown on the Master Parcel Plan prior to the issuance of the first Certificate of Occupancy for such Parcel. The security shall be held for two years. (existing)

17. All common buffers and other common areas shall be provided with landscaping with an irrigation system of sufficient capacity to maintain the landscaping in a healthy growing condition. (existing)

18. 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 Owner shall bear the pass-thru fee for landscape consulting fees not to exceed $1,500.00. (existing)

19. Prior to the development activities on Avonlea Preserve A and B (Parcels 2 and 12), any applicable payment into the City's tree replacement fund based on the City's Tree Replacement Formula, Section 5.05.02, shall be made as followed in the mitigation data requirements provided in the Landscape Plan details for Avonlea Preserve A and B, and prepared by DLS Environmental Services. Solely at the City's discretion, or the applicant may donate and/or locate mitigated trees in a public area designated by the City. (existing)

20. A tree protective barrier plan shall be reviewed, approved and inspected by the landscape architect and by a City staff person on-site prior to construction activity to ensure that all preserve areas are not disturbed. (existing)

21. In addition to the landscaping depicted on the Landscape Plan for Avonlea Preserve Parcel 12, and at the owners discretion, the Owners may (with Development Department approval) provide pedestrian access thru the street frontage landscaping along Baker Road from the front door to the Baker Road sidewalk, so long as each residence is treated with the same access to the Baker Road sidewalk. The potential sidewalk access will not diminish the number of required street trees demonstrated on the landscape plan, but rather will be allowed to shift the landscaping to accommodate the pedestrian access and may result in a small

reduction of ground cover and shrub area. A decision by the Development Department to withhold approval for the pedestrian access plan shall be appealable to the City Commission. (existing)

22. Property owners in Avonlea Preserve A and B (Parcels 2 and 12) may not construct fences or structures (such as sheds) in any yard. The individual POA for the particular Parcel may provide a uniform fencing program acceptable to the Development Department via an administrative amendment, which may allow fences to delineate property boundaries and separate residential property from common areas. (existing)

Signage

23. 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. Monument signs shall be grounded mounted, limited to ten feet (10') in height with design criteria conforming to the City's Land Development Code. No cabinet signs or pole signs shall be permitted. (existing)

Potable Water and Sewer Utilities

24. Parcels 1, 2 10, 11 and 12 shall be served by Martin County Utilities, parcels 13, 14, 15 and 16 shall be served by City of Stuart (existing)

Off-Site Infrastructure Plan

25. The Off-Site Infrastructure plan (Avonlea PUD Off-Site Infrastructure Plan, by HJA Design Studio, Sheet 1 and 2 of 2, dated 1.11.16) identifies the phasing of delivery of sidewalks, street and intersections, street furniture, landscaping, parking, lighting, utilities and storm water improvements, which is in addition to the Master Parcel Plan. The Off-Site Infrastructure Plan shall be reviewed for each phase of development of this PUD. Amendments to the Off-Site Infrastructure Plan shall be processed through a minor PUD amendment in order to secure a consistency of improvements throughout the PUD and to account for any off-site infrastructure provided by the City. Any amendment to the Off-Site Infrastructure Plan will necessitate a review and potential updating of the approved REDA

agreement (Resolution 01-2018 CRA Avonlea Real Estate Development accelerator). (Revised)

26. Parcel 1 of Avonlea, also known as Kindig Professional Office, is required to build or bond the off-site patio prior to a Certificate of Occupancy in accordance with the attached site plan for Parcel 1, notwithstanding the phasing plan for the Off-Site Infrastructure Plan, which shall remain in full force and effect. (existing)

27. Parcel 16 of Avonlea, applied for by New Urban Communities, LLC, is required to build or bond the off-site sidewalks and a cross walk across Green River Parkway at the traffic circle prior to the first Certificate of Occupancy in accordance with the attached site plan, notwithstanding the phasing plan for the Off-Site Infrastructure Plan, which shall remain in full force and effect (new)

28. All remaining infrastructure improvements within a given phase as required by the Off-Site Infrastructure Plan shall be built or bonded prior to any vertical construction in accordance with the phasing plan for the Off-Site Infrastructure Plan. Vertical construction within a phase of development is not contingent on the completion of off-site infrastructure work within the separate phase indicated in the phasing plan. (existing)

29. All utilities within adjacent rights-of-ways, within a given phase as depicted in the Off-Site Infrastructure Plan, must be buried, except for the existing FPL transmission line, prior to the issuance of a Certificate of Occupancy for any vertical construction. (existing)

30. Sidewalks of at least 8 feet in width, including provisions for bicycles, shall be shown on the Off-Site Infrastructure Plan, which shall demonstrate full connectivity to surrounding pedestrian facilities. Any sidewalk damaged during construction shall be repaired or replaced at the expense of the POA and sub-POA (henceforth known as a "Village Association") prior to the issuance of a Certificate of Occupancy for such Parcel. The Off-Site Infrastructure Plan and the individual master site plans shall at a minimum demonstrate safe and adequate pedestrian and bicycle circulation, including handicap accessibility and access to public transit. (existing)

31. Any on-street parking constructed by the Owners shall be depicted on the Off-Site Infrastructure Plan and shall be built at the Owners' expense. On-street parking may be creditable toward required parking for individual Parcels as shown on the Master Parcel Plan, but shall not exclude use by the general public. (existing)

On-Site Infrastructure

32. All utilities internal to the development must be buried, except for the existing FPL transmission lines. Prior to the issuance of a Certificate of Occupancy for a Parcel for any vertical construction, any overhead utilities associated with such Parcel shall be buried. (existing)

33. Typical cross-sections for streets and alleys shall be submitted with each master site plan submittal indicating the proposed right-of-way width, pavement width, utilities, drainage, sidewalk, curb and gutter, on street parking and street lighting. (existing)

34. Parking areas shall be interconnected between adjacent CPUDs and through each CPUD Parcel to the extent feasible. (existing)

35. The Owner shall ensure a continuous pedestrian connection between all Parcels of the PUD, whenever practicable. (existing)

Prior to Issuance of Site Permits

36. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of any site permits. (existing)

37. Final Development plans and/or Construction Drawings and Building Plans shall be submitted, reviewed, and approved by the City prior to the issuance of any Development Permits. (existing)

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

39. Where applicable, the Owner shall provide enclosed dumpster details on submitted civil construction plans prior to final site plan approval acceptable to the City's Public Works Department. (existing)

40. 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. (existing)

41. Prior to building permit approval, the applicant shall provide crosswalks at all internal intersections. (new)

42. Prior to building permit approval, the applicant shall provide a fence or hedge separating playground areas with adjacent roads. (new)

Development and Construction

43. All applicable state or federal permits must be obtained before the commencement any development activities. Issuance of this development order/permit/approval by the City of Stuart does not in any way create any right on the part of an applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Stuart for the issuance of this order/permit/approval if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law. (existing)

44. At the time of every Major Site Plan Amendment application for the remaining Parcels, the Owners' proposed Master Site Plan shall include, but not be limited to, the following features: proposed residential density or non-residential square footage; uses; lot layout and dimensions; typical cross sections for streets and alleys; building locations; accessory structures; dumpster locations; parking stall and aisle dimensions; fences, walls and landscaping; site lighting, pedestrian ways; recreational and other amenities, preserve areas; traffic circulation patterns; access for emergency and sanitation vehicles; utility locations;

storm water facilities; architectural characteristics, appropriate building mass and scale; building elevations; finished floor elevations; color schemes; and signage. (existing)

45. The property is within the Community Redevelopment Area, and accordingly, prior to the issuance of any construction permits for vertical construction on a Parcel, the Owners of such Parcel shall either: A) contribute an amount equal to or greater than one and one-half percent of the value of vertical construction costs for such Parcel into the public art trust fund; or b) provide work of art on the property, the value of which shall not be less than one percent of the vertical construction costs for such Parcel and shall be submitted and approved by the City's Community Redevelopment Board for conformity with the public art standards as required in Sec. 3.01.08 of the City's Land Development Code. (existing)

46. Final site plan construction drawings for each Parcel as shown on the Master Parcel Plan shall be consistent with the approved master site plan. (existing)

47. The maximum front façade width of any proposed Assisted Living Facility, as defined herein, shall be 200 feet. (existing)

48. To sustain harmony, building or tenant improvement plans for business with outdoor speakers and/or entertainment will include a noise mitigation plan consisting of the location and orientation of speakers to contain sound within the business's area including the use of specific sound barriers and absorbs together with the time of use and volume that will meet or exceed the City's code requirements. (existing)

49. Pursuant to City/County/School Board inter-local agreement and for the purposes of determining the applicability of school impact fees, appropriateness of design, and impacts on school concurrency, the Martin County School Board shall be provided an opportunity to review all proposed residential development at the time of application for master site plan approval. (existing)

50. Construction traffic shall be reasonably controlled. The City may impose access management restrictions if deemed necessary. (existing)

51. Construction activity shall be limited from 7:00 a.m. to 6:00 p.m. Monday – Saturday. (existing)

52. 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. Prior to and during the construction period, the applicant shall provide a schedule for the inspection and maintenance of barricades and erosion controls. (existing)

53. No trailers, pre-fabricated or modular structures shall be permitted except on a temporary basis to assist in development and with rentals and sales of realty within the PUD. Such trailers or structures shall be removed within thirty (30) days of a direction to do so, as issued by the City Development Director. Failure to remove such a trailer or structure accordingly shall be deemed a violation of the City Code. (existing)

54. Owners shall comply with all requirements of the City's Comprehensive Plan and all applicable provisions of the City's Land Development Code not in conflict herewith. (existing)

55. All utility improvements constructed by the Owner within Martin County's right-of-way, shall be constructed in a manner and form acceptable to Martin County's Engineering Department. The Owner shall grant any such utility easements necessary for this site as may be required by Martin County. (existing)

56. Lighting shall comply with Section 6.07.00 of the Land Development Code and reviewed by Police for CEPTED/Crime Prevention recommendations prior to final site plan approval. Lighting shall include shields to direct the light away from residential areas. (existing)

57. The development of Parcels 2 and 12 may occur in up to two phases, or both as one phase. Prior to the issuance of a permit for whichever Parcel(2) constitutes Phase 1, with the exception of two (2) permits for model units on that Phase, the off-sit improvements as depicted as Phase 1 of the offsite improvement plan will be completed, inclusive of landscaping to be places within the right-of-way(s), stormwater drainage, grading and road

base on the parcel(s) shall be in place, and demonstration of connection to City Water and Sewer and power to the parcel shall be completed. Prior to the issuance of the first Certificate of Occupancy within Phase 1, the curbing, first lift of asphalt, and all underground utilities within Phase 1 will be in place. Landscaping within the boundary of the lot being certified shall be completed. And finally, the amenity package and common areas for that phase will be completed. Prior to the issuance of the last five (5) Certificates of Occupancy within Phase 1, site development will be completed inclusive, but not limited to final lift of asphalt, landscaping, street lighting, mail boxes, etc. The timing of construction will apply to Phase 2 in the same manner. (existing)

Future Amendments

58. Any amendments to this agreement shall be governed by the following:

Any amendments to this agreement shall be governed by the following:

The owner of a Parcel, as the Parcels are depicted in Exhibit "D" attached hereto, who seeks to amend this agreement with respect to such Parcel, shall not be required to obtain consent to such amendment from any owner of property, the POA or any home owners association, included in this agreement, provided, however, notice of any hearing before either the City Local Planning Agency, or the City Commission, shall be given to all owners of property subject to this agreement. The determination of whether such amendment is a major or minor amendment, and the hearings required for major or minor amendments, shall be governed by the laws in effect in the City at the time an application to amend this agreement is filed with the City. (existing)

The Avonlea Property Owners Association Inc. and Developers control the Avonlea Property Owners Association "Association" (Master Association). This association has been established to maintain the common areas and elements of the PUD and provide surety of maintenance to the governing bodies regulating the maintenance of the common areas and is regulated in accordance with the Covenants and Restrictions and By Laws recorded in OR Book 2893 Page 2898 as may be amended. At such a time that the Developers turn over the Association to the property owners, "Village Associations" are to make up the voting board of the Association. (existing)

Parcels 2 and 12 are a Village Association within the Association (Master Association). Any future amendments to the Development Conditions of Parcels 2 and 12 shall require the written consent of the Village Association. Until such a time that the Developers have turned over control of the Association to the property owners, written consent of the Association (Master Association) shall be required. (existing)

59. The applicant is permitted to transfer any on-street parking toward the provision of bus stops, as requested by outside agencies such as the Martin County School Board or the Metropolitan Planning Organization, without penalty of reducing required parking calculations. (new)

Phase II of existing Commercial Development

60. Consistent with Ordinance No. 2307-2015, development approval for the remaining undeveloped portion of the Avonlea Commercial Center, located on the northeast corner of Cardinal Road and Baker Road shall be administratively approved, provided the proposed development adhered to the Pattern Book included by reference herein. (existing)

Development Timetables

61. Timetables for development shall be as follows:

Phase One. Off-Site Infrastructure Plan:

Completion of the Off-Site Infrastructure shall occur in two phases as demonstrated on the Avonlea PUD Off-Site Infrastructure Plan, by HJA Design Studio, dated 12.8.17. The first phase shall be completed prior to the first Certificate of Occupancy for the developments of Avonlea Preserve A and B. The completion of the second phase shall be triggered with an application for a Master Parcel site plan or site plans and shall be completed prior to the first Certificate of Occupancy of the development of said Parcel or Parcels.

Phase Two. Deadlines for master site plan approval for individual Parcels:

Master site plan approval for all Parcels as depicted on the Master Parcel Plan shall be obtained no later than three years of the completion of the water and sewer infrastructure.

PARCEL	DEADLINE FOR MASTER PUD SITE PLAN APPROVAL	TIMELINE FOR DEVELOPMENT
1	Completed	Phase 1 by June 1, 2022 Phase 2 by December 1, 2024
2	Completed	July 31, 2021
3-9	n/a	By administrative approval, no deadline
10	December 1, 2020	TBD at Major Amendment
11	December 1, 2020	TBD at Major Amendment
12	Completed	July 31, 2021
13	December 1, 2020	TBD at Major Amendment
14	December 1, 2020	TBD at Major Amendment
15	December 1, 2020	TBD at Major Amendment
16	Completed	March 31, 2023

Failure to meet the deadline(s) for master site plan approval identified above for any default under this Ordinance for any particular Parcel(s) shall not constitute a breach on a part of any other Parcel(s) which have met the deadline and have otherwise performed under this Ordinance. (revised)

Allowable Uses

62. The following uses, derived in part from the City's Urban Code, may be permitted individually or in combination in all CPUD parcels, notwithstanding the existing Avonlea Commercial Plaza (Parcels 3 thru 9) in which allowable uses are set forth in the approved Pattern Book: (existing)

    a. Multifamily;
    b. Live-Work unit (for the purposes of this Ordinance "Live-work unit" means a single residential unit consisting of a professional or business office component, the area of which does not exceed 50% of the unit's total floor space. A professional or business office located within a Live-Work unit shall be solely owned/operated by the tenant/resident of the unit);
    c. Accessory buildings;
    d. Greenhouses;
    e. Public utility stations;
    f. Government buildings;
    g. Hotels/motels;
    h. Bed and breakfast hotels;
    i. Retail sales and services, non-intensive
    j. Retail manufacturing and warehouse for service trades;
    k. Professional and medical offices;
    l. Banks;
    m. Theaters;
    n. Restaurants;
    o. Art Galleries;
    p. Dry cleaning, provided all cleaning is conducted off premises;
    q. Bakeries
    r. Mortuaries without cremation;
    s. Day care facilities;
    t. Home occupations as defined in Section 2.06.10 of the Stuart Land Development Code
    u. Health spas;
    v. Personal services;

w. Drugstores and pharmacies;
x. Parking garages;
y. Nursing Homes;
z. Assisted Living Facility (for the purposes of this ordinance, "Assisted Living Facility" means a facility operated for profit, which provides housing, meals, and one or more personal services for a period exceeding 24 hours to one or more adults who are unrelated to the owner/administrator.

63. The following uses shall be permitted individually or in combination in all RPUD Parcels: (existing)
    aa. Single Family;
    bb. Townhouse;
    cc. Multi-family;
    dd. Assisted Living Facility (for the purposes of this ordinance, "Assisted Living Facility" means a facility operated for profit, which provides housing, meals, and one or more personal services for a period exceeding 24 hours to one or more adults who are unrelated to the owner/administrator.

Prohibited

64. Billboards are prohibited within the entire PUD. (existing)

65. Banners and any other sign or advertising device not in accordance with the City's Land Development Regulations are prohibited. (existing)

Platting

66. Plat approval per Section 11.01.06.1 of the City's Land Development Code shall occur prior to any future development permit being issued. (existing)

67. The new Avonlea PUD property may be platted and conveyed to separate owners without further amendment to this Ordinance. Prior to application for any development, the applicants shall form a master POA or other similar entity acceptable to the City Attorney, which shall

be singularly responsible for the perpetual maintenance of the common infrastructure and common areas. (existing)

68. The Avonlea Preserve A and B (Parcels 2 and 12) shall be re-platted with City Commission approval prior to any building permit activity is approved on the respective Parcel. Each Parcel is permitted to be individually platted and developed subject to the specific timetable for development herein. (revised)

Densities and Intensities

69. Density transfers shall not apply to this PUD. (existing)

70. The property is designated Neighborhood/Special District, which is a mixed-use category within the City's Comprehensive Plan, and accordingly, shall achieve the vertical or horizontal mix of uses through strict adherence to the minimum and maximum ratios of residential and non-residential uses depicted in the City's Comprehensive Plan. The ratios that must be maintained for the entire PUD are 30% to 90% for residential and 10% to 70% for non-residential. (existing)

71. The following matrix shows maximum densities and intensities for each Parcel as depicted on the Master Parcel Plan. However, it should be noted, due to design constraints such as, lot dimensions, building configurations, parking, landscaping, stormwater, and preserve area requirements, etc., this does not guarantee that these maximums will be approved. (revised)

Avonlea PUD Maximum Density (RPUD and CPUD)								
Parcel	Name	PUD Type	Total Acres including preserve areas	Residential/Live work Units		Commercial SF	Residential Units permitted in CPUD	ALF Beds (Total Maximum within PUD)
				Maximum	Approved			
1	Avonlea Crossings A	CPUD	2.07	N/A		20,000 Phase 1 – 4,389 Phase 2 – 4,992	N/A	200
2	Preserve A	RPUD	3.11	44	30	N/A	N/A	
3-9	Avonlea Commerce Phase 2	CPUD	0.79	5	TBD	33,300	N/A	
*	Avonlea Commerce Phase 1	CPUD	2.21	5 (Complete)		23,700 sf (Complete)	N/A	
10	East Village	CPUD	4.07	50	TBD	100,000	80	
11	Preserve D	CPUD	0.90	N/A		15,000	N/A	
12	Preserve B	RPUD	3.07	46	32	N/A	N/A	
13	Preserve C	RPUD	6.35	123	TBD	N/A	N/A	
14	Avonlea Crossings C	CPUD	1.60	N/A		20,000	N/A	
15	Avonlea Crossings D	CPUD	0.90	5	TBD	5,000	0	
16	Avonlea Crossings B	RPUD	4.22	75	69	65,000 (none proposed)	80	

CITY OF STUART
CITY COMMISSION
March 9, 2020

Project Name: Avonlea Crossing Parcel B – Parcel 16 PUD	**Property Owner:** New Urban Communities, LLC
Project No.: Z19100017	**Applicant/Petitioner:** New Urban Communities, LLC
Ordinance No: 2434-2020	**Agent/Representative:** Cotluer and Hearing, LLC
	Case Planner: Stephen Mayer
Location: On the Southwest corner of Baker Road and Green River Parkway, east and north of the Haney Creek Natural Area	

Location Map



PROJECT SUMMARY		
Property Size (area)		4.14 Acres
Present Use		Undeveloped
Subject Property Land Use		Neighborhood/ Special District
Adjacent FLU	*North*	Martin County – Mobile Home
	South	City – Downtown
	East	City – Neighborhood/Special District
	West	County – Medium Density
Subject Property Zoning		Commercial Planned Unit Development (CPUD)
Adjacent Zoning	*North*	Martin County - RT
	South	City of Stuart – CPUD
	East	City of Stuart – CPUD (New Avonlea PUD)
	West	Martin County – R-5 and RM-8
Proposed Land Use Designation		Neighborhood/Special District
Proposed Zoning District		Residential Planned Unit Development RPUD
Proposed Use		47 townhomes and 22 single family cottages (69 units)
City Approvals		Building Department – No comments at this time. Fire Department – See comments attached Public Works – See comments attached Police Department – No comments at this time
Brief Explanation		The intent of this application is to request a major PUD amendment to rezone the property from CPUD to RPUD, allowing the construction of 47 townhomes and 22 single family cottages on a 4.14 acre site, known as the Avonlea Crossing Parcel B – Parcel 16, which was master planned with a potential of 75 residential units.
Staff Recommendation: Staff recommends approval for the Major PUD amendment to rezone the property to RPUD (Residential Planned Unit Development) and accept site and landscape plans, a design guideline for the RPUD and elevations and footprints for 47 townhomes and 22 single family cottages.		

STAFF REPORT AND RECOMMENDATION

I. LEGAL NOTICE REQUIREMENTS

A. Requirements for Application – The applications for the Future Land Use amendment to Multi-Family Density Residential, and zoning district designation to RPUD have been noticed in accordance with the requirements set forth in Sections 11.01.02, 11.01.09, and 11.02.00 of the Land Development Regulations.

B. Site Posting Date: 2-9-2020

C. Mail Notice Postmark: 2-9-2020 to property owners within 300 feet

D. Publication Date: 10 days prior to Second Reading

II. LARGE SCALE COMPREHENSIVE PLAN AMENDMENT AND ZONING MAP AMENDMENT ORDINANCE NO. 2427-2020

III. APPLICATION: Dated October 21, 2019

IV. HISTORY OF THE SITE

The vacant subject property is approximately 4.14 acres and is a part of the New Avonlea PUD. The New Avonlea PUD was approved by the City Commission on June 8, 2015, via Ordinance 2307-2015, and consists of multiple parcels that are zoned CPUD and RPUD as shown on a Master Parcel Plan. The Master Parcel Plan also consisted of development maximum approvals. This request represents the third amendment and is specific to Parcel 16 of the Master PUD.

V. ANALYSIS

A. Site and Area Characteristics

The Master Parcel Plan (Exhibit D) of the original New Avonlea PUD, delineated this parcel to be a Commercial Planned Unit Development, allowing for up to 75 residential units and 65,000 square feet of commercial development. The applicant would like to build 69 residential units and no commercial development on the site.

The site approximately 4.14 acres in size and on the south and west is near to the Haney Creek Natural Area. To the east and across from Green River Parkway are undeveloped parcels of the New Avonlea PUD. To the north and across Baker Road is preserve area that is an unincorporated undeveloped site.

B. Project Description

The proposed development for Avonlea Crossings Parcel B – (Parcel 16) consists of 47 two-story, two-bedroom townhouses in 12 buildings and 22 two-story, three-bedroom detached,

single-family cottage homes. The New Avonlea Masterplan allows for up to 75 units on Parcel 16, a site density of 18.1 du per acre. The proposed 69 units, a site density of 16.7 du per acre.

The stated desire from the developer, New Urban Communities, is to meet a market need for middle-income families who may otherwise have a hard time finding housing in a location in Stuart. With close proximity to downtown Stuart, Jensen Beach, quality schools, and commercial amenities, many middle-income families appear in large numbers to be priced out of the market. The developer seeks to meet this need by providing smaller, efficiently designed cottage units with superior site and landscape design. The site plan and building siting and massing combines to create a unique, intimate community with a real sense of place. The two distinct product types offered will allow a broader spectrum of households to live in the community, consistent with the original concept of Avonlea.

The development's location adjacent to the Haney Creek Natural Area to the West and South will allow residents to experience nature through a direct connection to the Haney Creek Park trail system.

The main access to the community will be from Baker Road. The applicant is providing 34% open space (or 61,378 square feet) where a minimum of 30% is required on site. The natural preserve and wetland areas have been delineated through an overall PUD agreement with the Department of Environmental Protection.

Landscaping: The development is fully landscaped with adequate perimeter buffers of the required number of shade trees per 30 linear feet of property. The applicant is providing a full Jamaica Caper hedge at the property line and 26 Live Oak shade trees along the western and northern property lines. The street frontage along the Green River Parkway property line consists of Florida Royal Palms. Other plant coverage includes Silver Buttonwoods, Mahogany and Gumbo Limbos. The landscape plan also includes planting schemes around the perimeter of the townhomes and cottages.

Traffic Study: A traffic study was already approved for the Master Site Plan. Because the project is not utilizing all 75 residential units or any of the commercial square footage allowed on the site, the number of trips generated will be significantly less that what the traffic study assumed and approved for Parcel 16.

Parking Provisions: City of Stuart Land Development Code, Sec. 6.01.13. - Off-street parking schedule, requires two (2) parking spaces per unit when two (2) or more bedrooms are proposed, for a total 138 parking spaces required. The single-family units will have a driveway with an optional carport and will accommodate two (2) parking spaces each unit. The townhomes will front along the northern and eastern property lines and adjacent to the central amenity feature. An 88-space surface parking lot is provided adjacent to the townhomes, along with six (6) on street parking spaces on site, and an additional five (5) on-street parking spaces along Baker Road. In total, the site will provide 140 parking spaces, or two (2) more than required.

Architectural Details: Architectural details are included on each of the four sides of the proposed townhome and cottage units offering a high standard of design and scale.

C. Rezoning and Land Development Code Consistency Review

The application has been reviewed for consistency with the City's LDC. Approval of the rezoning to RPUD would allow for attached housing to be constructed at the site. The Master Parcel Plan approved up to 75 units on the CPUD, based on available density. The applicant is proposing 69 units, which is less than the Master Parcel Plan permits. The applicant shall continue to maintain an appropriate mix of Commercial and Residential uses within the entire Master Parcel Plan, by maintaining not less than 10% of the entire PUD as commercial, which is a requirement of the Special Neighborhood Future Land Use designation.

The proposed project on Parcel 16 of the New Avonlea PUD is consistent with Element I in the City of Stuart's Comprehensive Plan through its compact residential development pattern (Policy A5.1), compatibility with surrounding existing homes (Policy A5.2, Policy B3.2, and Policy B3.6), provision of market-rate units that are affordable to residents in the moderate-income level (Policy A5.4), compatibility with families (Policy A5.5), and quality landscape and streetscape design (Policy A5.6).

The proposed project is consisted with Element III in the Comprehensive Plan through its provision of housing on adequate residential land to accommodate population growth (Policy A1.2), provision of small-lot homes in a new development (Policy A1.4), provision of market-rate housing that is affordable to those in the moderate-income level (Policy A2.1), provision of a distinct, but compatible housing type that provides a more diverse housing option to residents (Policy A2.6), and provision of a project that can demonstrate a new possibility for the design and construction of housing in Stuart (Policy A2.7).

D. Technical Review by Other Agencies

The City Building, Public Works, Fire, and Police Departments have reviewed the applications and have offered their comments. See attachment to this agenda item. Each department will provide specific comments at final site approval for permitting.

The applicant will be responsible to meet all federal, state and local permitting and environmental standards. Further, the applicant will also be required to demonstrate full compliance at all times.

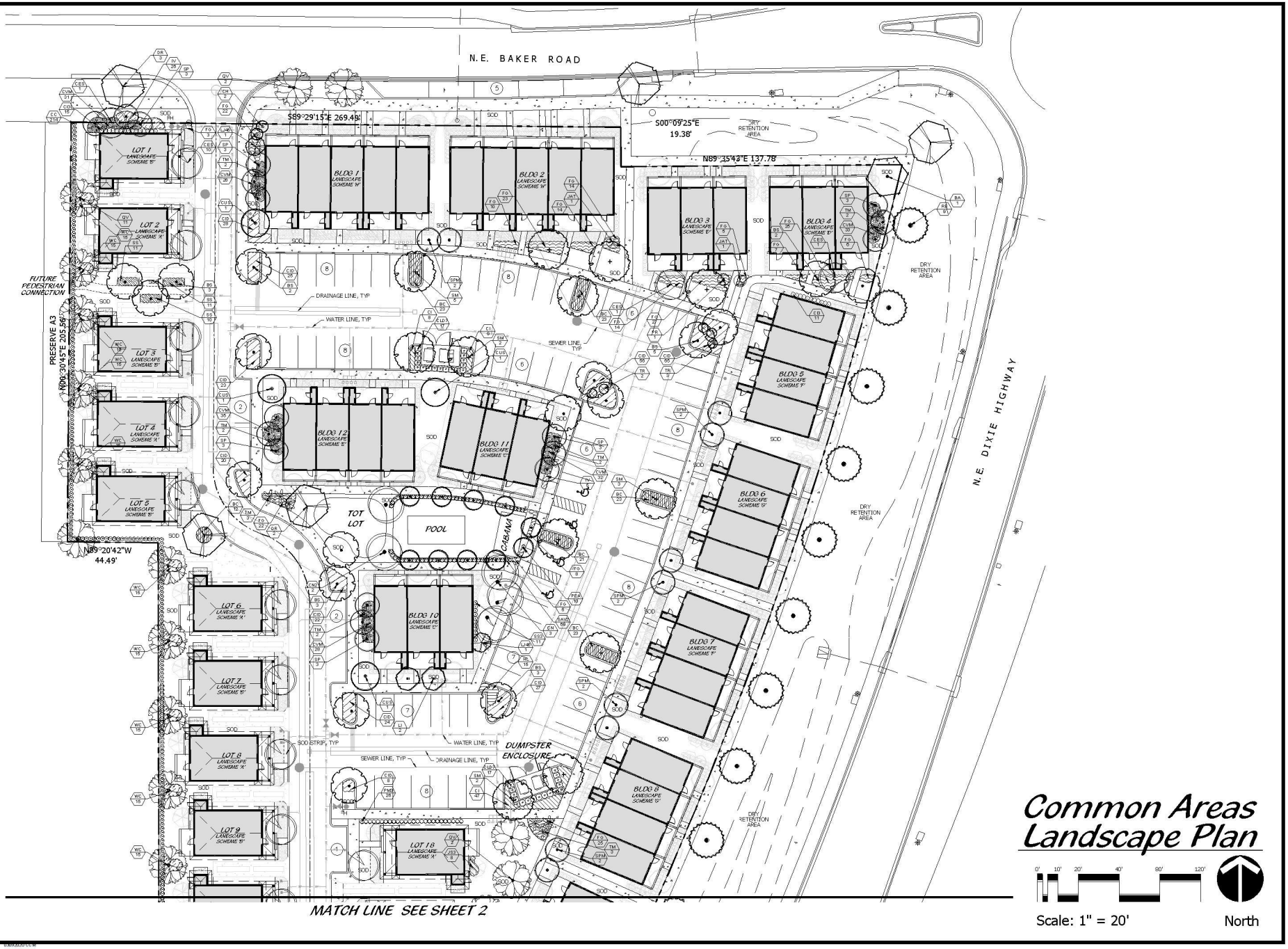
VI. LOCAL PLANNING AGENCY BOARD RECOMMENDATION

On February 20, 2020, the Local Planning Agency made an advisory recommendation of approval to the City Commission as to the need and justification for the change and as to the relationship of the proposed change to the goals, objectives and policies of the

Comprehensive Plan and of the Land Development Code. The draft minutes of the Local Planning Agency hearing is attached.

VII. STAFF and LPA RECOMMENDATION (APPROVAL WITH CONDITIONS)

Staff and the LPA has determined that the proposed major PUD amendment with a rezoning from CPUD to RPUD is consistent with the goals, objectives and policies of the Comprehensive Plan and the regulations in the Land Development Code. Staff offers no objection to the requests.



Common Areas Landscape Plan

0' 10' 20' 40' 80' 120'

Scale: 1" = 20'

North

Cotleur & Hearing
Landscape Architects
Land Planners
Environmental Consultants
1934 Commerce Lane
Suite 1
Jupiter, Florida 33458
561.747.6336 · Fax 747.1377
www.cotleurhearing.com
Lic# LC-26000535

AVONLEA
NEW URBAN COMMUNITIES
Stuart, Florida

DESIGNED	DEH
DRAWN	JAE
APPROVED	DEH
JOB NUMBER	19-1014
DATE	01-23-2020
REVISIONS	

January 23, 2020 11:17:2 a.m.
Drawing: 191014_LP.DWG

SHEET 1 OF 4

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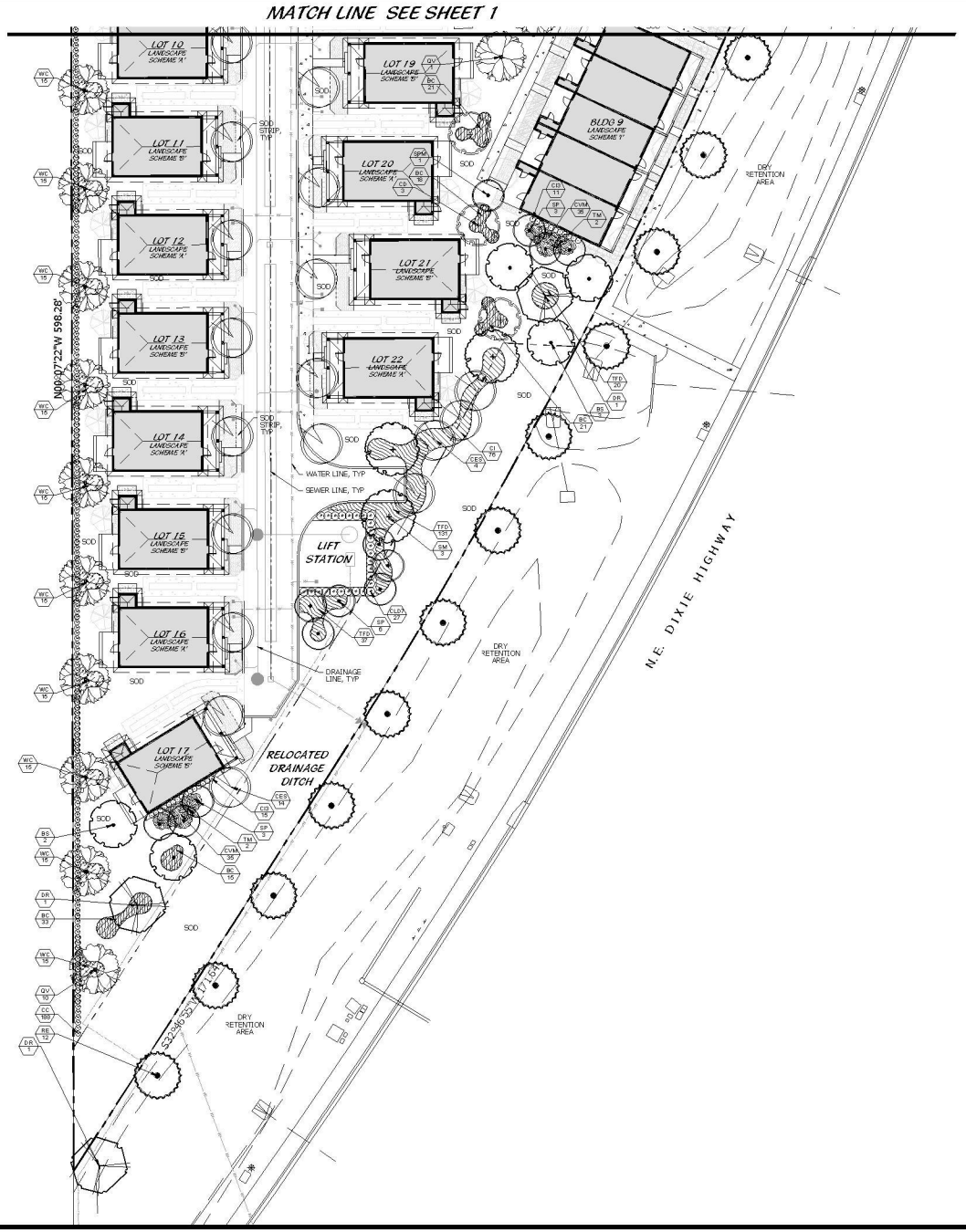
These drawings are the property of the architect and are not to be used for extensions or on other projects except by agreement in writing with the architect. Immediately report any discrepancies to the architect.



Common Areas Landscape Plan

0' 10' 20' 40' 80' 120'

Scale: 1" = 20'

North

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www.cotleurhearing.com
Lic# LC-26000535

AVONLEA
NEW URBAN COMMUNITIES
Stuart, Florida

DESIGNED DEH
DRAWN JAE
APPROVED DEH
JOB NUMBER 19-1014
DATE 01-23-2020
REVISIONS

January 23, 2020 11:17:2 a.m.
Drawing: 191014_LP.DWG

SHEET 2 OF 4

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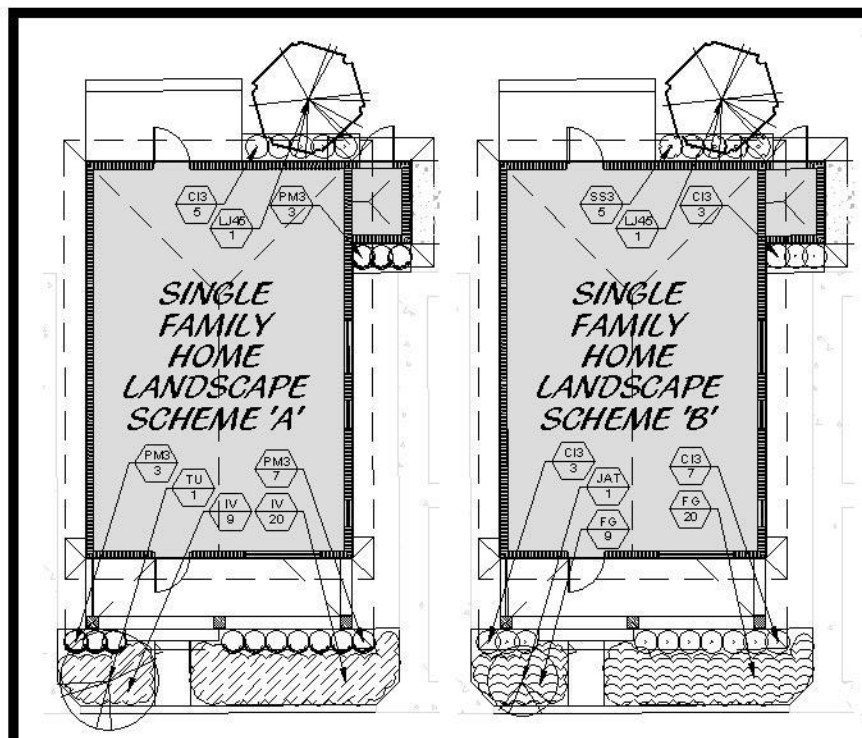
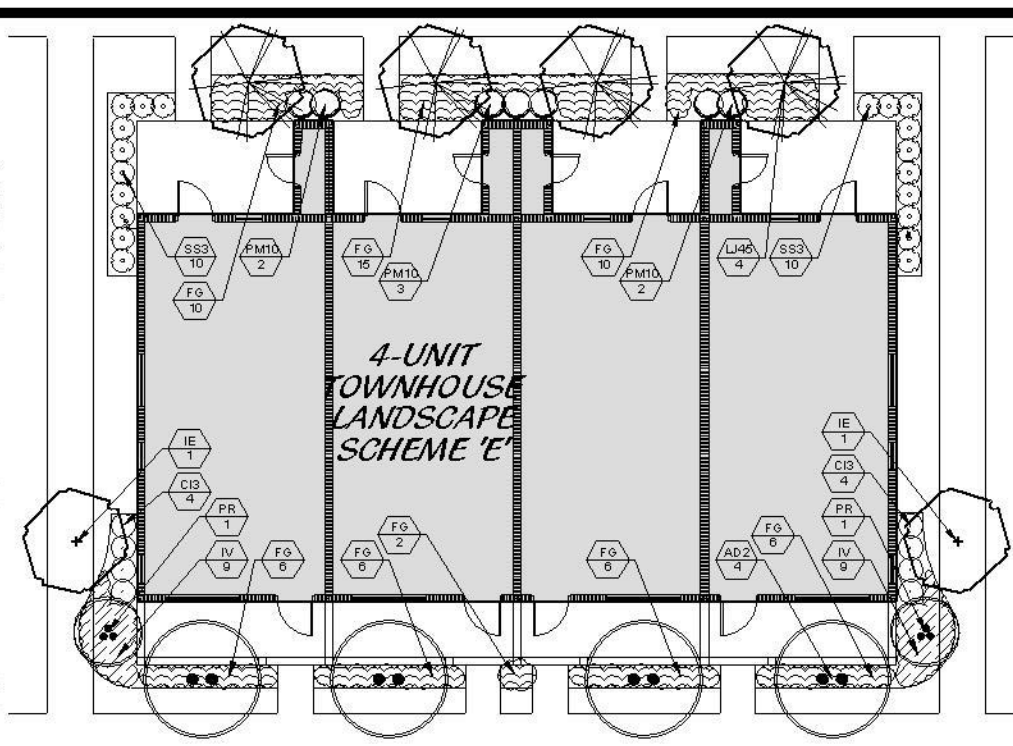
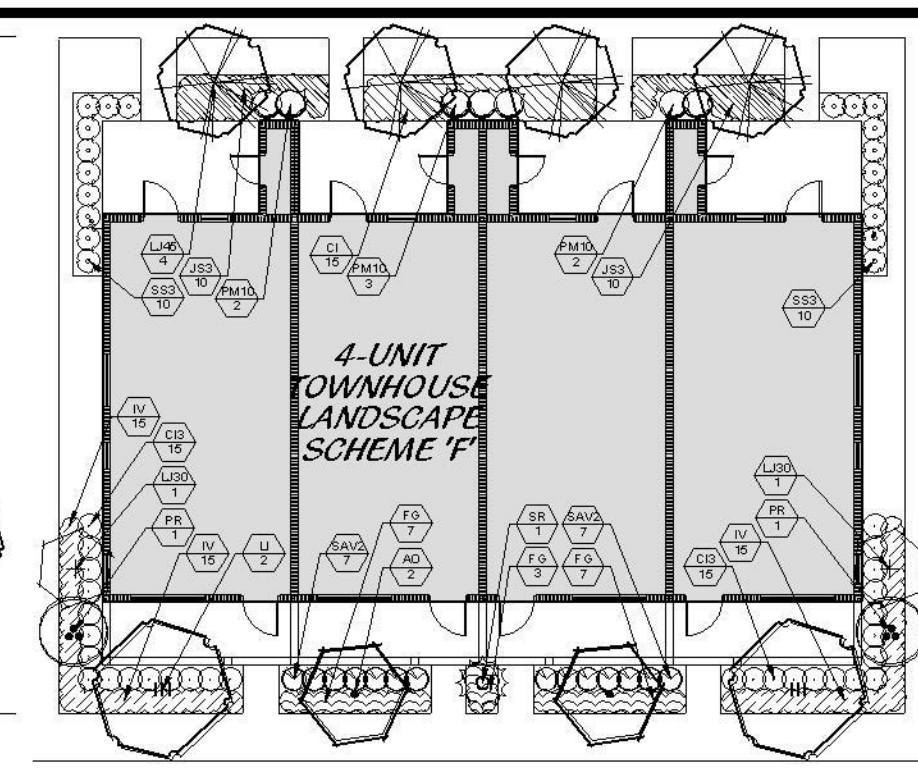
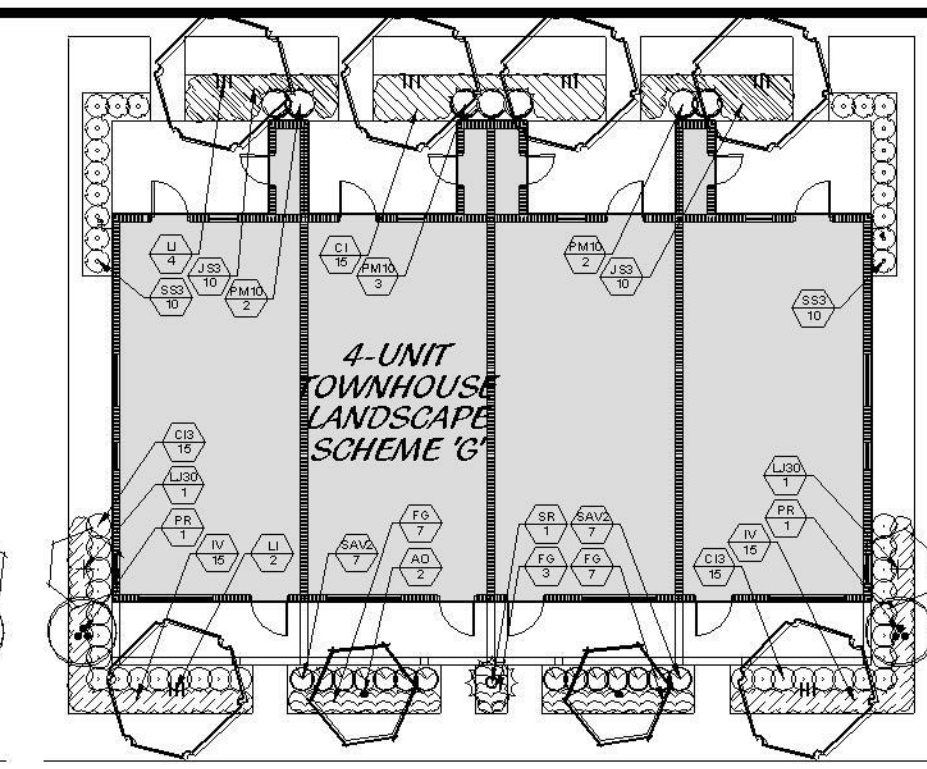
Landscape Plan Typicals









PLANT LIST - SCHEME 'A'

ACCENT PLANTS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
LI45	1	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMB UP
TU	1	TIBOUCHINA GRANULOSA	PURPLE GLORY TREE	30 GAL	1.5' CAL	5' HT X 4' SPRD	N	FULL CANOPY, SYMETRICAL, MULTI-TRUNK
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	5	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM3	13	PODOCARPUS MAKI	PODOCARPUS	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
IV	29	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK

PLANT LIST - SCHEME 'B'

ACCENT PLANTS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
JAT	1	JATROPHA STANDARD	JATROPHA	30 GAL	1' CAL	4' HT X 3' SPRD	N	FULL CANOPY
LI45	1	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMBUP
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	13	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
SS3	5	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
FG	29	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK

PLANT LIST - SCHEME 'E'

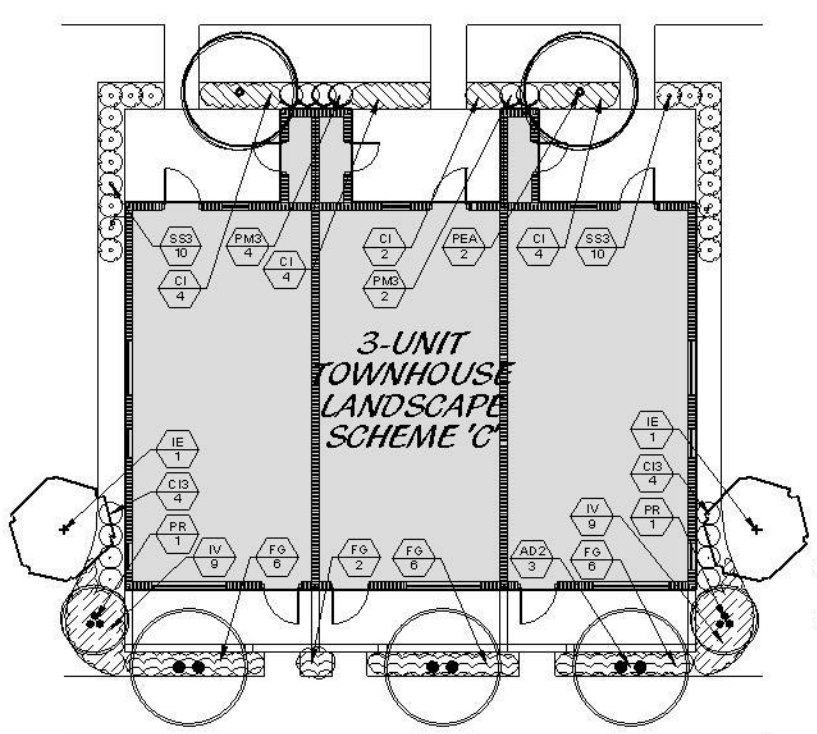
TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
IE	2	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	65 GAL	2.5' CAL	12' HT X 4' SPRD	Y	FULL CANOPY, 5' CT, SOUTH GROWN, MATCHED, FLORIDA FANCY, FULL TO BASE
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
LI45	4	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMB UP
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
AD2	4	VEITCHIA MERRILLII	DOUBLE CHRISTMAS PALM	FIELD GROWN	N/A	10' OA	N	FULL CANOPY, MATCHED
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	8	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM10	7	PODOCARPUS MAKI ~	PODOCARPUS	10 GAL	3' X 2'	30' OC	N	FULL & THICK
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
FG	61	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	18	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK

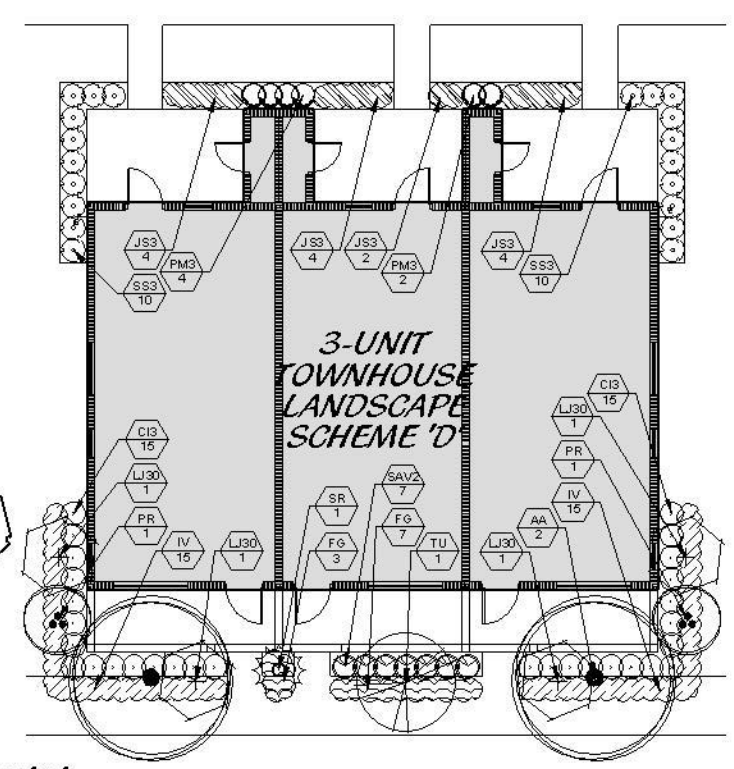
PLANT LIST - SCHEME 'F'

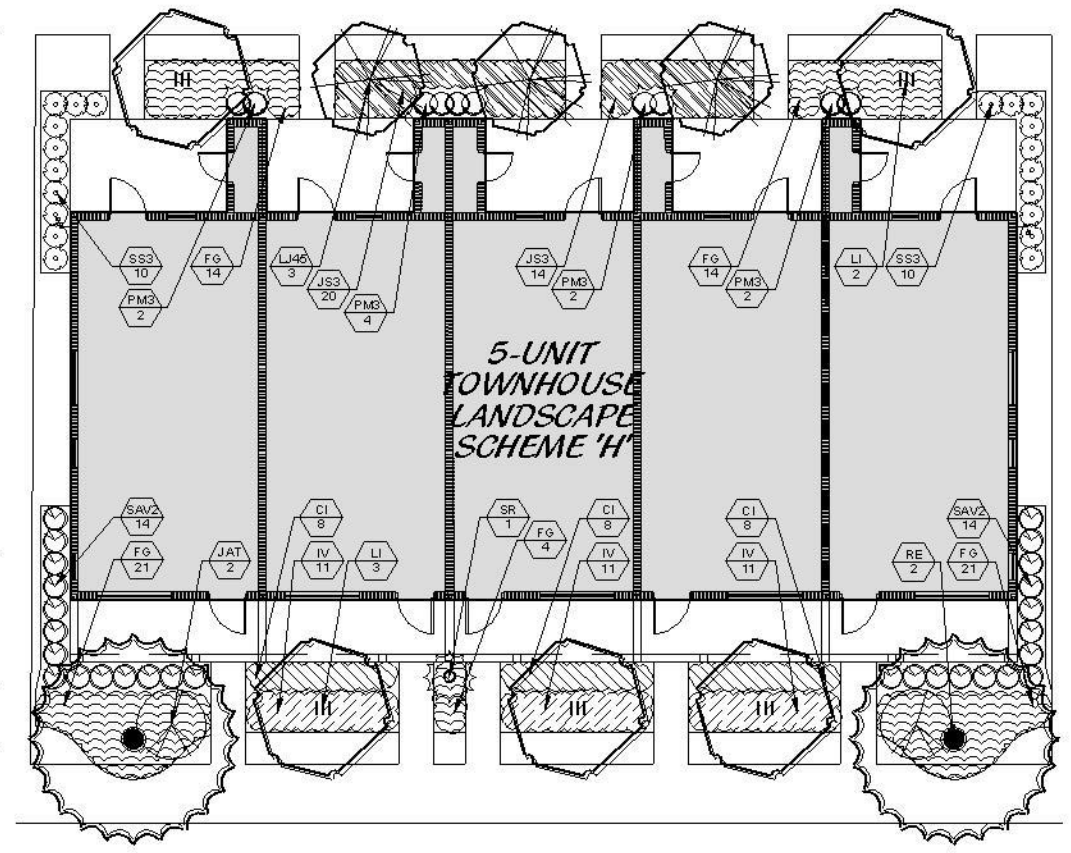
TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
LI	2	LAGERSTROEMIA IND 'MUSKOGEE' / 'TUSKEGEE'	CRAPE MYRTLE	30 GAL	1.5' CAL	12' HT X 5' SPRD	N	MULTI, LIMB UP 5', CHERRY LAKE NURSERY.
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
AO	2	AGLAIA ODORATA	CHINESE PERFUME TREE	15 GAL	1' CAL	5'-6' OA	N	FULL CANOPY
LI45	4	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMBUP
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	30	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
LJ30	2	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	30 GAL	4'-5' OA	AS	N	FULL CANOPY, MULTI-STEM, LIMBUP
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM10	7	PODOCARPUS MAKI ~	PODOCARPUS	10 GAL	3' X 2'	30' OC	N	FULL & THICK
SAV2	14	SCHEFFLERA ARBORICOLA 'TRINETTE'	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SR	1	STRELITZIA REGINAE	ORANGE BIRD OF PARADISE	7 GAL	2.5' X 2'	AS	N	FULL & THICK, FLORIDA FANCY
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI	15	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	18' X 18'	24' OC	Y	FULL & THICK
FG	17	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	30	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK
JS3	20	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18' X 18'	24' OC	N	FULL & THICK

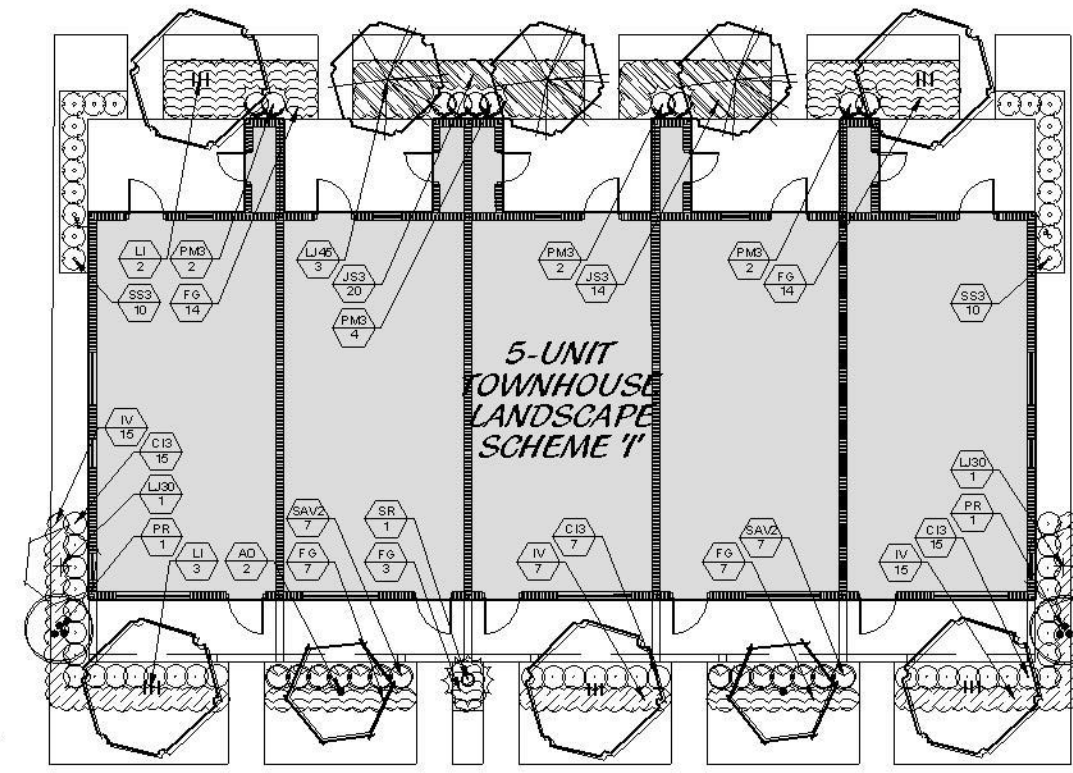
PLANT LIST - SCHEME 'G'

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
LI	6	LAGERSTROEMIA IND 'MUSKOGEE' / 'TUSKEGEE'	CRAPE MYRTLE	30 GAL	1.5' CAL	12' HT X 5' SPRD	N	MULTI, LIMB UP 5', CHERRY LAKE NURSERY.
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
AO	2	AGLAIA ODORATA	CHINESE PERFUME TREE	15 GAL	1' CAL	5'-6' OA	N	FULL CANOPY
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	30	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
LJ30	2	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	30 GAL	4'-5' OA	AS	N	FULL CANOPY, MULTI-STEM, LIMBUP
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM10	7	PODOCARPUS MAKI ~	PODOCARPUS	10 GAL	3' X 2'	30' OC	N	FULL & THICK
SAV2	14	SCHEFFLERA ARBORICOLA 'TRINETTE'	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SR	1	STRELITZIA REGINAE	ORANGE BIRD OF PARADISE	7 GAL	2.5' X 2'	AS	N	FULL & THICK, FLORIDA FANCY
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI	15	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	18' X 18'	24' OC	Y	FULL & THICK
FG	17	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	30	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK
JS3	20	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18' X 18'	24' OC	N	FULL & THICK









PLANT LIST - SCHEME 'C'

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
IE	2	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	65 GAL	2.5' CAL	12' HT X 4' SPRD	Y	FULL CANOPY, 5' CT, SOUTH GROWN, MATCHED, FLORIDA FANCY, FULL TO BASE
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
PEA	2	PTYCHOSPERMA ELEGANS	SINGLE ALEXANDER PALM	FIELD GROWN	N/A	10' OA	N	FULL CANOPY, SINGLE STEM, MATCHED
AD2	3	VEITCHIA MERRILLII	DOUBLE CHRISTMAS PALM	FIELD GROWN	N/A	10' OA	N	FULL CANOPY, MATCHED
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	8	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM3	6	PODOCARPUS MAKI	PODOCARPUS	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI	14	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	18' X 18'	24' OC	Y	FULL & THICK
FG	20	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	18	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK

PLANT LIST - SCHEME 'D'

ACCENT PLANTS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
TU	1	TIBOUCHINA GRANULOSA	PURPLE GLORY TREE	30 GAL	1.5' CAL	5' HT X 4' SPRD	N	FULL CANOPY, SYMETRICAL, MULTI-TRUNK
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
AA	2	ARCHONTOPHOENIX ALEXANDRAE	ALEXANDRA PALM	FIELD GROWN	N/A	16' HT, 10' CT	N	FULL CANOPY
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	30	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
LJ30	4	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	30 GAL	4'-5' OA	AS	N	FULL CANOPY, MULTI-STEM, LIMBUP
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM3	6	PODOCARPUS MAKI	PODOCARPUS	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SAV2	7	SCHEFFLERA ARBORICOLA 'TRINETTE'	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SR	1	STRELITZIA REGINAE	ORANGE BIRD OF PARADISE	7 GAL	2.5' X 2'	AS	N	FULL & THICK, FLORIDA FANCY
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
FG	10	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	30	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK
JS3	14	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18' X 18'	24' OC	N	FULL & THICK

PLANT LIST - SCHEME 'H'

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
LI	5	LAGERSTROEMIA IND 'MUSKOGEE' / 'TUSKEGEE'	CRAPE MYRTLE	30 GAL	1.5' CAL	12' HT X 5' SPRD	N	MULTI, LIMB UP 5', CHERRY LAKE NURSERY.
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
JAT	2	JATROPHA STANDARD	JATROPHA	30 GAL	1' CAL	4' HT X 3' SPRD	N	FULL CANOPY
LI45	3	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMBUP
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
RE	2	ROYSTONEA ELATA	FLORIDA ROYAL PALM	FIELD GROWN	N/A	8' GW	Y	FULL, STRAIGHT TRUNK, MATCHED
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM3	10	PODOCARPUS MAKI	PODOCARPUS	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SAV2	28	SCHEFFLERA ARBORICOLA 'TRINETTE'	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SR	1	STRELITZIA REGINAE	ORANGE BIRD OF PARADISE	7 GAL	2.5' X 2'	AS	N	FULL & THICK, FLORIDA FANCY
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI	24	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	18' X 18'	24' OC	Y	FULL & THICK
FG	74	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	33	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK
JS3	34	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18' X 18'	24' OC	N	FULL & THICK

PLANT LIST - SCHEME 'I'

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
LI	5	LAGERSTROEMIA IND 'MUSKOGEE' / 'TUSKEGEE'	CRAPE MYRTLE	30 GAL	1.5' CAL	12' HT X 5' SPRD	N	MULTI, LIMB UP 5', CHERRY LAKE NURSERY.
ACCENT PLANTS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**	**SIZE**	**NATIVE**	**REMARKS**
AO	2	AGLAIA ODORATA	CHINESE PERFUME TREE	15 GAL	1' CAL	5'-6' OA	N	FULL CANOPY
LI45	3	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMB UP
PR	2	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3' CAL EACH, 3 TRK MIN	4'-5' OA	N	TRIPLE TRUNK, FLORIDA FANCY
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
CI3	37	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
LJ30	2	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	30 GAL	4'-5' OA	AS	N	FULL CANOPY, MULTI-STEM, LIMB UP
SS3	20	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5' X 1.5'	2' OC	Y	FULL & THICK
PM3	10	PODOCARPUS MAKI	PODOCARPUS	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SAV2	14	SCHEFFLERA ARBORICOLA 'TRINETTE'	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5' X 1.5'	2' OC	N	FULL & THICK
SR	1	STRELITZIA REGINAE	ORANGE BIRD OF PARADISE	7 GAL	2.5' X 2'	AS	N	FULL & THICK, FLORIDA FANCY
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SIZE**	**SPACE**	**NATIVE**	**REMARKS**
FG	45	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12' X 12'	24' OC	N	FULL & THICK
IV	37	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPON HOLLY	3 GAL	12' X 12'	24' OC	Y	FULL & THICK
JS3	34	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18' X 18'	24' OC	N	FULL & THICK

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NEW URBAN COMMUNITIES
Stuart, Florida

DESIGNED: DEH
DRAWN: JAE
APPROVED: DEH
JOB NUMBER: 19-1014
DATE: 01-23-2020
REVISIONS:

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Drawing: 191014_LP.DWG

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03092020 CCM

LANDSCAPE NOTES

ALL PLANT MATERIAL SHALL BE FLORIDA NUMBER 1 OR BETTER AS DEFINED BY THE DIVISION OF PLANT INDUSTRY FLORIDA GRADES AND STANDARDS' LATEST EDITION.

ALL LANDSCAPE SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF SUTART LANDSCAPE CODE SHALL GOVERN IN THE EVENT FOR A CONFLICT.

VEGETATION REMOVAL PERMITS ARE REQUIRED PRIOR TO REMOVING, CLEARING OR STRIPPING ANY VEGETATION FROM THE PROPERTY.

AT THE TIME OF BUILDING PERMIT, THE APPLICANT SHALL EXECUTE HOLD HARMLESS AGREEMENTS WITH ALL APPLICABLE UTILITIES FOR LANDSCAPING WITHIN UTILITY EASEMENTS.

THE LANDSCAPE CONTRACTOR SHALL NOT MAKE ANY SUBSTITUTIONS AND/OR CHANGES WITHOUT THE AUTHORIZATION OF CITY OF STUART, THE OWNER AND THE LANDSCAPE ARCHITECT.

THE LANDSCAPE CONTRACTOR SHALL REVIEW THE PROJECT DRAINAGE AND UTILITY PLANS PRIOR TO CONSTRUCTION AND SHALL ALSO VERIFY UTILITIES. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS.

THE CONTRACTOR SHALL COORDINATE THE PLANTING AND TRIMMING OF STREET TREES TO ENSURE FULL VISIBILITY TO TRAFFIC CONTROL AND SAFETY SIGNAGE.

TREES SHALL BE POSITIONED TO AVOID CONFLICTS WITH SIGNAGE AND SITE LIGHTING. LARGER TREES WILL BE PROVIDED AT INTERSECTIONS WHERE DEEMED NECESSARY.

ALL VEGETATION SHALL BE SELECTED AND BE POSITIONED SO THAT IT DOES NOT PRESENT OBSTRUCTIONS TO THE LINE OF SIGHT AT INTERSECTIONS PURSUANT TO THE CITY OF STUART CODE.

ALL ABOVE GROUND UTILITIES I.E. TRANSFORMERS, SWITCH BOXES, AC CONDENSERS AND ALIKE SHALL BE FULLY SCREENED FROM VIEW ON THREE SIDES WITH LANDSCAPING. THE LANDSCAPING SHALL TO THE TALLEST POINT OF SAID EQUIPMENT AT TIME OF PLANTING.

ALL TREES SHALL BE LOCATED WITHIN A MULCH PLANTING BED WITH A MINIMUM OF TWO (2) FEET OF CLEARANCE TO THE EDGE OF THE BED.

SOD AND IRRIGATION SHALL BE INSTALLED IN ANY ADJACENT RIGHT OF WAY BETWEEN THE SIDEWALK AND THE CURB.

ALL SOD SHALL BE STENOTAPHRUM SECONDATUS FLORITAM-PALMETTO (ST. AUGUSTINE SOD).

TREES WITHIN PLANTING ISLANDS LESS THAN FIVE (5) FEET IN WIDTH SHALL BE LOCATED TO AVOID CONFLICTS WITH THE OVERHANG OF VEHICLES.

TYPE D RAISED CONCRETE CURBING SHALL BE PROVIDED AROUND ALL PLANTING ISLANDS WITHIN VEHICULAR USE AREAS.

TREES AT ENTRANCE WAYS AND WITHIN SIGHT TRIANGLES SHALL BE TRIMMED IN SUCH A FASHION TO MINIMIZE SITE VISIBILITY CONFLICTS. CLEAR VISIBILITY SHALL BE MAINTAINED BETWEEN 30 INCHES AND 7 FEET, TEN FOOT BY THIRTY FOOT SIGHT VISIBILITY TRIANGLES SHALL BE PROVIDED AT THE INTERSECTIONS WITH THE PUBLIC RIGHT OF WAY. IN ADDITION ALL LANDSCAPING SHALL CONFORM TO THE REQUIREMENTS OF FOOT INDEX 546.

EARTH BERMS SHALL NOT EXCEED A 3:1 SLOPE 4:1 SLOPES OR GREATER ARE PREFERABLE.

ALL TREES PLANTED UNDER OR ADJACENT TO FPL POWER LINES WILL COMPLY WITH THE FPL RIGHT TREE IN THE RIGHT PLACE GUIDELINES (REV. 5/96).

PERIMETER TREES AT THE TIME OF PLANTING SHALL BE SPACED IN A WAY THAT COMPLEMENTS THE SPACING OF ANY EXISTING TREES ON ADJACENT DEVELOPED AREAS.

ALL LANDSCAPE ISLANDS AND STRIPS SHALL BE FREE FROM SHELL ROCK AND CONSTRUCTION DEBRIS, EXCAVATED TO A DEPTH OF 36 INCHES OR TO CLEAN NATIVE SOILS AND FILLED WITH THE SPECIFIED BACKFILL MIXTURE.

ALL LANDSCAPE ISLANDS SHALL INCORPORATE THE INSTALLATION OF MOUNDING OF NATIVE SOILS A MINIMUM OF SIX INCHES (6") ABOVE THE TOP OF CURB.

15.7" TWO BARRIER ROOT BARRIER SHALL BE PROVIDED FOR SHADE TREES PLANTED WITHIN SIX (6) FEET OF PUBLIC SURFACE SIDEWALKS OR SUBJECT RIGHT-OF-WAY. ROOT BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATIONS. THE TOTAL LENGTH OF THE ROOT BARRIERS SHALL BE 20' ADJACENT TO THE SIDEWALK AND 20' ADJACENT TO THE CURB.

ALL AREAS SHALL BE FULLY IRRIGATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF STUART. THE IRRIGATION WATER SOURCE SHALL BE WELL WATER FOR COMMON AREAS AND POTABLE WATER AROUND THE BUILDING FOUNDATION.

CATCH BASINS AND DRAINAGE SHALL NOT BE LOCATED WITH IN REQUIRED PERIMETER BUFFERS OR PRESERVE AREAS.

THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE 100% OVERLAP COVERAGE TO ALL LANDSCAPE AND SOD AREAS.

THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN SENSOR/CUT OFF SWITCH IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.

EXISTING TREES AND VEGETATION TO REMAIN SHALL BE STAKED AND BARRICADED PRIOR TO ANY LAND CLEARING. TREES TO BE RELOCATED SHALL BE ROOT PRUNED AND PROTECTED DURING CONSTRUCTION.

ALL TREES PROPOSED TO BE PRESERVED ON SITE SHALL BE PROTECTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN DIVISION IV., VEGETATION REMOVAL REQUIREMENTS IN THE CITY OF STUART CODE PRIOR TO THE ISSUANCE OF A C.O.

ANY AREA DESIGNATED WITH EXISTING VEGETATION TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH NATIVE PLANTINGS.

EXISTING TREES PRESERVED OR RELOCATED ON SITE SHALL BE PRUNED ACCORDING TO ANSI A300 STANDARDS OR BY AN ISA CERTIFIED ARBORIST.

ALL EXISTING LANDSCAPING AND TREES TO REMAIN SHALL BE BARRICADED WITH ORANGE CONSTRUCTION BARRICADE. THE BARRICADE SHALL BE INSTALLED AT THE DRIP LINE OF THE TREE/PALM OR AT THE EDGE OF THE SHRUB MASS. BARRICADES SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION.

EXISTING, SUITABLE NATIVE VEGETATION LOCATED WITHIN THE PROPOSED DEVELOPMENT AREAS SHALL BE RELOCATED TO SUPPLEMENT THE LANDSCAPING. NATIVE VEGETATION SHALL BE RELOCATED BY TREE SPADE OR CRANE, PRIOR TO THE CLEARING OF THE SITE THE APPLICANT SHALL IDENTIFY ALL NATIVE VEGETATION TO BE RELOCATED.

RELOCATION METHODOLOGY: EXISTING NATIVE VEGETATION DETERMINED TO BE SUITABLE FOR RELOCATION SHALL BE RELOCATED TO TARGET AREAS USING HYDROLOGIC TREE SPADES. THE SIZE OF SPACE SHALL VARY FROM 90' TO 45' DEPENDING ON THE SIZE AND TYPE OF VEGETATION TO BE MOVED. THE APPLICANT SHALL IDENTIFY PRIOR TO THE CLEARING OF THE SITE ALL EXISTING NATIVE VEGETATION TO BE RELOCATED. FOLLOWING RELOCATION, VEGETATION SHALL BE WATERED DAILY FOR A PERIOD NOT LESS THAN 90 DAYS AFTER WHICH IT SHALL BE WATERED ON AN AS NEED BASES TO INSURE SURVIVAL. AT A MINIMUM THE APPLICANT SHALL INSURE 66% SURVIVAL FOR ALL RELOCATED PLANT MATERIAL.

LANDSCAPE SPECIFICATIONS

1. GENERAL LANDSCAPE REQUIREMENTS

LANDSCAPE CONTRACT WORK INCLUDES, BUT IS NOT LIMITED TO, SOIL PREPARATION, FINE OR FINISH GRADING, FURNISHING AND INSTALLING PLANT MATERIAL, WATERING, STAKING, GUYING AND MULCHING.

PLANT SIZE AND QUALITY

TREES, PALMS, SHRUBS, GROUNDCOVERS
PLANT MATERIAL SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS.
NOMENCLATURE SHALL CONFORM TO STANDARD PLANT NAMES, 1ND EDITION, ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS PARTS I & II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS OF GOOD QUALITY AND BE IN A HEALTHY GROWING CONDITION.

AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER.

STANDARD PLANTING MIXTURE SHALL BE ONE (1) PART RECYCLED OR GANIC MATERIAL ADDED TO THREE (3) PARTS EXISTING NATIVE SOIL.

REPLACEMENT SOIL SHALL BE USED AS SPECIFIED TO REPLACE EXISTING SOILS THAT ARE DETERMINED BY THE LANDSCAPE ARCHITECT TO BE UNSUITABLE FOR PLANTING, IE. ROAD BASE, PAVEMENT, ETC. REPLACEMENT SOIL MIX SHALL CONTAIN 60% SAND AND 40% MUCK. SAND SHALL BE 100% CLEAN NATIVE SAND SCREENED TO 1/4" AND MUCK SHALL BE 100% CLEAN ORGANIC NATIVE MUCK SCREENED TO 1/2". ALL SOIL SHALL BE MIXED PRIOR TO DELIVERY ON SITE.

MULCH SHALL BE SHREDDED MELALEUCA, EUCALYTUS OR GRADE "A" RECYCLED. ALL MULCH IS TO BE APPLIED TO A DEPTH OF 3", EXCEPT AS OTHERWISE NOTED.

FERTILIZER IN BACKFILL MIXTURE FOR ALL PLANTS SHALL CONSIST OF MILORGANITE ACTIVATED SLUDGE PELLET WITH THE FOLLOWING, AT A RATE OF NOT LESS THAN 50 LBS. PER CUBIC YARD.

FERTILIZER FOR TREES AND SHRUBS MAY BE TABLET FORM OR GRANULAR. GRANULAR FERTILIZER SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE-FLOWING. THIS PERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURER'S STATEMENT OF ANALYSIS, AND SHALL MEET THE FOLLOWING REQUIREMENTS: 15% NITROGEN 7% PHOSPHORUS, 10% POTASSIUM, PLUS IRON. TABLET FERTILIZER (AGRIFORM OR EQUAL) IN 21 GRAM TABLETS OF LONG LASTING NUTRIENTS FOR TREES AND SHRUBS AS FOLLOWS:

PLANT SIZE	16-7-12	AGRIFORM TABLETS (21 GRAM)
1 GAL.	1/4 LB.	1
3 GAL.	1/2 LB.	3
7-15 GAL	1.0 LB.	6
1"=3" CALIPER	2 LBS./1" CALIPER	2 PER 1" CALIPER
4" AND LARGER	3 LBS./1" CALIPER	2 PER 1" CALIPER

"FLORIDA EAST COAST PALM SPECIAL" SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/4 LB. PER 1" CALIPER OF TRUNK, BUT NOT LESS THAN 1 LB.

FIELD GROWN TREES AND PALMS PREVIOUSLY ROOT PRUNED SHALL OBTAIN A ROOT BALL WITH SUFFICIENT ROOTS FOR CONTINUED GROWTH WITHOUT RESULTING SHOCK.

CONTRACTOR SHALL NOT MARK OR SCAR TRUNK IN ANY FASHION.

PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.

THE LOCATIONS OF PLANTS, AS SHOWN IN THESE PLANS, ARE APPROXIMATE. THE FINAL LOCATIONS MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. MAJOR ADJUSTMENTS TO THE LAYOUT ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT.

ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.

ALL TREES MUST BE STAKED AS SHOWN ON THE PLANTING DETAILS WITHIN 24 HOURS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 6 MONTHS, BUT NO LONGER THAN 18 MONTHS. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.

ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT'S DIRECTION. SABAL PALMS MAY BE HURRICANE CUT.

ALL SHRUBS, TREES AND GROUND COVER WILL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. THE SOILS SHALL BE RAKED IN THE HOLE DURING PLANTING. TOP DRESSING ONLY IS NOT ACCEPTABLE.

DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING. ALL TREES SHALL BE SPIKED IN UTILIZING WATER AND A TRUE BAR.

THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF CONTRACT OR ACCEPTANCES BY LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.

THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY HIS CREWS DURING THE PERFORMANCE OF THE WORK. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROMPTLY REMOVE ALL WASTE MATERIALS, DEBRIS, UNUSED PLANT MATERIAL, EMPTY PLANT CONTAINERS AND ALL EQUIPMENT FROM THE PROJECT SITE.

UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND REQUEST A FINAL INSPECTION. ANY ITEMS THAT ARE JUDGED INCOMPLETE OR UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR WITHIN 14 DAYS.

ALL LABOR AND MATERIAL FOR SOIL AMENDMENTS AND FERTILIZER THAT IS REQUIRED TO INSURE THE SUCCESSFUL ESTABLISHMENT AND SURVIVAL OF THE PROPOSED VEGETATION, AS WELL AS ALL THE COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL, SHALL BE INCLUDED IN THE CONTRACTOR'S BID TO REPERFORM THE WORK REPRESENTED IN THIS PLAN SET.

2. PLANTING TREES

EXCAVATE PIT AS PER PLANTING DETAILS.

BACKFILL AROUND BALL WITH STANDARD PLANTING MIXTURE AND SLIGHTLY COMPACT, WATER THOROUGHLY AS LARGE BUBBLES ARISE AND TO ELIMINATE VOIDS AND AIR POCKETS. BUILD A 4" HIGH BERM OF STANDARD PLANTING MIXTURE BEYOND EDGE OF EXCAVATION. APPLY 3" LAYER OF MULCH EXCEPT WITHIN 1" OF TRUNK.

PRUNE TREE TO REMOVE DAMAGED BRANCHES, IMPROVE NATURAL SHAPE AND THIN OUT STRUCTURE. DO NOT REMOVE MORE THAN 15% OF BRANCHES. DO NOT PRUNE BACK TERMINAL LEADER.

GUY AND STAKE TREE IN ACCORDANCE WIT THE STAKING DETAILS IMMEDIATELY AFTER PLANTING.

3. PLANTING SHRUBS

LAYOUT SHRUBS TO CREATE A CONTINUOUS SMOOTH FRONT LINE AND FILL IN BEHIND.

EXCAVATE PIT OR TRENCH TO 1-1.2 TIMES THE DIAMETER OF THE BALLS OR CONTAINERS OR 1'-0" WIDER THAN THE SPREAD OF ROOTS FOR POSITIONING AT PROPER HEIGHT. BACKFILL AROUND PLANTS WITH STANDARD PLANTING MIXTURE AND LEAVE GRADE SLIGHTLY DISHED AT EACH PLANT. WATER THOROUGHLY. APPLY 3" OF MULCH OVER ENTIRE PLANTING BED, LIFTING PLANT PULLAGE ABOVE MULCH.

DURING PERIODS OF HOT SUN AND/OR WIND AT TIME OF PLANTINGS, PROVIDE PROTECTIVE COVER FOR SEVERAL DAYS OR AS NEEDED.

5. PLANTING LAWNS

SODDING: SOD TYPE SPECIFIED ON PLANT LIST SHALL BE MACHINE STRIPPED NOT MORE THAN 24 HOURS PRIOR TO LAYING.

LOOSEN SUBGRADE TO DEPTH OF 4" AND GRADE WITH TOPSOIL EITHER PROVIDED ON SITE OR IMPORTED STANDARD PLANTING MIX TO FINISH DESIGN ELEVATIONS. ROLL PREPARED LAWN SURFACE. WATER THOROUGHLY, BUT DO NOT CREATE MUDDY SOIL CONDITION.

FERTILIZE SOIL AT THE RATE OF APPROXIMATELY 10 LBS. PER 1,000 S.F. SPREAD FERTILIZER OVER THE AREA TO RECEIVE GRASS BY USING AN APPROVED DISTRIBUTION DEVICE CALIBRATED TO DISTRIBUTE THE APPROPRIATE AMOUNT. DO NOT PERFORM OPERATIONS WHEN WIND VELOCITY EXCEEDS 15 M.P.H. THOROUGHLY MIX FERTILIZER INTO THE TOP 2" OF TOPSOIL.

LAY SOD STRIPS WITH TIGHT JOINTS. DO NOT OVERLAP, STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. WORK JOINTS TO FORCE STANDARD PLANTING MIXTURE INTO MINOR CRACKS BETWEEN PIECES OF SOD AND REMOVE EXCESS. SOIL DEPOSITS FROM SODDED AREAS. SOD ON SLOPES GREATER THAN 3:1 SHALL BE STAKED WITH TWO WOOD PEGS PER SOD STRIP, LIGHTLY AND WATER THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.

6. MISCELLANEOUS LANDSCAPE WORK

LANDSCAPE MAINTENANCE

MAINTAIN LANDSCAPE WORK UNTIL FINAL ACCEPTANCE IS ISSUED BY THE OWNER'S REPRESENTATIVE. INCLUDE WATERING, WEEDING, CULTIVATING, RESTORATION OF GRADE, MOWING AND TRIMMING GRASS, PRUNING TREES AND SHRUBS, PROTECTION FROM INSECTS AND DISEASES, PER TILIZING AND SIMILAR OPERATIONS AS NEEDED TO INSURE NORMAL GROWTH AND GOOD HEALTH FOR LIVE PLANT MATERIAL.

PLANT MATERIAL SUBSTITUTION

NO SUBSTITUTION OF PLANT MATERIAL TYPE OR SIZES WILL BE PERMITTED WITHOUT AUTHORIZATION FROM THE LANDSCAPE ARCHITECT.

PLANTING BED PREPARATION

ALL PLANTING BEDS SHALL BE PROPERLY PREPARED PRIOR TO THE COMMENCEMENT OF ANY PLANTING. PLANTING AREAS, INCLUDING LAWNS SHALL BE FREE OF ALL WEEDS AND NUISANCE VEGETATION. BY TORPED GRASS (PANICUM REPENS) IS PRESENT OR ENCOUNTERED DURING PLANTING, THE LANDSCAPE CONTRACTOR SHALL STOP ALL PLANTING UNTIL IT CAN BE DEMONSTRATED THAT IT HAS BEEN COMPLETELY REMOVED OR ERADICATED. THIBLE SHALL BE NO EXCEPTIONS TO THIS PROVISION.

ALL LANDSCAPE ISLANDS AND BEDS WILL BE FILLE OF SHELL ROCK AND CONSTRUCTION DEBRIS AND WILL BE EXCAVATED TO A DEPTH OF 30 INCHES OR TO CLEAN, NATIVE SOIL AND FILLED WITH THE SPECIFIED REPLACMENT SOIL.

LANDSCAPE WARRENTY

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF SIX (6) MONTHS FROM THE DATE OF CONDITIONAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF CONDITIONAL ACCEPTANCE THE SIX (6) MONTH WARRANTY PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED OR DECLINED TO THE POINT WHERE THEY NO LONGER MEET FLORIDA #1 CONDITION DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR ON THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM ACTS OF GOD SUCH AS LIGHTNING, VANDALISM, AND AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS UP TO THE CONDITIONAL ACCEPTANCE PERIOD, UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDED FOR A DIFFERENT ARRANGEMENT.

LANDSCAPE DATA

PROPOSED PLANT TYPE	% NATIVE
TREES	72%
PALMS	75%
SHRUBS & GROUNDCOVER / ACCENT PLANTS	62%

PLANT LIST

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
BA	1	BULNESIA ARBOREA	VERAWOOD	45 GAL	2.5" CAL	12' HT X 5' SPRD	N	FULL CANOPY
BS	23	BURSERA SIMARUBA	GUMBO LIMBO	45 GAL	2.5" CAL	12' HT X 6' SPRD	Y	FULL CANOPY
CD	3	COCCOLOBA DIVERSIFOLIA	PIGEON PLUM	45 GAL	2.5" CAL	12' HT X 6' SPRD	Y	FULL CANOPY
CUS	4	COCCOLOBA UVIFERA	SEAGRAPE	45 GAL	2.5" CAL	12' HT X 6' SPRD	Y	FULL CANOPY
CES	31	CONOCARPUS ERECTUS `SERICEUS`	SILVER BUTTONWOOD TREE	FIELD GROWN	2" CAL	12' HT X 5' SPRD	Y	FULL CANOPY, SINGLE STRAIGHT TRUNK,
DR	8	DELONIX REGIA	ROYAL POINCIANA	45 GAL	2.5" CAL	12' HT X 6' SPRD	N	SINGLE STRAIGHT TRUNK, FULL CANOPY, FLORIDA FANCY.
LI	2	LAGERSTROEMIA IND `MUSKOGEE` / `TUSKEGEE`	CRAPE MYRTLE	30 GAL	1.5" CAL	12' HT X 5' SPRD	N	MULTI, LIMB UP 5', CHERRY LAKE NURSERY.
QV	26	QUERCUS VIRGINIANA	LIVE OAK	65 GAL	3" CAL	12'-14' HT X 6' SPRD	Y	FULL CANOPY, 5' C.T. MIN.
SM	15	SWIETENIA MAHAGONI	MAHOGANY TREE	45 GAL	2.5" CAL	12' HT X 6' SPRD	Y	FULL CANOPY, GRADE #1

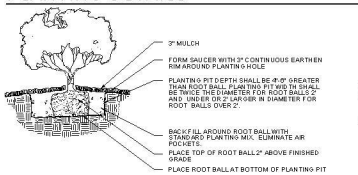
ACCENT PLANTS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
CH	2	CHAMAEROPS HUMILIS `SILVER SELECT`	EUROPEAN FAN SILVER SELECT	30 GAL	N/A	4'-5' OA	N	MULTI TRUNK, FULL CANOPY
JAT	2	JATROPHA STANDARD	JATROPHA	10 GAL	1" CAL	4' HT X 3' SPRD	Y	FULL CANOPY
LJ45	2	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	45 GAL	N/A	7'-8' HT X 7' SPRD	N	FULL CANOPY, MULTI-STEM, LIMB UP
PR	1	PHOENIX ROEBELENII	PYGMY DATE PALM	30 GAL	3" CAL EACH, 3 TRK MIN	8'-10' OA	N	TRIPLE TRUNK, FLORIDA FANCY
TM	20	THRINAX MORRISII	KEYS THATCH PALM	FIELD GROWN	N/A	4'-5' OA	Y	FULL & THICK, TRIPLE STEM
TR	5	THRINAX RADIATA	FLORIDA THATCH PALM	FIELD GROWN	N.A.	4' OA HT	Y	FULL & THICK

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	NATIVE	REMARKS
CN	3	COCOS NUCIFERA `MAYPAN`	COCONUT PALM	FIELD GROWN	N/A	6' - 8' GW	N	FULL CANOPY, CURVED TRUNK
CN2	2	COCOS NUCIFERA `MAYPAN`	COCONUT PALM	FIELD GROWN	N/A	6' - 8' GW	N	FULL CANOPY, STRAIGHT TRUNK
PEA	10	PTYCHOSPERMA ELEGANS	SINGLE ALEXANDER PALM	FIELD GROWN	N/A	10' OA	N	FULL CANOPY, SINGLE STEM, MATCHED
RE	21	ROYSTONEA ELATA	FLORIDA ROYAL PALM	FIELD GROWN	N/A	8' GW	Y	FULL, STRAIGHT TRUNK, MATCHED
SP	30	SABAL PALMETTO	SABAL PALMETTO	FIELD GROWN	N/A	12', 14', 16' CT, STAGGERED	Y	STAGGERED, SLICK TRUNK
SPM	11	SABAL PALMETTO	SABAL PALMETTO	FIELD GROWN	N/A	16' CT	Y	MATCHED, SLICK TRUNK

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACE	NATIVE	REMARKS
CC	402	CAPPARIS CYNOPHALLOPHORA	JAMAICA CAPER	3 GAL	2` X 2`	2` OC	Y	FULL & THICK
CI3	52	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	1.5` X 1.5`	2` OC	Y	FULL & THICK
CLD7	61	CLUSIA FLAVA	SMALL LEAF CLUSIA	7 GAL	3` X 2`	2.5` OC	Y	FULL & THICK
SS3	11	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	1.5` X 1.5`	2` OC	Y	FULL & THICK
PM3	26	PODOCARPUS MAKII	PODOCARPUS	3 GAL	1.5` X 1.5`	2` OC	N	FULL & THICK
SAV2	69	SCHEFFLERA ARBORICOLA `TRINETTE`	DWARF VARIEGATED SCHEFFLERA	3 GAL	1.5` X 1.5`	2` OC	N	FULL & THICK

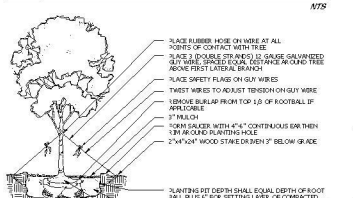
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACE	NATIVE	REMARKS
CI	140	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL	18" X 18"	24" OC	Y	FULL & THICK
CID	298	CHRYSOBALANUS ICACO `HORIZONTAL`	DWARF COCOPLUM	3 GAL	12" X 18"	24" OC	Y	FULL & THICK, NOT STRETCHED
CUM	295	CODIAEUM X MAMMY	CROTON MAMMY	3 GAL	18" X 18"	24" OC	N	FULL & THICK
FG	231	FICUS MACROPHYLLA	GREEN ISLAND FICUS	3 GAL	12" X 12"	24" OC	N	FULL & THICK
HL	15	HYMENOCALLIS LATIFOLIA	SPIDER LILY	3 GAL	18" X 18"	24" OC	Y	FULL & THICK
IV	31	ILEX VOMITORIA `STOKES DWARF`	DWARF YAUPON HOLLY	3 GAL	12" X 12"	24" OC	Y	FULL & THICK
JS3	8	JASMINUM VOLUBILE	WAX JASMINE	3 GAL	18" X 18"	24" OC	N	FULL & THICK
SS	32	MYRCIANTHES FRAGRANS	SIMPSONS STOPPER	3 GAL	24" X 24"	24" OC	Y	FULL & THICK
BC	233	PSYCHOTRIA LIGUSTRIFOLIA	BAHAMA COFFEE	3 GAL	18" X 18"	24" OC	Y	FULL & THICK
WC	300	PSYCHOTRIA NERVOSA	WILD COFFEE	3 GAL	15" X 15"	24" OC	Y	FULL & THICK
TFD	188	TRIPSACUM DACTYLOIDES	DWARF FAKAHATCHEE GRASS	3 GAL	24" X 24"	24" OC	Y	FULL & THICK

PLANTING DETAILS



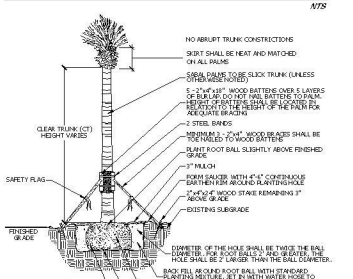
SHRUB/GROUNDCOVER PLANTING DETAIL

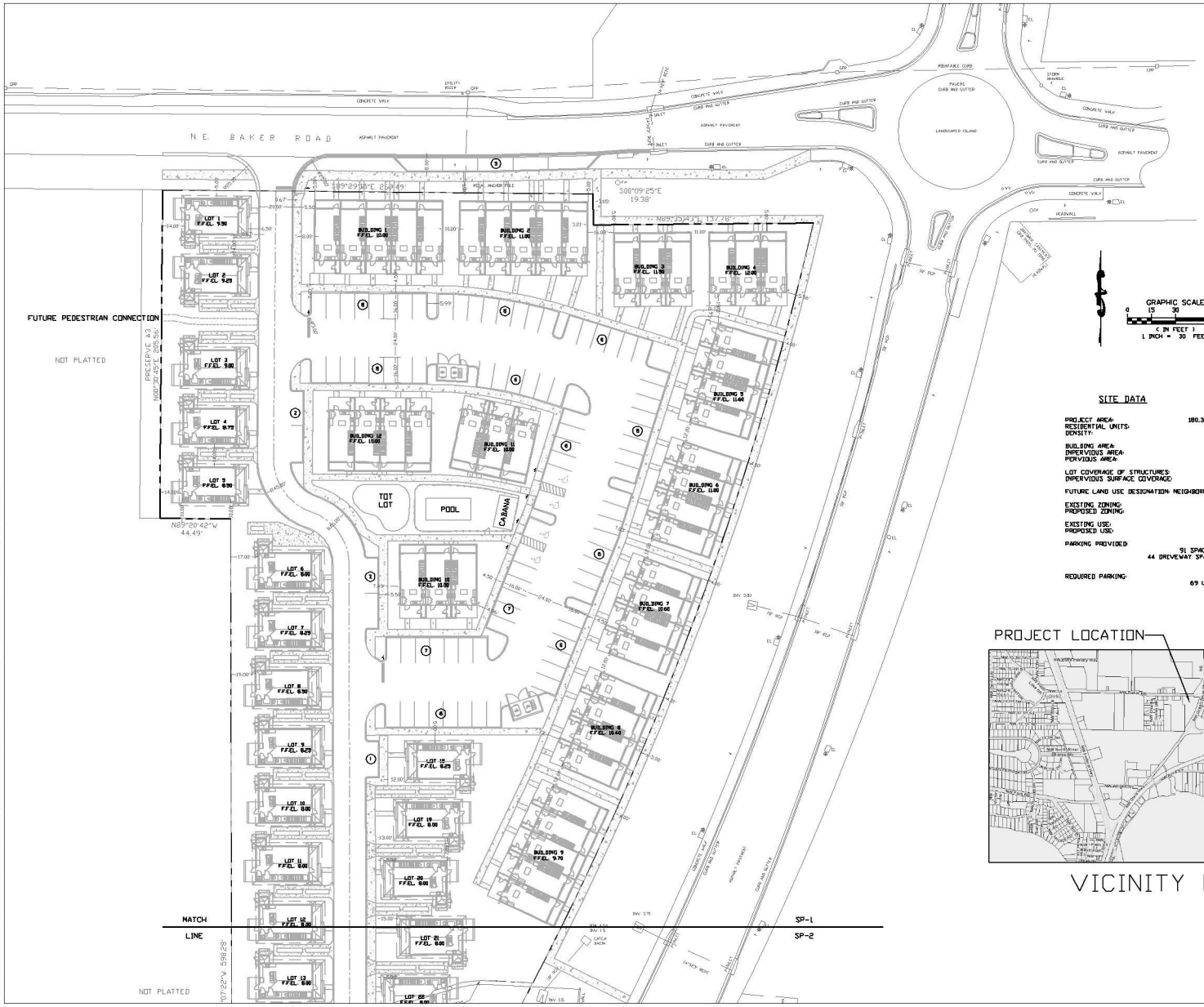
NTS



LARGE TREE PLANTING DETAIL

NTS


NO ABRUPT TRUNK CONSTRICTIONS
SKIRT SHALL BE NEAT AND MATCHED ON ALL PALMS
SABAL PALMS TO BE SLICK TRUNK (UNLESS OTHERWISE NOTED)
5 - 2"x4"x18" WOOD BATTENS OVER 5 LAYERS OF BURLAP. DO NOT NAIL BATTENS TO PALM. BOTTOM OF BATTENS SHALL BE LOCATED BY 1/3 POINT OF THE HEIGHT OF THE PALM FOR ADEQUATE BRACING
2 STEEL BANDS
MINIMUM 3 - 2"x4" WOOD BRACES SHALL BE TOE NAILED TO WOOD BATTENS
PLANT ROOT BALL SLIGHTLY ABOVE FINISHED GRADE
3" MULCH
FORM SAUCER WITH 4"-6" CONTINUOUS EARTHEN BERM AROUND PLANTING HOLE
2"x4"x24" WOOD STAKE REMAINING 3" ABOVE GRADE
EXISTING SUBGRADE
CLEAR TRUNK (CT) HEIGHT VARIES
SAFETY FLAG
FINISHED GRADE
DIAMETER OF THE HOLE SHALL BE TWICE THE BALL DIAMETER. FOR ROOT BALLS 2" AND GREATER, THE HOLE SHALL BE 2" LARGER THAN THE BALL DIAMETER.
BACK FILL AROUND ROOT BALL WITH STANDARD PLANTING MIX. ELIMINATE AIR POCKETS WITH WATER HOSE TO ELIMINATE AIR POCKETS.
MINIMUM ROOT BALL SIZE AS PER GRADES & STANDARDS.
PLACE ROOT BALL AT BOTTOM OF PLANTING PIT ON UNDISTURBED SUBGRADE



SITE DATA

PROJECT AREA:	180,322 SQ. FT. = 4.140 ACS.
RESIDENTIAL UNITS:	69
DENSITY:	16.7 UNITS/ACRE
BUILDING AREA:	37,971 SQ. FT. = 32%
IMPERVIOUS AREA:	69,972 SQ. FT. = 34%
PERVIOUS AREA:	61,378 SQ. FT. = 34%
LOT COVERAGE OF STRUCTURES:	32%
IMPERVIOUS SURFACE COVERAGE:	66%
FUTURE LAND USE DESIGNATION:	NEIGHBORHOOD/SPECIAL DISTRICT
EXISTING ZONING:	CPUD-COMMERCIAL PUD
PROPOSED ZONING:	CPUD-COMMERCIAL PUD
EXISTING USE:	VACANT
PROPOSED USE:	RESIDENTIAL
PARKING PROVIDED	148
	91 SPACES FOR 47 TOWNHOMES
	44 DRIVEWAY SPACES FOR 22 COTTAGES
	5 SPACES ON-STREET
REQUIRED PARKING:	138
	69 UNITS X 2 SPACES/UNIT

PROJECT LOCATION

VICINITY MAP NTS

NO.	DESCRIPTION:	BY:	DATE:
1	PER REVIEW COMMENTS	PWA	1.15.2020

DATE DRAWN: 10CT19
SCALE: 1"=30'
DESIGN BY: PWA
DRAWN BY: PWA
CHECKED BY: PWA
APPROVED BY: PWA

PETER WAYNE AQUART, P.E.
CONSULTING CIVIL ENGINEER
14032 SW 48TH STREET, MIAMI, FL 33175
TEL.: (561) 379-2879 E-MAIL:PAQUART@AOL.COM
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 34176

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AVONLEA PUD
LOT 16
CITY OF STUART FLORIDA

PREPARED FOR:
NEW URBAN COMMUNITIES

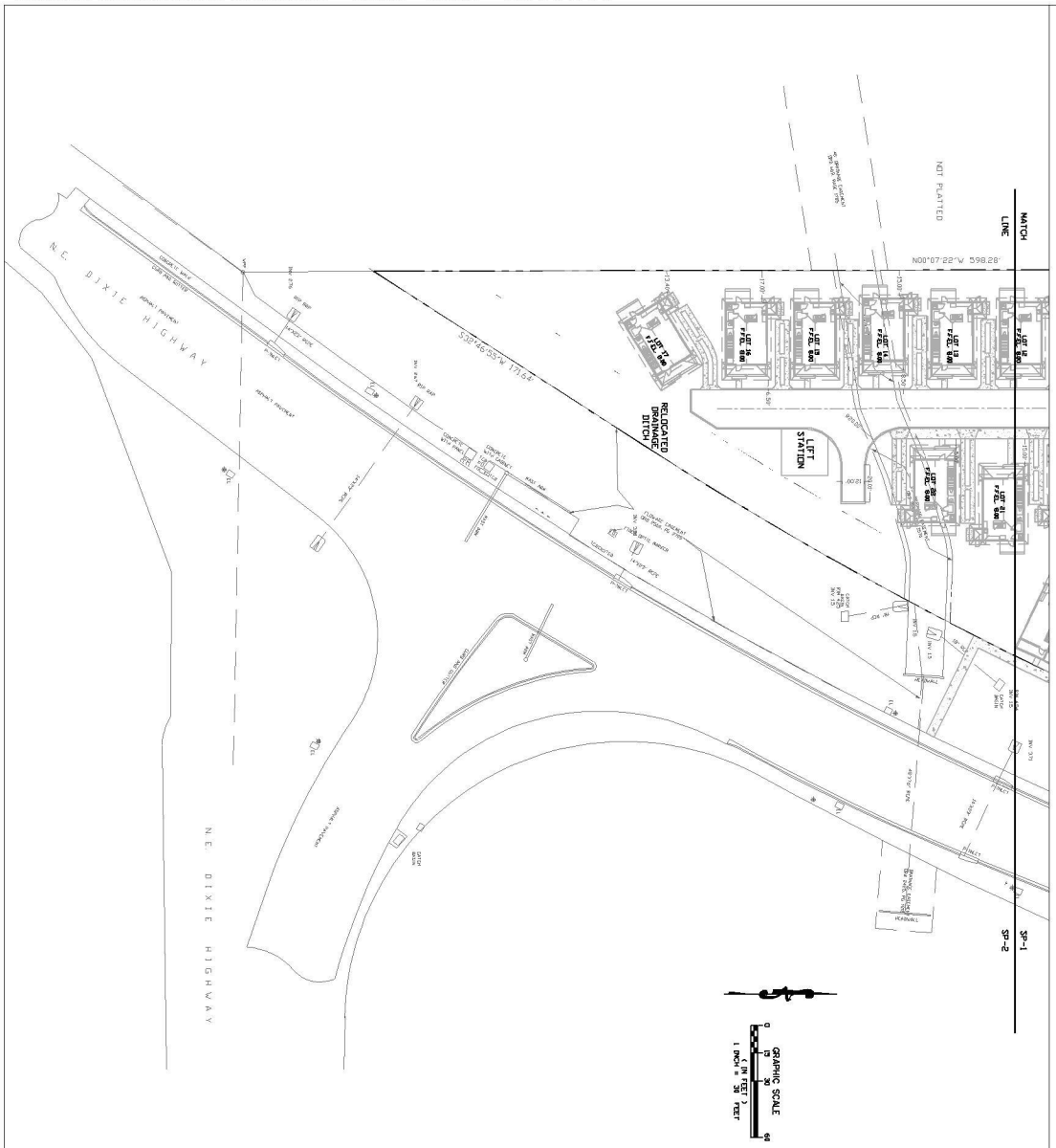
SITE PLAN

NOT VALID UNLESS IT BEARS AN ORIGINAL SIGNATURE AND A RAISED, EMBOSSED ENGINEER SEAL

January 23, 2020
Peter Wayne Aquart
Florida P.E. No. 34176

PROJECT NO.
105

SP-1
SHEET 1 OF 2



SHEET 2 OF 2	SP-2	AVONLEA PUD LOT 16 CITY OF STUART FLORIDA	PETER WAYNE AQUART, P.E. CONSULTING CIVIL ENGINEER 14032 SW 48TH STREET, MIAMI, FL 33175 TEL.: (561) 379-2879 E-MAIL:PAQUART@AOL.COM FLORIDA LICENSED PROFESSIONAL ENGINEER No. 34176
PROJECT NO.	105	PREPARED FOR: NEW URBAN COMMUNITIES	
		SITE PLAN	

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NO.	DESCRIPTION:	BY:	DATE:
1	PER REVIEW COMMENTS	PWA	1.15.2020

DATE DRAWN:	19OCT19
SCALE:	1"=30'
DESIGN BY:	PWA
DRAWN BY:	PWA
CHECKED BY:	PWA
APPROVED BY:	PWA

Avonlea Parcel 16

DESIGN GUIDELINES

New Urban Communities

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Purpose & Intent

To maintain a high standard of design through a proper balance of consistency and variety within the community. These design guidelines will help ensure the creation and maintenance of a residential community with a distinct character.

1 Single-Family Elevations

1.1 Intent

The single-family homes will use a variety of elevations and color palettes with a level of architectural consistency to unify its character, while being varied enough to make for an interesting streetscape.

1.2 Single-Family Guidelines

1.2.1 Elevation Repetition

No single-family home shall have the same front elevation design as the home(s) next door or directly across the street.

1.2.2 Color Repetition

No single-family home shall have the same color palette as the home(s) next door or directly across the street.

1.3 Elevations

1.3.1 Option A



FRONT ELEVATION
(OPTION A)

1.3.2 Option B



FRONT ELEVATION
(OPTION B)

1.3.3 Option C



FRONT ELEVATION
(OPTION C)

1.4 Color Palettes

HOMESCAPES™

Choose Color With Confidence

Welcome to HomeScapes by Sherwin-Williams. It's an exclusive program designed to take the guesswork out of color selection, so you, the homebuyer, can choose your exterior color scheme with confidence.

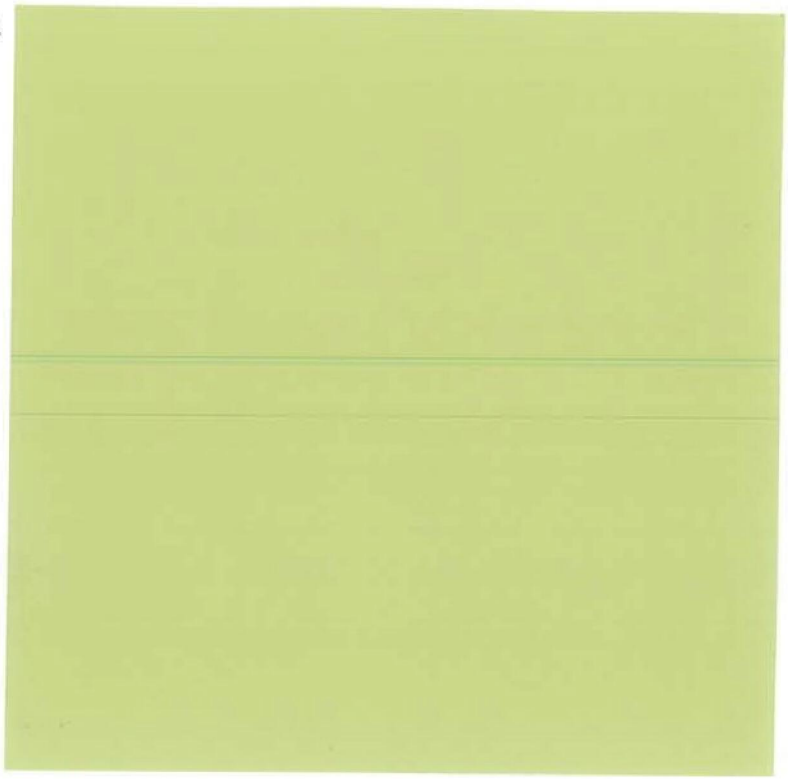
We're proud to partner with Sherwin Williams to provide this unique service. Sherwin-Williams is the largest provider of high-quality paints in North America and a color innovator for more than 130 years, with a complete commitment to service, excellence and quality.

Working with Sherwin-Williams color and design experts, we've put together this signature portfolio of distinct color combinations for you to choose from. The color schemes were selected to complement each other, yet give your home a distinct look that reflects your individual tastes.

We're delighted to help you put the finishing touch on your new home

SCHEME#!

2



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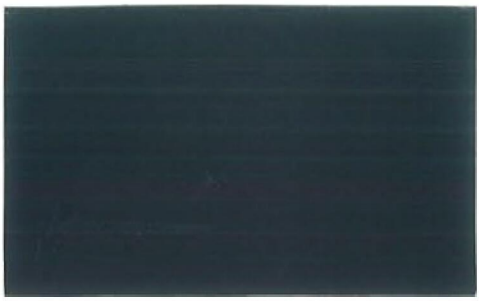


SCHEME 1)

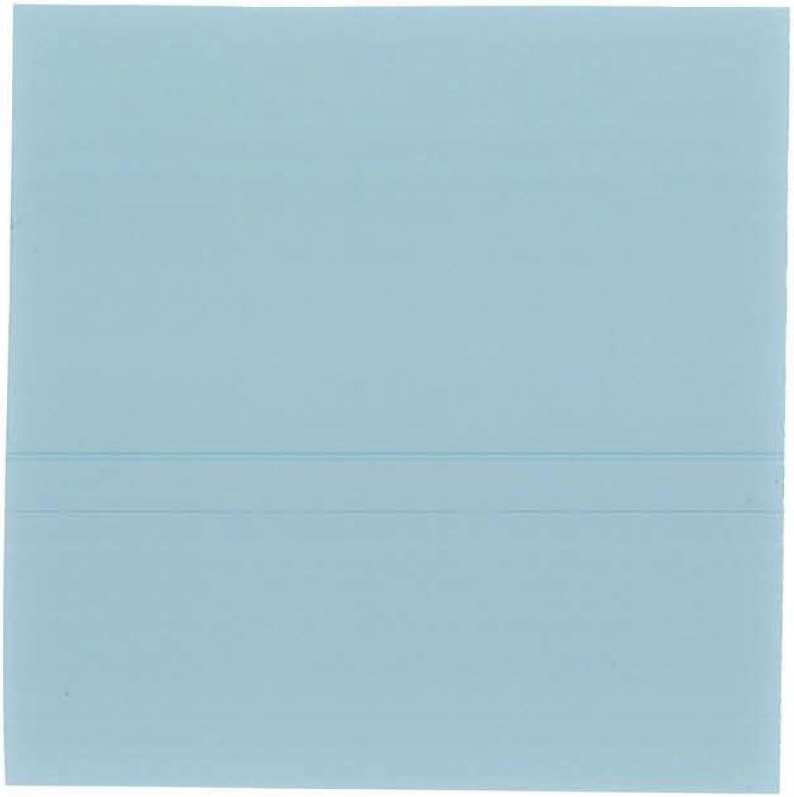
I Lap Siding: Acadia White AC-41

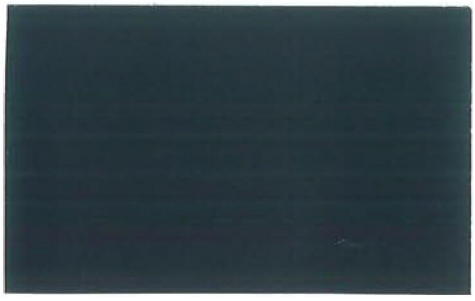
;). Body:Henderson Buff HC-15

1

Y Shutter•:Black

scheme 2



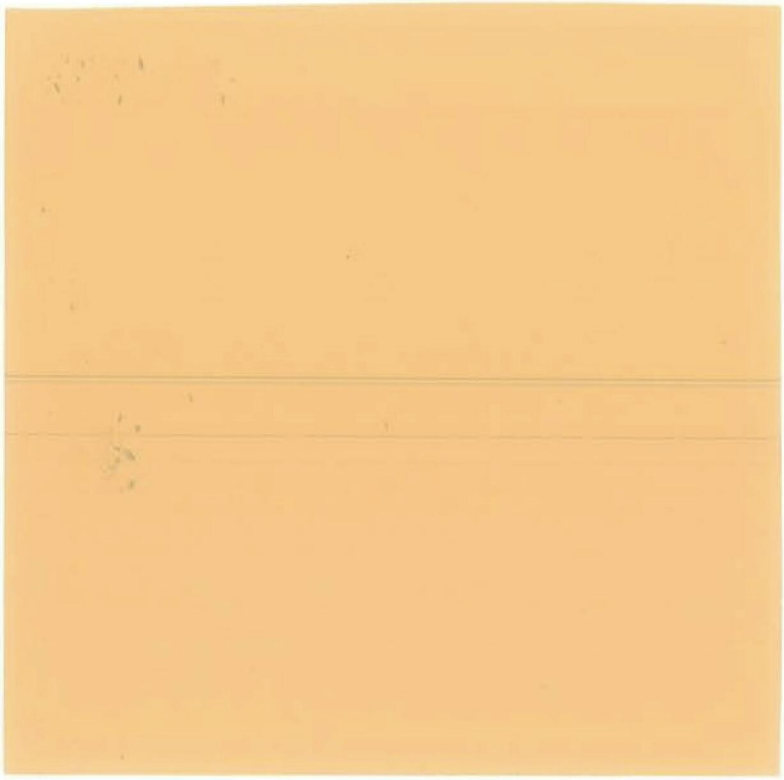


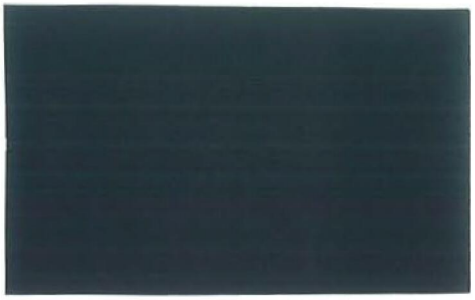
THE FINISHING TOUCH™
04-03-025

Botanica

1	**Body**	AC-22
2	**lap Siding**	AC-4
3	**Trim**	Brilliant While
4	**Shutter**	Block

scheme 3





3

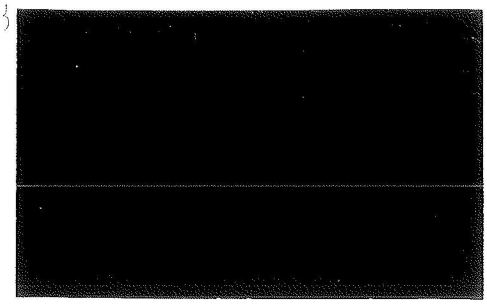
4

THE FINISHING TOUCH"
04-03-025

Botanica

1	Body	2157-40
2	Lap Siding	AC-41
3	Trim	Brilliant White
4	Shutter	Block

scheme 4



THE
FINISHING TOUCH™
04-03-025

Botanica

1	Body	2034-70
2	Trim	Brilliant White
3	Shutters	Black

scheme 5

\

4



3

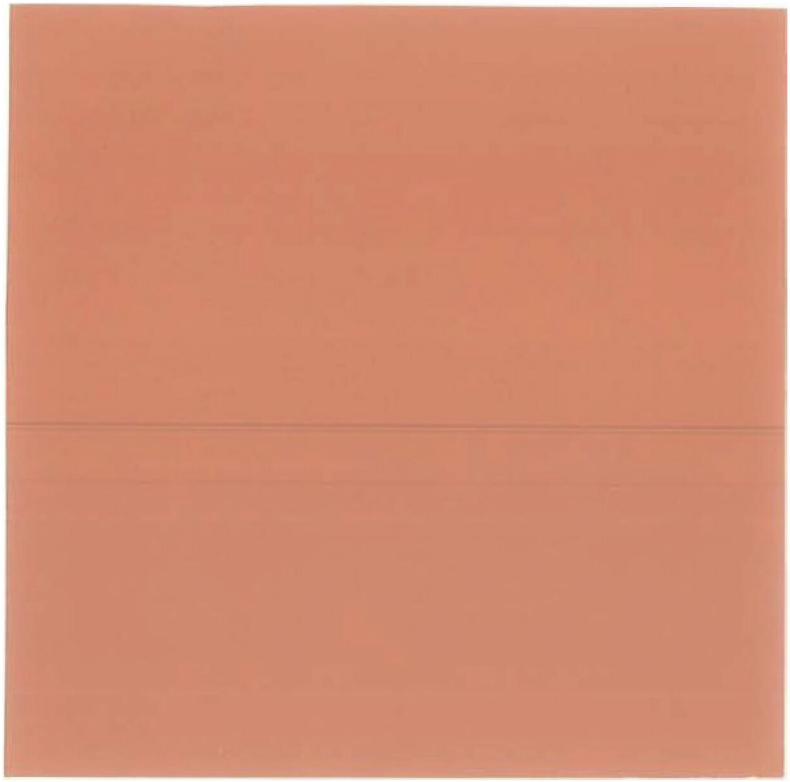
THE FINISHING TOUCH

04-03-025

Botanica

1 **Body**	HC-90
2 **Lap Siding**	AC-41
3 **Trim**	Brilliant White
4 **ShuHer**	HC-159

scheme 6



3

4

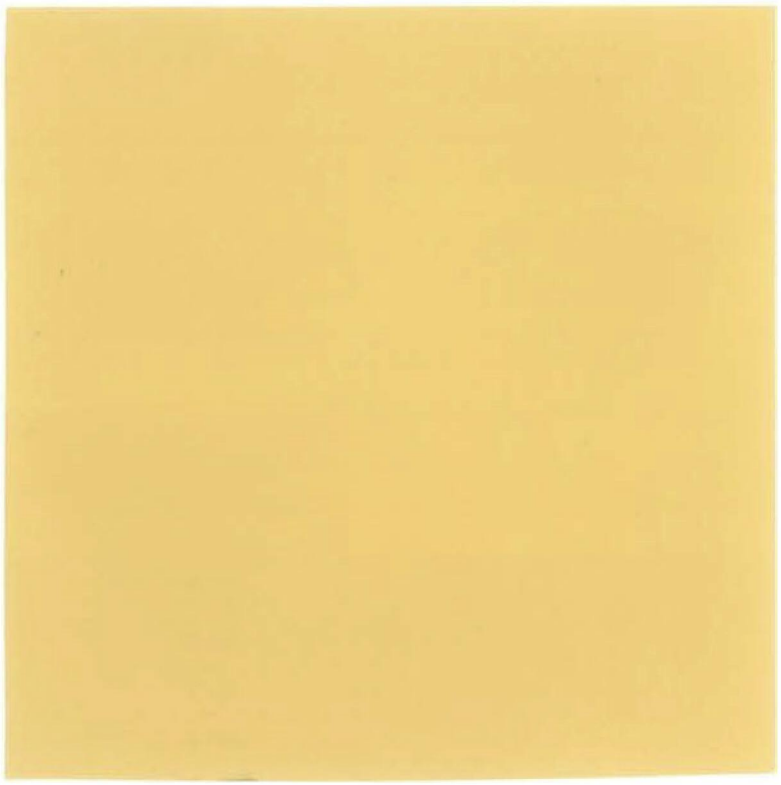


THE FINISHING TOUCH™
04-03-025

Botanica

1 Body	2175-40
2 Lap Siding	AC-41
3 Trim	Brilliant White
4 Shutter	HC-159

scheme 7





Botanica

1	Body	2159-40
2	Lap Siding	AC-41
3	Trim	Brillion! White
4	Shutter	HC 159

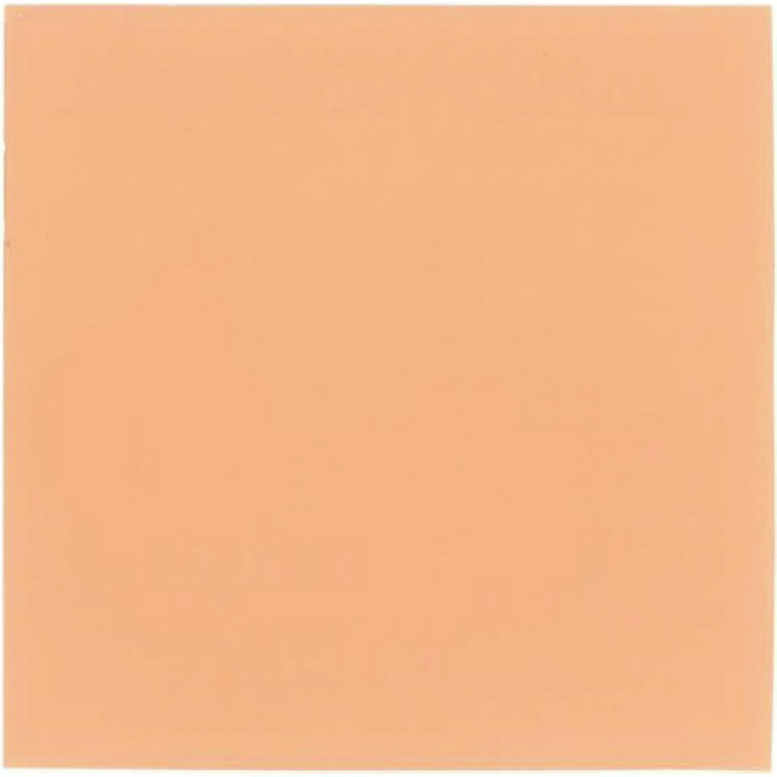
THE FINISHING TOUCH

04-03-025

scheme 8



3





Botonico

1	**Body**	2167-40
2	**Trim**	Brilliant White
3	**ShuHers**	HC-159

scheme 9



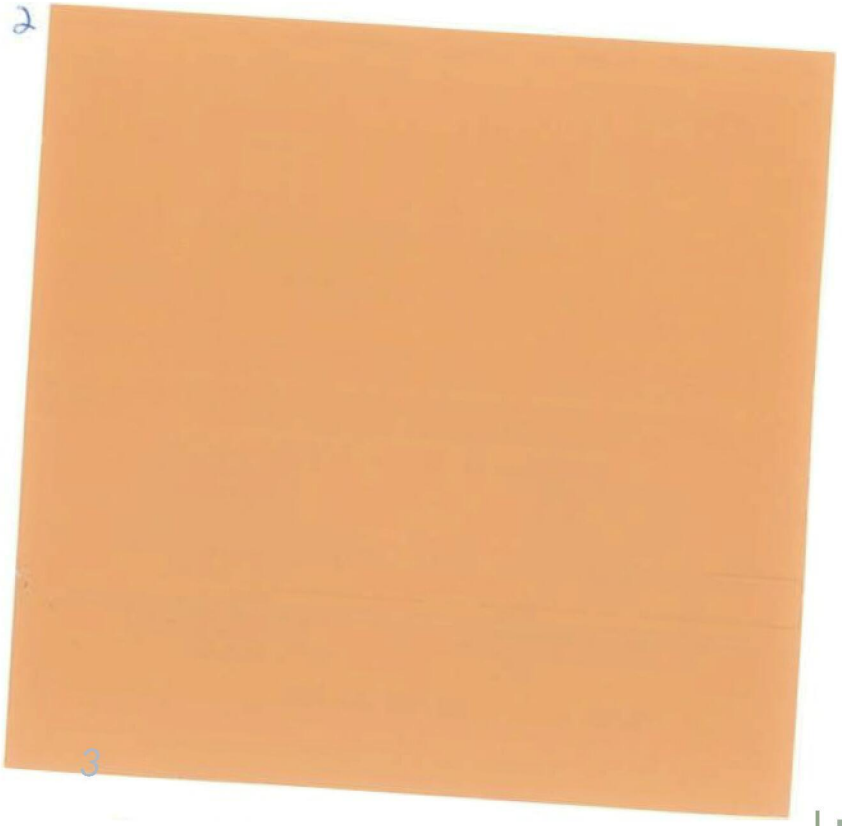


THE FINISHING TOUCH
04-03-025

Botanica

1 Body	2154-40
2 Lap Siding	AC-41
3 Trim	Brilliant White
4 Shutter	HC-113

SCHEME #10



SCHEME1Q)

Lap Siding: Acadia White AC-41

Body: Soft Pumpkin 2166-40

Trim: Brilliant White

Shuttere: Louisburg Green HC–113

SCHEME#11

"SCHEME 11)
Lap Siding:Acadia White AC-41
Body: Crown Point Sand HC-90
Trim:Brilliant White
Shuttere:Louisburg Green HC-113



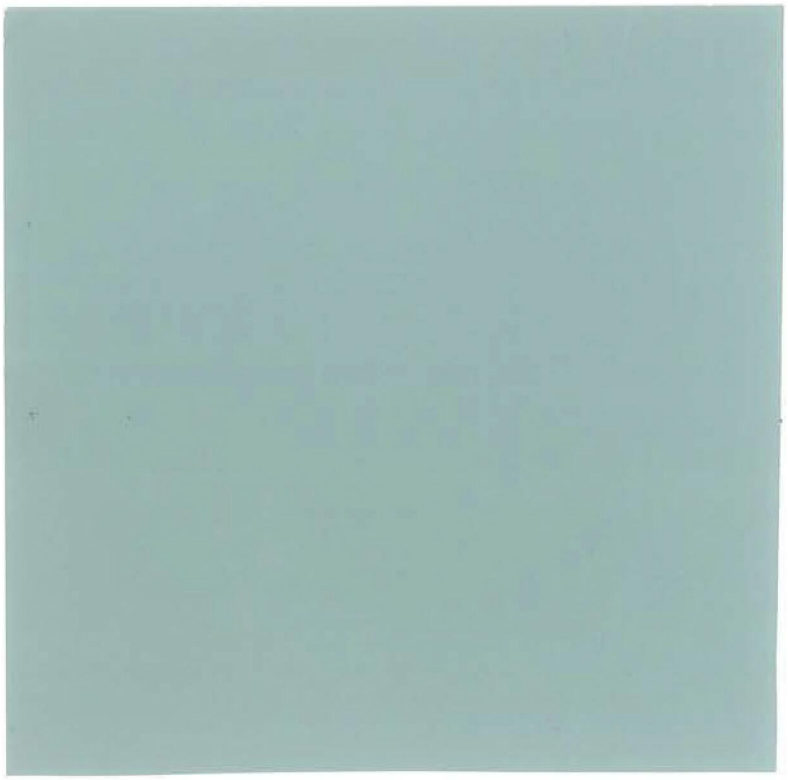
SCHEME#12

3



tCHEME 12)
I Body:Straw 2154-50
J Trim: Brilliant White
3 Shuttera:Louisburg Green HC–113

scheme 13





THE FINISHING TOUCH
04-03-025

Botanica

Body	AC-16
2 lap Siding	AC-41
3 Trim	Brilliant White
4 Shutter	HC-154

scheme 14

.1

3

4



THE FINISHING TOUCH™
04-03-025

Botanica

	Body	HC-29
2	Lap Siding	AC-41
3	Trim	Brilliant White
4	ShuHer	HC-154

scheme 15



3

4



THE FINISHING TOUCH™
04-03-025

Botanica

1 Body	2158-40
2 lap Siding	AC-41
3 Trim	Brillion!White
4 Shutter	HC-154

scheme 16



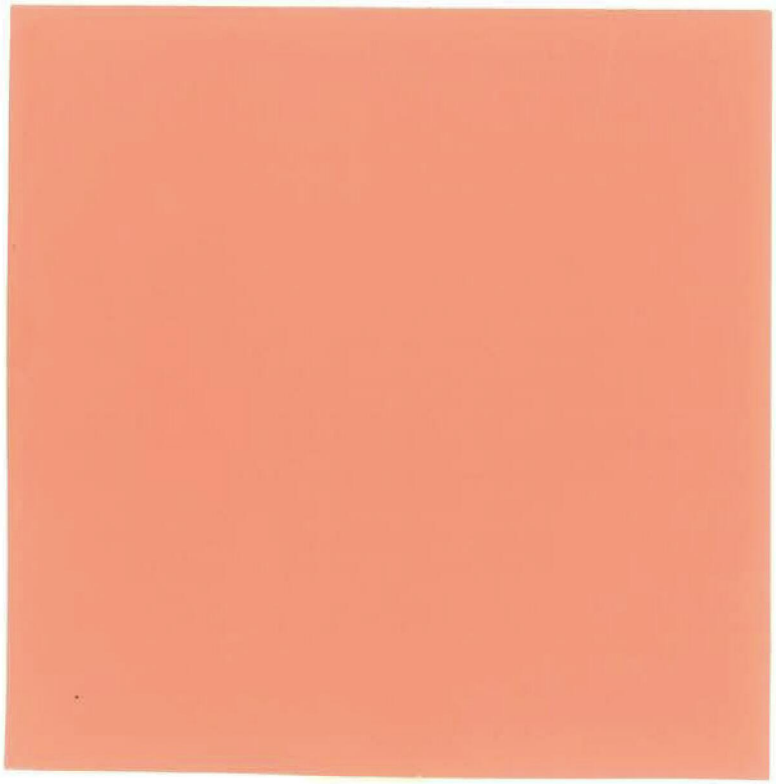
3

THE FINISHING TOUCH
04-03-025

Botanica

1 Body	2146-50
2 Trim	Brilliant White
3 Shutters	HC-154

scheme 17



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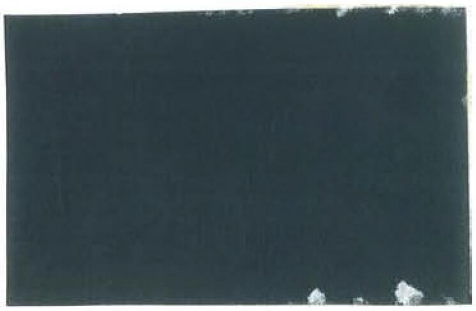


THE FINISHING roue
04-03-025

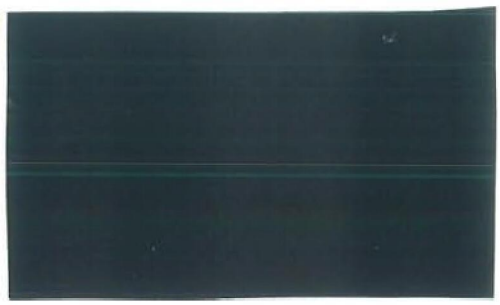
Botonico

1	**Body**	2170-40
2	**Lap Siding**	AC-41
3	**Trim**	Brilliant White
4	**Shutter**	Bbck

SCHEME#18

I

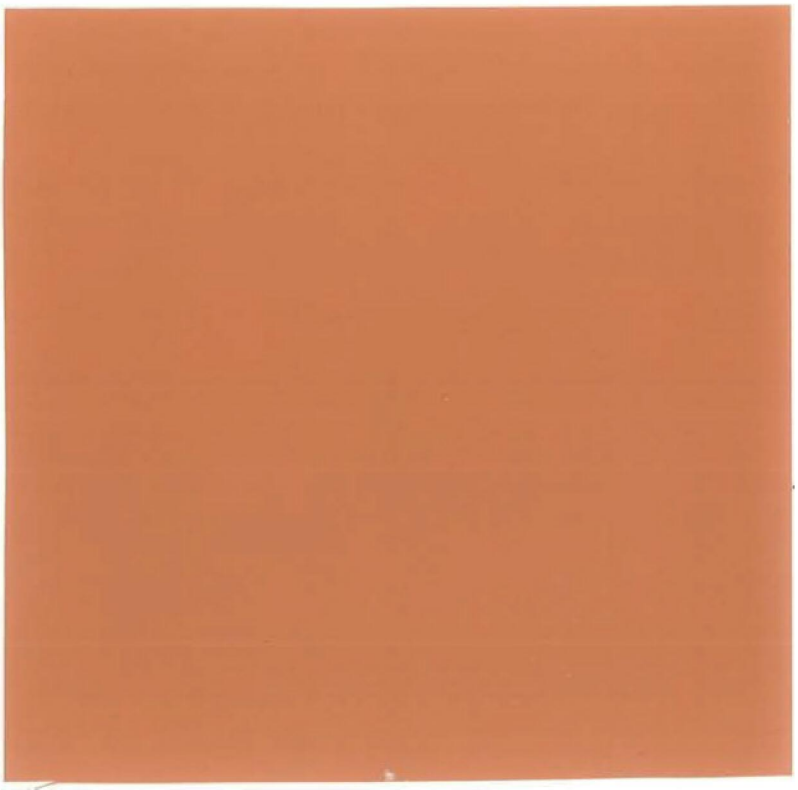
4

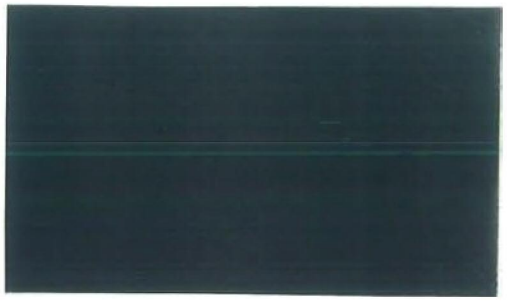


J

SCHEME 18)
I Lap Siding:Acadia White AC-41
J Body:Castleton Mist HC-1
J Trim:Brilliant Whit
1 Shutters:Black

scheme 19





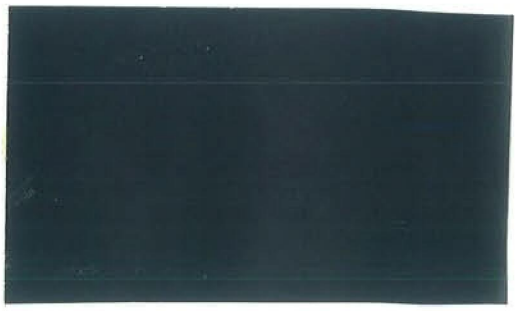
Botanica

1	Body	2167-30
2	Lap Siding	AC-41
3	Trim	Brillion! While
4	Shutter	Block

THE FINISHING TOUCH

scheme 20

3



THE FINISHING TOUCH*
04-03-025

1 Body	2027-60
2 Trim	Brilliant White
3 Shutters	Black

Botanica

scheme 21

3

THE FINISHING TOUCH
04-03-025

Botanica

1 Body	2154-50
2 Lap Siding	AC-41
3 Trim	Brilliant White
4 ShuHer	HC-117

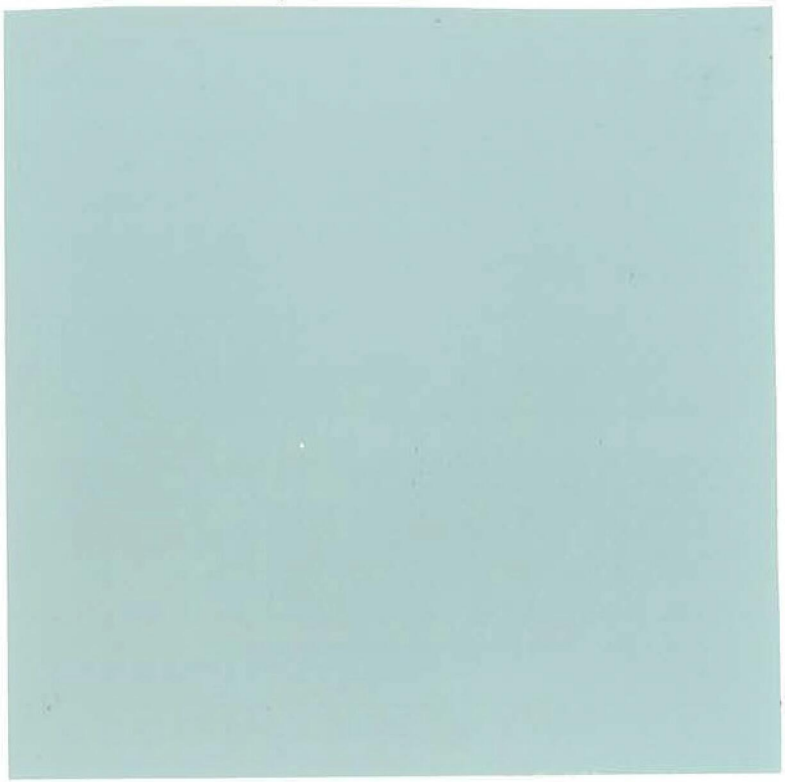
scheme 22

THE FINISHING TOUCH™
04-03-025

Botanica

1	Body	HC-24
2	Lap Siding	AC-41
3	Trim	Brilliant White
4	Shutter	HC-117

scheme 23



THE FINISHING TOUCH
04-03-025

Botanica

1	**Body**	HC-146
2	**Lap Siding**	AC-41
3	**Trim**	Brilliant White
4	**ShuHer**	HC-117

scheme 24

THE FINISHING TOUCH
04-03-025

Botanica

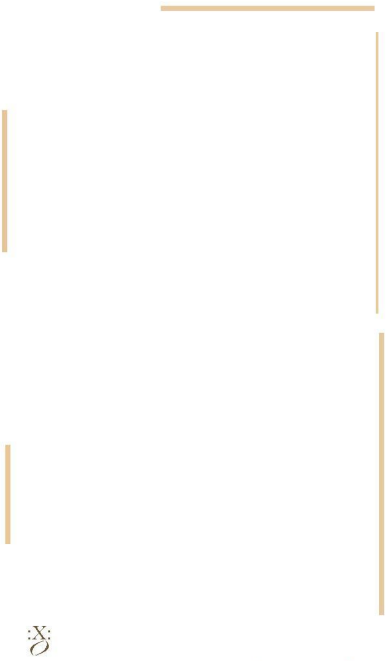
1 **Body**	HC-12
2 **Trim**	Brilliant White
3 **ShuHers**	HC-117

SCHEME#25



SCHEME25)
Lap Siding:Acadia White AC-41
Body:Hawthom Yellow HC-4
Trim:Brilliant White
Shuttera:Van Deusen Blue HC–156

scheme 26



ansonia peach

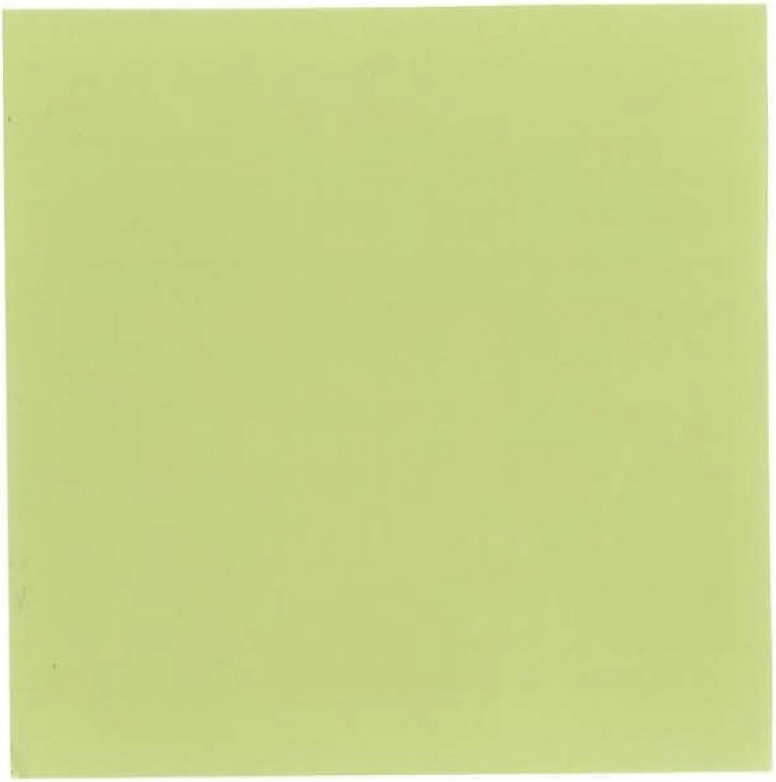


Botanica

1	Body	HC-52
2	Lap Siding	AC-41
3	Trim	Brilliant White
4	ShuHer	HC-156

THE FINISHING TOUCH™
04-03-025

SCHEME#27





- **8CHEME27)**
- **Lllp Siding:** Acadia White AC-41
- **I!lody:**Henderson Buff HC-15
- **Trim:**Brilliant White
- **Shuttera:** Van Deusen Blue HC–156"'

scheme 28

3



jumel peachtone

jumel peachtone

Botanica

1	**Body**	HC-54
2	**Trim**	Brilliant White
3	**ShuHers**	HC-156

THE FINISHING TOUCH™

scheme29

i



Botanica

1 Body	HC-90
2 lap Siding	AC-41
3 Trim	Brilliant White
4 Shutter	Block

THE FINISHING TOUCH
04-03-025

scheme 30

3



Botanica

1	Body	2154-50
2	Trim	Brilliant White
3	Shutters	11c-1S

THE FINISHING TOUCH
04-03-025

2 Driveways

2.1 Intent

Tandem driveways for the single-family homes provide each home with its own parking spaces. The design was inspired by driveways for cottage homes in historic neighborhoods in and around West Palm Beach, as well as some more recent New Urbanist cottage projects around the country. By parking in driveways between each house, the elevations of each home will not be broken up by parked cars.



Figure 1: Driveways between Single-Family Homes in Fayetteville, AR

2.2 Driveway Designs

2.2.1 Ribbon Driveways

The use of ribbon driveways is preferred so as to lessen the amount of asphalt or other hardscape material.

2.2.2 Paver Driveways

The use of pavers is allowed as either a ribbon driveway or a single-slab driveway.



Figure 2: Ribbon Driveway with Pavers

2.3 Driveway Guidelines

2.3.1 Width of Driveway

Each driveway shall have a width of no less than 7 feet and no more than 9 feet measured from the outside edge of one ribbon to the outside edge of the other ribbon.

2.3.2 Depth of Driveway

Each driveway shall have a depth of no less than 36 feet and no more than 38 feet, so as to accommodate two automobiles parked in tandem.

2.3.3 Width of Each Ribbon

The strips in each ribbon driveway shall be no less than 2 feet and no more than 3 feet in width and located so they are spaced 5 feet apart on center.

2.3.4 Between Each Ribbon

The space between each paved ribbon shall be sod, turf, or some other permeable landscape or hardscape material.

2.4 Driveway Materials

2.4.1 Concrete

Concrete may be used in ribbon driveways, but single-slab concrete driveways are prohibited.



Figure 3: Ribbon Driveway with Concrete, Grandview Heights, West Palm Beach, FL

2.4.2 Pavers

Pavers may be used for either ribbon driveways or single-slab driveways.

3 Fencing

3.1 Intent

Fences will be used in the rear and side yards of the single-family homes to separate backyards. Every fence shall comply with the design guidelines of this section.

3.2 Fence Guidelines

3.2.1 Fence Height

Fences shall be no less than 36 inches and no more than 72 inches in height as measured from grade.

3.2.2 Fence Materials

Materials shall be PVC, Composite (Trex or approved equivalent) or Aluminum.

3.2.3 Fence Styles

Styles shall be consistent with the designs illustrated below.

A

B



C



D



E



F

G



H



CALCULATIONS

AIR CONDITIONED AREAS

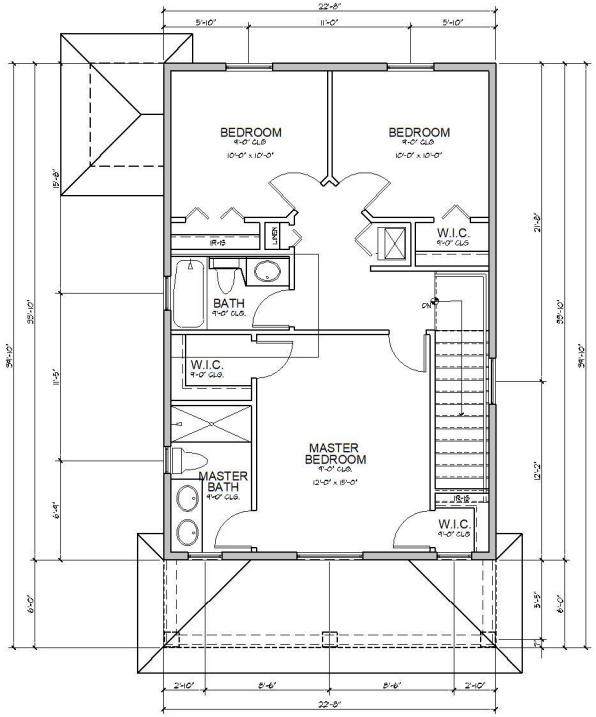
FIRST FLOOR	767 SF
SECOND FLOOR	704 SF
	1471 SF

NON CONDITIONED AREAS

STORAGE	35 SF
COVERED PORCH	136 SF
	171 SF

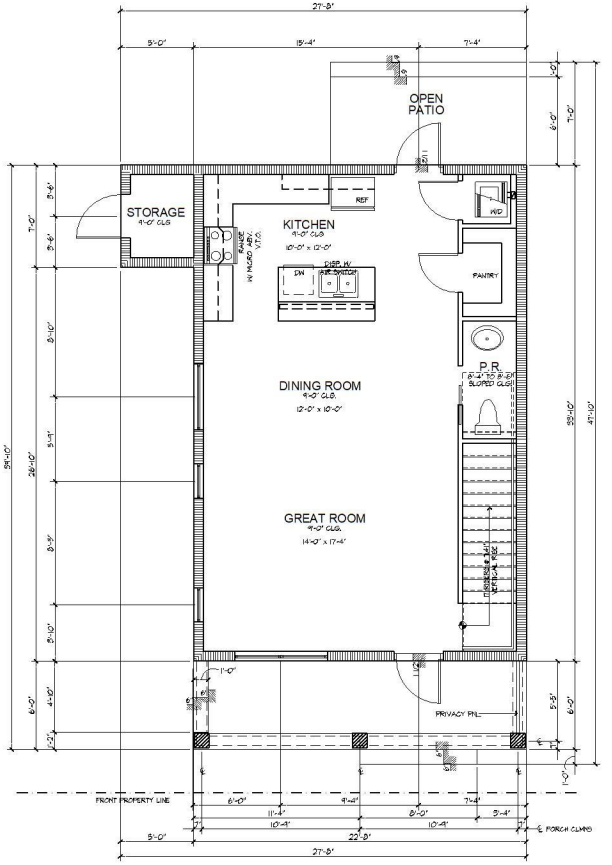
GROSS AREA

GROSS AREA	1642 SF



SECOND FLOOR PLAN

OPTION "A" ROOF SHOWN



FIRST FLOOR PLAN

revisions

no.	date
-	-

designed SBD
drawn LTH
checked SBD
date 01/01/20
scale 1/4" = 1'-0" UNO.
job no. 1904400.dwg

Scott Blakeslee Disher
AR-0011568 AA-0003285

project

MODEL I ELEVATION C

AVONLEA
CITY OF STUART
FLORIDA

by: NEW URBAN COMMUNITIES

ARCHITECTURAL Studio, Inc.

Architecture
Planning

300 Avenue of Champions
Suite 260
Palm Beach Gardens, Florida 33418

Phone 561.202.6990
Fax 561.296.2494
archstudioflcom

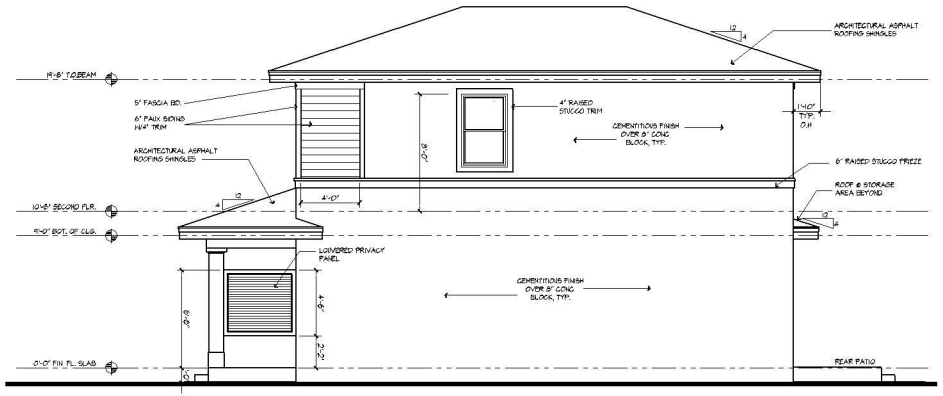
drawing

FLOOR PLANS

sheet

A-1

03/09/2020 CC M



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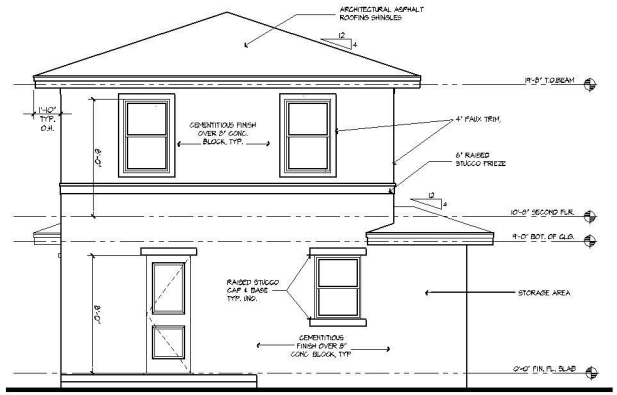
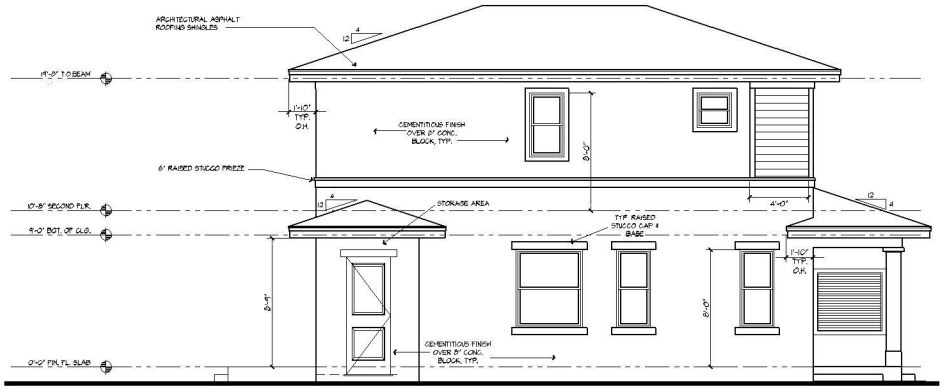


REAR ELEVATION



LEFT ELEVATION



FRONT ELEVATION
(OPTION A)

revisions
no. date
- -

designed SBD
drawn LTH
checked SBD
date 01/01/20
scale 1/4" = 1'-0" UNO.
job no. 1904A0.06

Scott Blakeslee Disher
AR-0011980 AR-0003985

project
MODEL I ELEVATION A
AVONLEA
CITY OF STUART
FLORIDA
by: NEW URBAN COMMUNITIES

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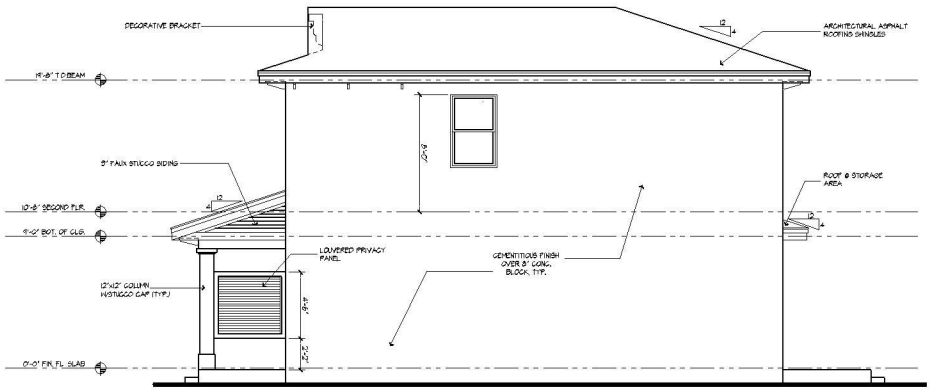
drawing
ELEVATIONS
A

sheet
A-2



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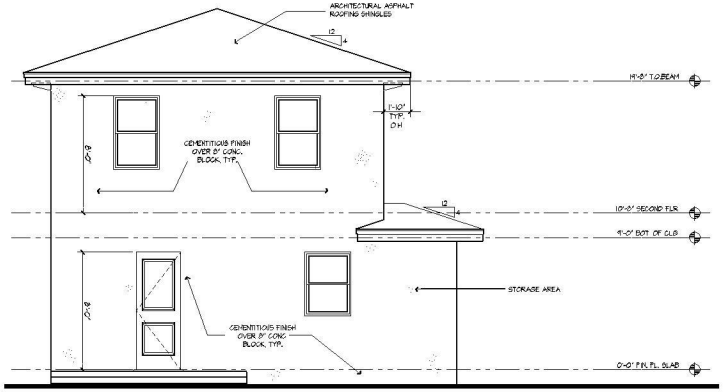

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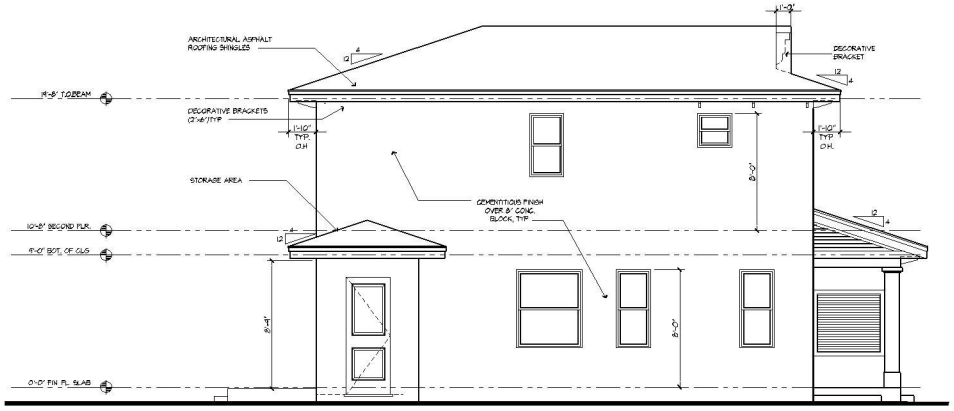

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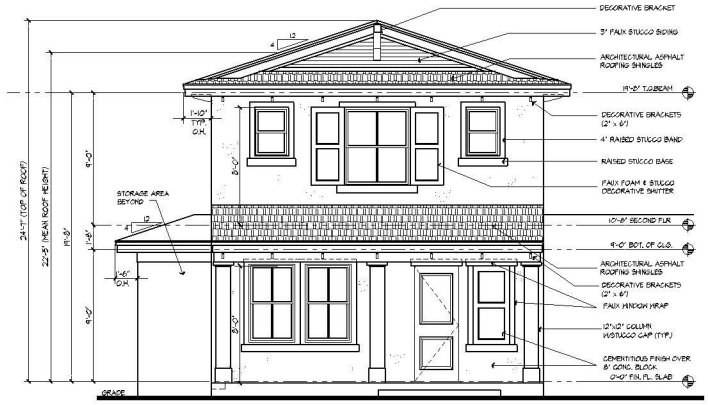

FRONT ELEVATION
(OPTION B)

Scott Blakeslee Disher
AR-0011586 AA-0003283

revisions
no. date
- -

designed SBD
drawn LTH
checked SBD
date 01/01/20
scale 1/4" = 1'-0" U.N.O.
job no. 19044.01.16

project
MODEL I ELEVATION B
AVONLEA
CITY OF STUART
FLORIDA
by: NEW URBAN COMMUNITIES

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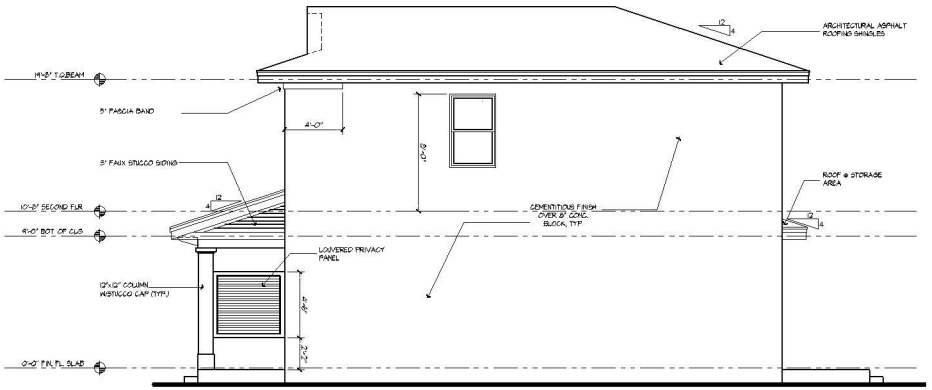
drawing
ELEVATIONS
B

sheet
A-3



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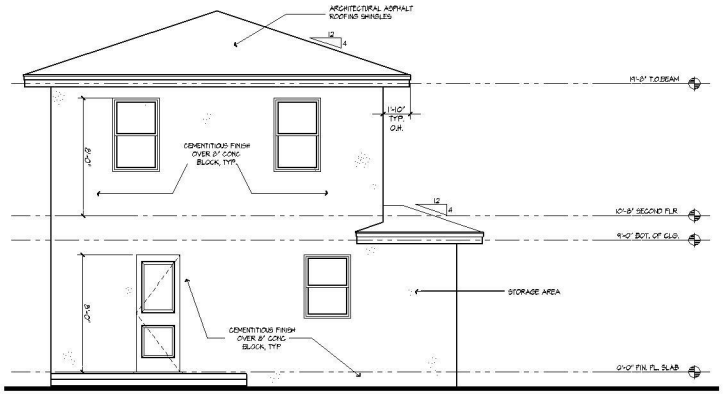

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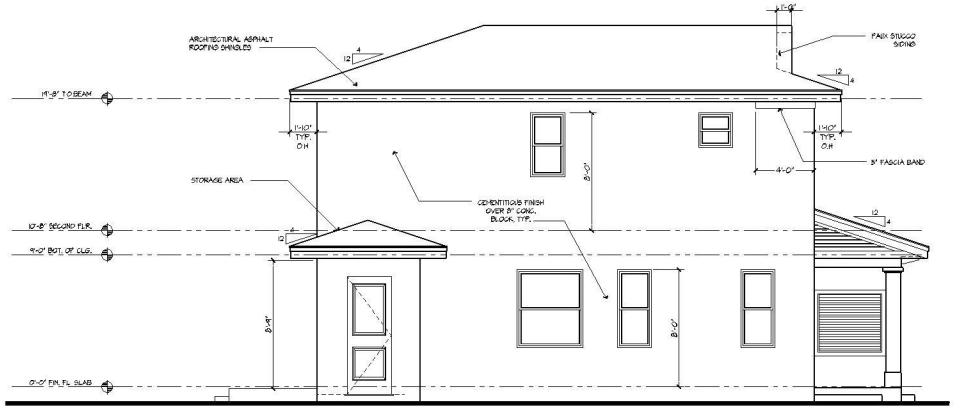

LEFT ELEVATION



FRONT ELEVATION
(OPTION C)

revisions
no. date
- -

designed SBD
drawn LTH
checked SBD
date 01/01/20
scale 1/4" = 1'-0" U.N.O.
job no. 19044.01.16

Scott Blakeslee Disher
AR-0011586 AA-0003283

MODEL I ELEVATION C

project
AVONLEA
CITY OF STUART
FLORIDA
by: NEW URBAN COMMUNITIES

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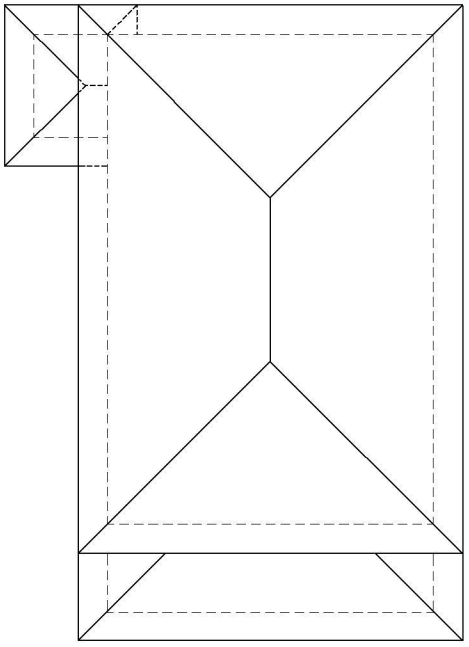
architectdf.com

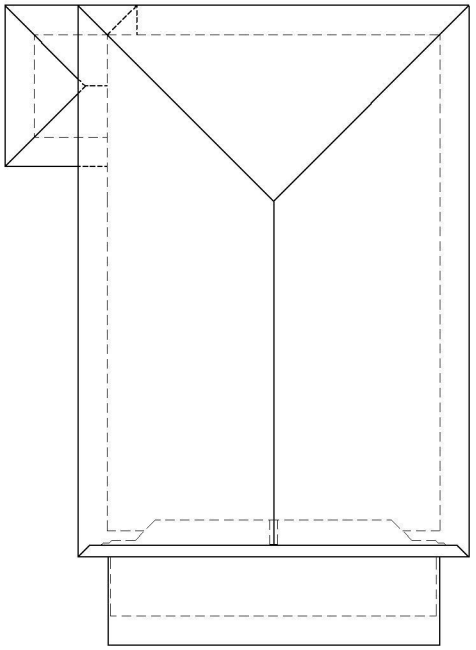
drawing
ELEVATIONS C

sheet
A-4

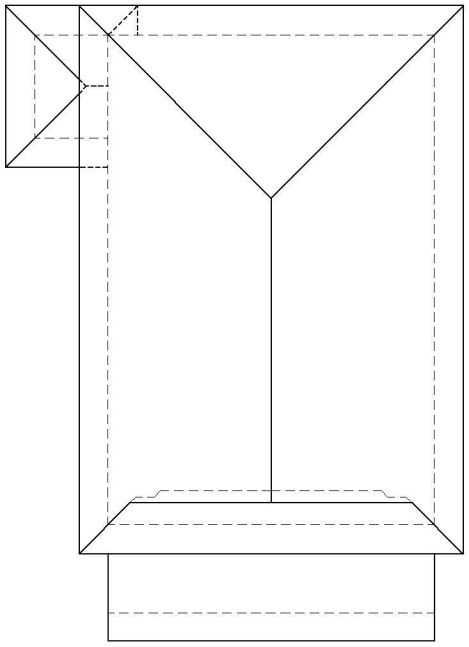
03092020 CC M



ROOF PLAN
A



ROOF PLAN
B



ROOF PLAN
C

revisions
no. date

designed SBD
drawn LTH
checked SBD
date 01/01/20
scale 1/4" = 1'-0" U.N.O.
job no. M044-02.vwx

Scott Blakeslee Disher
AR-0011888 AA-0003285

MODEL I
project

AVONLEA
CITY OF STUART
FLORIDA

by: NEW URBAN COMMUNITIES

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Architecture
•
Planning

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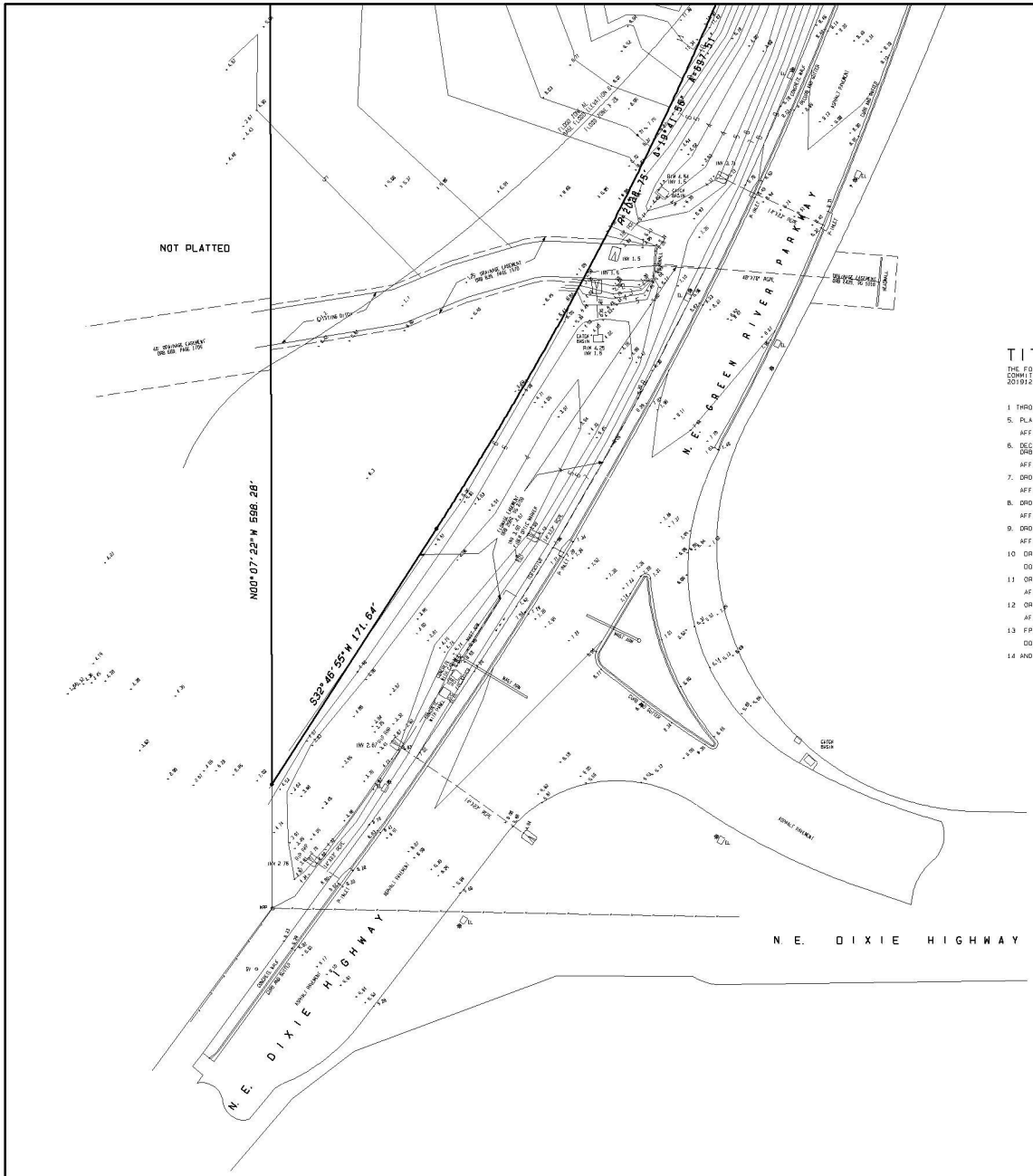
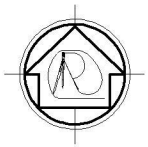
Fax 561.296.2494
architectdesi.com

drawing
ROOF PLANS

sheet
A-5

03/09/2020 CC M





0 30' 60' 120'

GRAPHIC SCALE IN FEET
SCALE 1" = 30'

LEGEND

A - CURVE ARC LENGTH
Δ - CURVE CENTRAL ANGLE
R - CURVE RADIUS
CPP - CONCRETE POWER POLE
FIR - FOUND IRON ROD
FH - FIRE HYDRANT
FO - FIBER OPTIC BOX
TCB - TRAFFIC CONTROL BOX
WPP - WOOD POWER POLE
WV - WATER VALVE
- LIGHT POLE
- MITERED END SECTION
- OVERHEAD UTILITY LINES

TITLE NOTES

THE FOLLOWING NOTES CORRESPOND TO THE SCHEDULE B-II EXCEPTIONS CONTAINED IN THAT COMMITMENT FOR TITLE INSURANCE ISSUED BY STEWART TITLE GUARANTY COMPANY, FILE NO 20191220, EFFECTIVE MAY 7, 2019.

1 THROUGH 4 - NOT ADDRESSED

5. PLAT - PLAT BOOK 17, PAGE 35.
AFFECTS - PLOTTABLE MATTERS ARE SHOWN HEREON

6. DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS AND OTHER MATTERS ORB 1975, PAGE 1348; ORB 2893, PAGE 2898.
AFFECTS

7. ORDINANCE NO. 1498-97 - ORB 1277, PAGE 1686.
AFFECTS

8. ORDINANCE NO. 2026-05 - ORB 2029, PAGE 764
AFFECTS

9. ORDINANCE NO. 2094-07 - ORB 2241, PAGE 547
AFFECTS

10. DRINAGE EASEMENT(S) - ORB 2425, PAGE 1018 AND ORB 2426, PAGE 1028
DO NOT AFFECT - PLOTTED HEREON

11. ORDINANCE NO. 2307-2015 - ORB 2809, PAGE 2750.
AFFECTS

12. ORDINANCE NO. 2366-2018 - ORB 3016, PAGE 2510.
AFFECTS

13. FPL EASEMENT - ORB 898, PAGE 833
DOES NOT AFFECT.

14 AND 15 NOT ADDRESSED

DESCRIPTION

LOT 16, NEW AVONLEA P.U.D., ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 17, PAGE 35, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

LYING IN THE CITY OF STUART, MARTIN COUNTY, FLORIDA
CONTAINING 180,322 SQUARE FEET, 4.1398 ACRES, MORE OR LESS

NOTES

1. REPRODUCTIONS OF THIS MAP ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER
2. THIS MAP WAS PREPARED WITH THE BENEFIT OF THAT COMMITMENT FOR TITLE INSURANCE ISSUED BY STEWART TITLE GUARANTY COMPANY, FILE NO 20191220, EFFECTIVE MAY 7, 2019.
3. ELEVATIONS SHOWN HEREON ARE IN FEET, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD 88, AND ARE RELATIVE TO MARTIN COUNTY BENCHMARK GPR-8 WHOSE PUBLISHED ELEVATION IS 11.88, NAVD 88
4. PARCEL IS LOCATED IN FLOOD ZONE X (PROTECTED BY LEVEE) AND FLOOD ZONE AE, BASE FLOOD ELEVATION 8 FEET, ACCORDING TO FLOOD MAP 12085C0132 G, EFFECTIVE MARCH 16, 2015
5. PARCEL ID NUMBER:
28-37-41-013-000-00160-0

CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND CONFORMS TO THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17.050-.052, FLORIDA ADMINISTRATIVE CODE. THERE ARE NO VISIBLE ABOVE GROUND ENCROACHMENTS OTHER THAN THOSE SHOWN HEREON, SUBJECT TO THE QUALIFICATIONS NOTED HEREON.

Richard H. Smith
Digitally signed by Richard H. Smith
DN: cn=Richard H. Smith, o=RHSMI 5239, email=rsmithsurvey@bellsouth.net, c=US
Date: 2019.10.17 13:56:29-04'00'

FOR THE FIRM, BY

RICHARD H. SMITH
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA LICENSE NUMBER 5239

08/01/19	RHS	5800	BOUNDARY SURVEY

REVISIONS

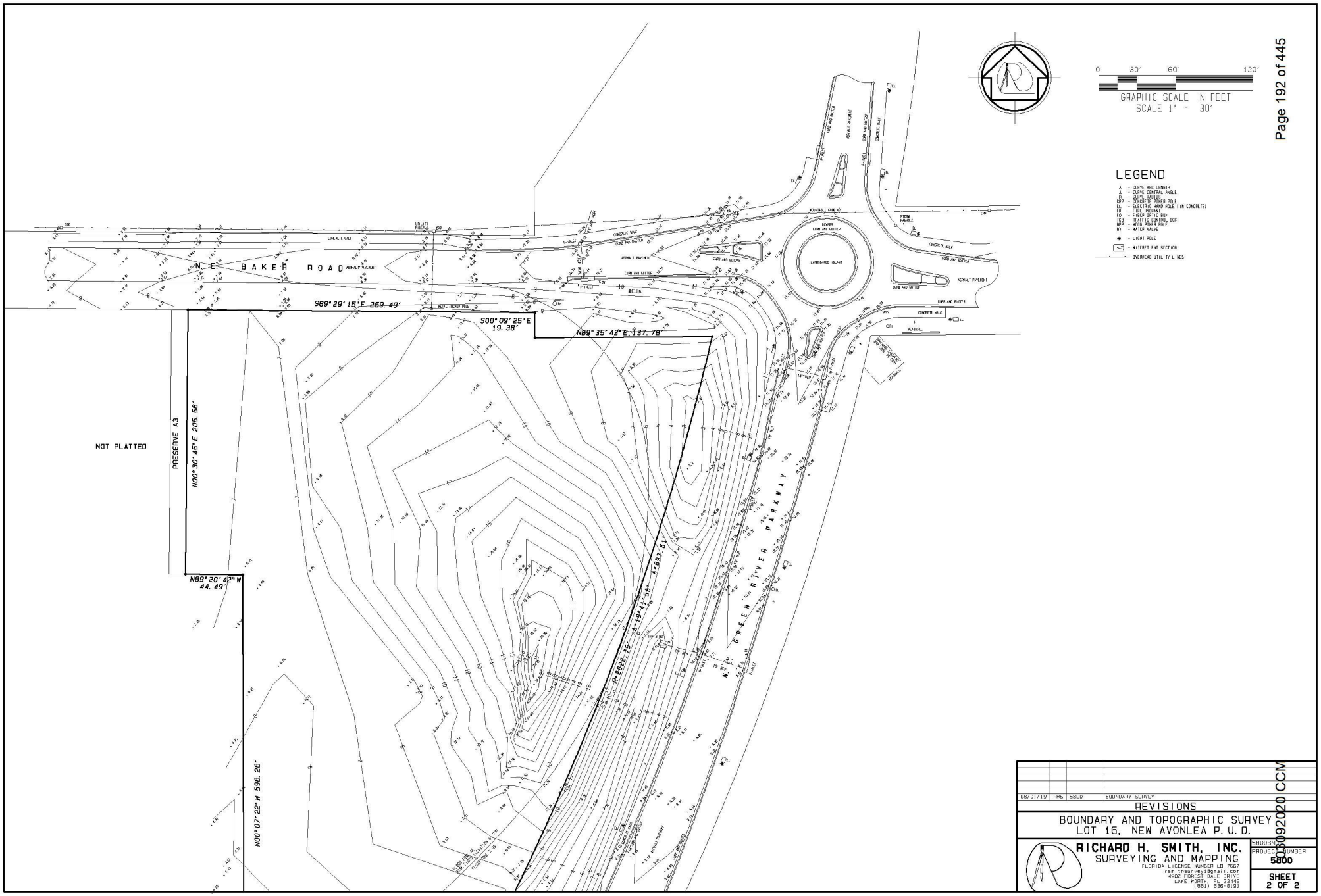
BOUNDARY AND TOPOGRAPHIC SURVEY
LOT 16, NEW AVONLEA P.U.D.

RICHARD H. SMITH, INC.
SURVEYING AND MAPPING
FLORIDA LICENSE NUMBER LB 7867
rsmithsurvey1@gmail.com
4902 FOREST DALE DRIVE
LAKE WORTH, FL 33449
(561) 536-8191

5800BN
PROJECT NUMBER
5800

SHEET
1 OF 2

20200092020 CCM



08/01/19	RHS	5800	BOUNDARY SURVEY

REVISIONS

BOUNDARY AND TOPOGRAPHIC SURVEY
LOT 16, NEW AVONLEA P. U. D.

RICHARD H. SMITH, INC.
SURVEYING AND MAPPING
FLORIDA LICENSE NUMBER LB 7667
rsmithsurvey1@gmail.com
4902 FOREST DALE DRIVE
LAKE WORTH, FL 33449
(561) 536-8191

5800BN
PROJECT NUMBER
5800

SHEET
2 OF 2

20200092020 CCM


N. E. BAKER ROAD
ASPHALT PAVEMENT
CURB AND GUTTER
S89°29'15"E 269.49'
METAL ANCHOR POLE
S00°09'25"E
19.38'
N89°35'43"E 137.78'
PRESERVE A3
N00°30'45"E 205.56'
N89°20'42"W
44.49'
N00°07'22"W 598.28'
LOT 1
F.F.EL. 9.50
LOT 2
F.F.EL. 9.25
LOT 3
F.F.EL. 9.00
LOT 4
F.F.EL. 8.75
LOT 5
F.F.EL. 8.50
LOT 6
F.F.EL. 8.00
LOT 7
F.F.EL. 8.25
LOT 8
F.F.EL. 8.50
LOT 9
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LOT 13
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LOT 15
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LOT 16
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LOT 17
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LOT 18
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LOT 19
F.F.EL. 8.00
LOT 20
F.F.EL. 8.00
LOT 21
F.F.EL. 8.00
BUILDING 5
F.F.EL. 11.60
BUILDING 6
F.F.EL. 11.00
BUILDING 7
10.60
BUILDING 9
9.70
INV 3.80
18" RCP
INV 3.71
RIM 4.54
INV 1.5
CATCH BASIN
14'X62' RCPE
48"X76" RCPE
DRAINAGE EASEMENT
ORB 2425, PG 1010
CONCRETE WALK
CURB AND GUTTER
ASPHALT PAVEMENT
HEADWALL
INV 1.5
CATCH BASIN
RIM 4.25
INV 1.5
OT PLATTED
ADINAGE EASEMENT
668, PAGE 1705

AVONLEA PUD
LOT 16
CITY OF STUART FLORIDA

PREPARED FOR:
NEW URBAN COMMUNITIES

PRELIMINARY ENGINEERING PLAN

PETER WAYNE AQUART, P.E.
CONSULTING CIVIL ENGINEER
14032 SW 48TH STREET, MIAMI, FL 33175
TEL.: (561) 379-2879 E-MAIL:PAQUART@AOL.COM
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 34176

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NO.	DESCRIPTION:	BY:	DATE:
1	PER REVIEW COMMENTS	PWA	1.15.2020

DATE DRAWN:	190CT19
SCALE:	1"=30'
DESIGN BY:	PWA
DRAWN BY:	PWA
CHECKED BY:	PWA
APPROVED BY:	PWA

PE-2
SHEET 2 OF 3

PROJECT NO.
105

PRELIMINARY NOT RELEASED FOR CONSTRUCTION
ORIGINAL SIGNATURE AND SEAL OF PETER WAYNE AQUART, P.E. AFFIXED HEREON
Peter Wayne Aquart
Florida P.E. No. 34176



DATE DRAWN:	180ct19
SCALE:	1"=30'
DESIGN BY:	PWA
DRAWN BY:	PWA
CHECKED BY:	PWA
APPROVED BY:	PWA

NO.	DESCRIPTION:	BY:	DATE:
1	PER REVIEW COMMENTS	PWA	1.15.2020

PETER WAYNE AQUART, P.E.
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14032 SW 48TH STREET, MIAMI, FL 33175
TEL.: (561) 379-2879 E-MAIL:PAQUART@AOL.COM
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 34176

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AVONLEA PUD
LOT 16
CITY OF STUART FLORIDA

PREPARED FOR:
NEW URBAN COMMUNITIES

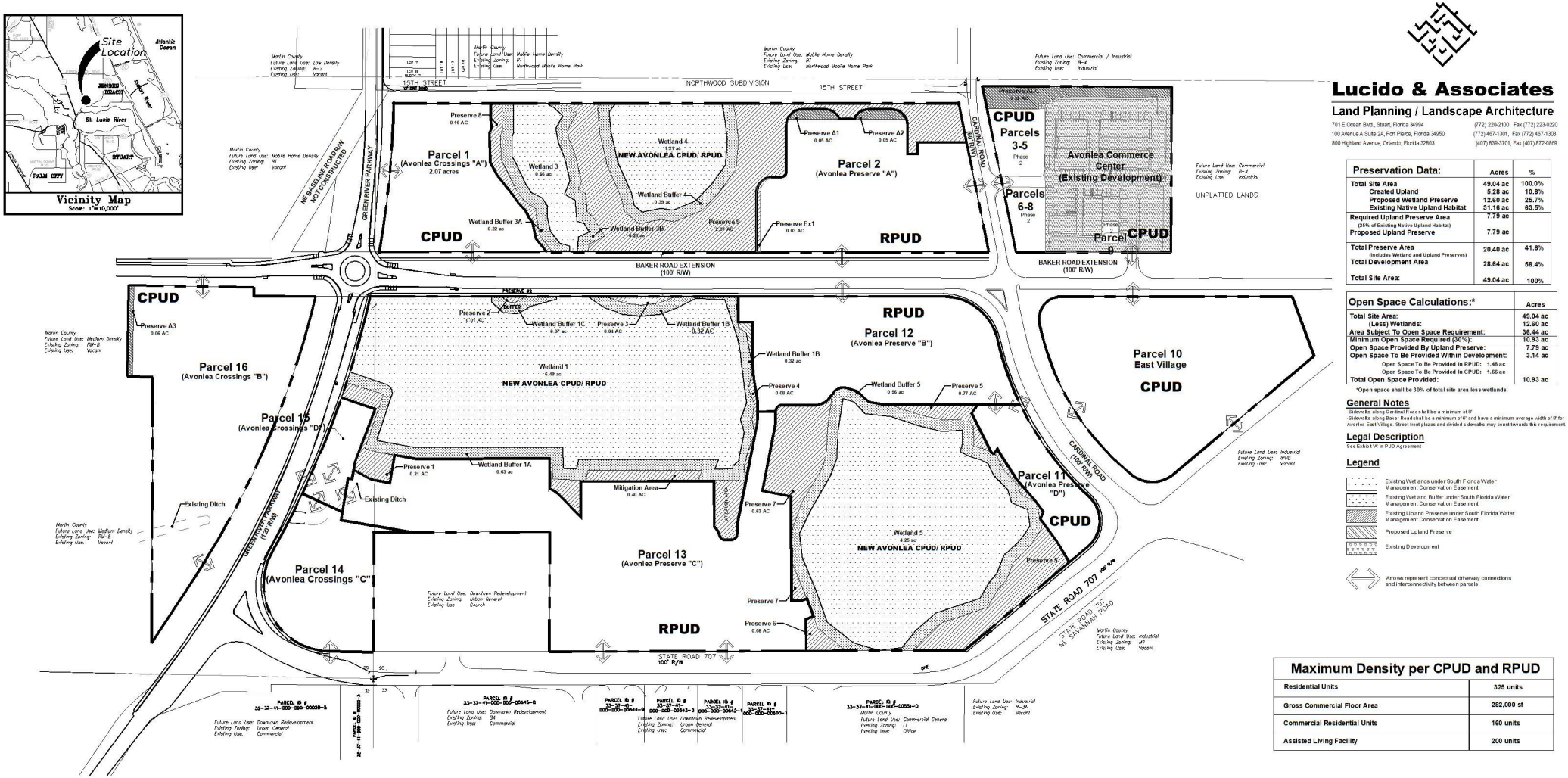
PRELIMINARY ENGINEERING PLAN

NOT VALID UNLESS IT BEARS AN ORIGINAL SIGNATURE AND A RAISED, EMBOSSED ENGINEER SEAL

January 16, 2020
Peter Wayne Aquart
Florida P.E. No. 34176

PROJECT NO.
105

PE-1
SHEET 1 OF 3



Lucido & Associates

Land Planning / Landscape Architecture

701 E Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220
100 Avenue A Suite 2A, Fort Pierce, Florida 34950 (772) 467-1301, Fax (772) 467-1303
800 Highland Avenue, Orlando, Florida 32803 (407) 839-3701, Fax (407) 872-0869

Preservation Data:	Acres	%
Total Site Area	49.04 ac	100.0%
Created Upland	5.28 ac	10.8%
Proposed Wetland Preserve	12.60 ac	25.7%
Existing Native Upland Habitat	31.16 ac	63.5%
Required Upland Preserve Area (25% of Existing Native Upland Habitat)	7.79 ac	
Proposed Upland Preserve	7.79 ac	
Total Preserve Area (Includes Wetland and Upland Preserves)	20.40 ac	41.6%
Total Development Area	28.64 ac	58.4%
Total Site Area:	49.04 ac	100%

Open Space Calculations:*	Acres
Total Site Area:	49.04 ac
(Less) Wetlands:	12.60 ac
Area Subject To Open Space Requirement:	36.44 ac
Minimum Open Space Required (30%):	10.93 ac
Open Space Provided By Upland Preserve:	7.79 ac
Open Space To Be Provided Within Development:	3.14 ac
Open Space To Be Provided In RPUD: 1.48 ac	
Open Space To Be Provided In CPUD: 1.66 ac	
Total Open Space Provided:	10.93 ac

*Open space shall be 30% of total site area less wetlands.

General Notes

-Sidewalks along Cardinal Road shall be a minimum of 8'.
-Sidewalks along Baker Road shall be a minimum of 6' and have a minimum average width of 8' for Avonlea East Village. Street front plazas and divided sidewalks may count towards this requirement.

Legal Description

See Exhibit "A" in PUD Agreement

Legend

- Existing Wetlands under South Florida Water Management Conservation Easement
- Existing Wetland Buffer under South Florida Water Management Conservation Easement
- Existing Upland Preserve under South Florida Water Management Conservation Easement
- Proposed Upland Preserve
- Existing Development
- Arrows represent conceptual driveway connections and interconnectivity between parcels.

Maximum Density per CPUD and RPUD

Residential Units	325 units
Gross Commercial Floor Area	282,000 sf
Commercial Residential Units	160 units
Assisted Living Facility	200 units

RPUD	Parcel	Site Area	Maximum Building Coverage	Developable Area	Max. Impervious	Maximum Density	Maximum Units	Maximum ALF Units	Permitted Uses:
Avonlea Preserve A	2	3.11 ac	30%	2.98 ac	75%	9.65 upa	30 units	200 Units Combined w/ CPUD	Multifamily, Attached, Single Family,ALF
Avonlea Preserve B	12	3.07 ac	30%	3.07 ac	75%	10.42 upa	32 units		
Avonlea Preserve C	13	6.35 ac	30%	6.35 ac	75%	19.37 upa	123 units		
Total		12.53 ac		12.40 ac		15.00 upa	185 units		
		Total: 12.53 ac							

Notes:
(1) The development mix in the CPUD and RPUD meet the minimum 10% commercial and 30% residential of the Neighborhood Special District land use.
(2) Maximum building coverage within the RPUD shall not exceed 30% of the total site area of the RPUD including a pro-rata share of the preserve area (43.3%)

CPUD	Parcel	Site Area	Developable Area	Maximum Gross Commercial Floor Area (2)	Max. Residential Units/ Live Work Units	Maximum Commercial Residential	Maximum ALF Units
Avonlea Commerce Phase 1	N/A	2.20 ac	2.20 ac	23,700 sf (Completed)	5 units (Completed)	Not Applicable	200 Units Combined w/ RPUD
Avonlea Commerce Phase 2	3-9	0.79 ac	0.79 ac	33,300 sf	5 units	Not Applicable	
East Village	10	4.07 ac	4.07 ac	100,000 sf	50 units	80 units	
Avonlea Crossings A	1	2.07 ac	2.07 ac	20,000 sf	Not Applicable		
Avonlea Crossings B	16	4.22 ac	4.16 ac	65,000 sf	75 units	80 units	
Avonlea Crossings C	14	1.60 ac	1.60 ac	20,000 sf	Not Applicable		
Avonlea Crossings D	15	0.45 ac	0.45 ac	5,000 sf	5 units	Not Applicable	
Avonlea Preserve D	11	0.90 ac	0.90 ac	15,000 sf	Not Applicable		
Total		16.30 ac	16.24 ac	282,000 sf	140 units	160 units	

(1) The development mix in the CPUD and RPUD meet the minimum 10% commercial and 30% residential of the Neighborhood Special District land use.
(2) Allowable commercial uses listed in Avonlea PUD Agreement

NORTH

SCALE
0 50' 100' 200'

New Avonlea PUD

Master Parcel Plan

City of Stuart, Martin County, Florida

Scale	1"= 100'	Revisions
Drawn by		
Checked By		
Computer File	13-571 Master Site Plan Final Re	Sheet
Computer Station	Server	1 of 1
Project Number	13-571	
Date	4-06-2015	

Residential PUD

Project:	Avonlea Parcel 16 RPUD
Date	2.10.20

Adjacent N	County Preserve
Adjacent S	Haney Creek Natrual Preserve
Adjacent E	Avonlea PUD
Adjacent W	Haney Creek Natural Preserve
Total Floor Space (sq.ft)	**None**

LDR Reference	Land Development Regulations	RPUD REVIEW STATUS
2.07.00 D.1	Land Use Designation	COMPLY
2.07.00 D.2 a	Uses	COMPLY
2.07.00 D.2 b	Compatible Residential Uses	COMPLY
2.07.00 D.2 c	Commercial (<30%)	NOT APPLICABLE
2.07.00.D.2.d	Commercial Uses (<30%) vertical	NOT APPLICABLE
2.07.00.D.3	Density	COMPLY
2.07.03 D.4.b	Open Space (>30%)	COMPLY
2.07.03 D.4.c	FAR	COMPLY
2.07.03.D.4.d	Native Vegetaion (>25%)	COMPLY

AREA, IMPERVIOUS SURFACE, SETBACK AND HEIGHT

2.04.03	Supplemental impervious surface	COMPLY
2.04.04	Supplemental setback requirements	COMPLY
2.04.05	Waterfront setbacks	NOT APPLICABLE
2.04.06	Certain street setbacks	NOT APPLICABLE
2.04.07	Supplemental building height	COMPLY
2.06.00	Supplemental Use standards	NOT APPLICABLE

4.04.01	Traffic Concurrency	COMPLY
4.09.00	School Concurrency	TO BE REVIEWED

RESOURCE PROTECTION

5.02.00	Environmental Assessment	COMPLY
5.03.02	Wetland Protection	COMPLY
5.04.00	Evironmentally sensitive lands	COMPLY
5.04.03	Monitoring & Maintenance	REVIEWED AT SITE PLAN
5.05.01	Tree Survey	COMPLY
5.05.02	Tree removal	COMPLY

5.06.00	Mangrove & Shoreline	NOT APPLICABLE
5.07.00	Floodplain Management	COMPLY
Comp Plan	Comprehensive Plan	COMPLY

TRANSPORTATION

6.01.04	Sidewalks/bikeways	COMPLY
6.01.05	Bike Ped (LCD)	COMPLY
6.01.06	Access	COMPLY
6.01.07	Drive-through	NOT APPLICABLE
6.01.08	Vehicular Access	COMPLY
6.01.09	Parking Code	COMPLY
6.01.18	Off-Street Loading	NOT APPLICABLE
6.01.19	PILOP	NOT APPLICABLE

STORMWATER

6.03.01	Generally	TO BE REVIEWED
6.03.04	Management	TO BE REVIEWED
6.03.08	Erosion	TO BE REVIEWED

LANDSCAPING

6.04.02	General Standards	COMPLY
6.04.02 A.1	Native Landscaping	COMPLY
6.06.02 A.2	Shade Trees Required	COMPLY
6.06.02 A.4	Banyan, Fiscus & Rubber Trees	NOT APPLICABLE
6.06.02 A.5	Proximity to power lines	COMPLY
6.06.02 A.6	Shrubs	COMPLY
6.06.02 A.7	Hedges	COMPLY
6.06.02 A.8	Vines	NOT APPLICABLE
6.06.02 A.9	Ground cover	COMPLY
6.06.02 A.10	Grass Area	COMPLY
6.06.02 B	Irrigation	REVIEWED AT SITE PLAN

LANDSCAPE DESIGN

6.04.03 A	Utility Lines (Existing and Proposed)	COMPLY
6.04.03 B.1	Landscaped Area >20%	COMPLY
6.04.03 B.2	Interior landscaping >50%	COMPLY
6.04.03 B.3	location of impervious	COMPLY
6.04.03 B.4	Mulch	COMPLY
6.04.03 B.5	Shoreline protection	NOT APPLICABLE
6.04.03 B.8	Visibility triangles	COMPLY

6.04.06	Land Use Transitions	COMPLY

LANDSCAPING - PARKING AREAS

6.04.07 A.1	Landscaped strip adjacent to street	COMPLY
6.04.07 A.2	Landscaped strip length linear feet	COMPLY
6.04.07 A.2a	Parking area adjacent to street	COMPLY
6.04.07 A.2b	Hedge/wall/berm on outside of strip	COMPLY
6.04.07 A.2c	Other Landscaping	COMPLY
6.06.07 A.2d	Grass	COMPLY
6.04.07 A.3	Shrubs/ground cover	COMPLY
6.04.07 B	parking screened from private propery	NOT APPLICABLE
6.04.07 B.1	Landscaped strip adjacent to private property	NOT APPLICABLE
6.04.07 B.2a	Parking area adjacent to private property	NOT APPLICABLE
6.04.07 B.2b	Hedge/wall/berm on outside of strip	NOT APPLICABLE
6.04.07 B.2c	Other Landscaping	NOT APPLICABLE
6.04.07 B.2d	Grass	NOT APPLICABLE
6.04.07 B.3	Shrubs/ground cover	NOT APPLICABLE
6.04.07 C.1	Parking Area (Major Dev't only)	COMPLY
6.04.07 C.2	Parking area rear and sides of building	COMPLY
6.04.07 C.3	Interior trees	COMPLY
6.04.07 C.4	Vechicle encroachment	COMPLY
6.04.07 C.5	Interior landscaped islands	COMPLY
6.04.07 C.6	Terminal landscaped islands	COMPLY
6.04.07 C.7	Interior landscaped medians	COMPLY
6.04.07 C.8	Interior shade trees	COMPLY
6.04.07 D	Visability triangles	COMPLY
6.04.08	Tree Requirements	COMPLY
6.04.10	Loading Storage	NOT APPLICABLE

COMMERCIAL DEVELOPMENT STANDARDS

6.05.02 B	Building Location	NOT APPLICABLE
6.05.02 C	Building Orientation	NOT APPLICABLE
6.05.02 D	Façade Design	NOT APPLICABLE
6.05.02 E	Massing	NOT APPLICABLE
6.05.02 F	Other Features	NOT APPLICABLE
6.05.02 G	Transitional Elevations	NOT APPLICABLE
6.05.03 B	Blank Wall Area	NOT APPLICABLE
6.05.03 C	Repeating Façade	NOT APPLICABLE
6.05.04	Additional Façade	NOT APPLICABLE

6.05.05	Roof Treatments	NOT APPLICABLE
6.05.06	Entryways and customer entrance	NOT APPLICABLE
6.05.07	Materials and Color	NOT APPLICABLE
6.06.00	Green Development	NOT APPLICABLE
6.07.00	Lighting	NOT APPLICABLE
6.08.00	Dumpster & Recycling	NOT APPLICABLE
6.09.05	Fences	NOT APPLICABLE
6.11.00	Signs	TO BE REVIEWED

Trees

	Shade or Canopy
	Palm
	Flowering
	Accent

Tree Species	Name	number	interior
(Ptychosperma elegans)	Alexander Palm*		
(Ilex opaca)	American Holly		
(Cordia boissieri)	Anacahuita, White Corda*		
(Phoenix canariensis)	Canary Island Date Palm*		
(Prunus caroliniana)	Cherry Laurel		
(Livistonia chinensis)	Chinese Fan Palm*		
(Ilex cassine)	Dahoon Holly		
(Ilex attenuata 'EastPalatka')	East Palatka Holly		
(Plumeria acuminata)	Frangipani Plumeria*		
(Cordia sebestena)	Geiger Tree		
(Cassia surattensis)	Glaucous Cassia*		
(Duranta repens)	Golden Dewdrop		
(Koelreuteria formosana)	Golden Rain Tree*		
(Bauhinia blakeana)	Hong Kong Orchid*		
(Capparis cynophallophora)	Jamaica Caper		
(Parkinsonia aculeata)	Jerusalem Thorn*		
(Quercus laurifolia)	Laurel Oak		
(Callistemon lanceolata)	Lemon Bottlebrush*		
(Quercus virginiana)	Live Oak		
(Gordonia lasianthus)	Loblolly Bay		
(Ptychosperma macarthuri)	MacArthur Palm*		
(Swietenia mahagoni)	Mahogany		
(Washingtonia robusta)	Mexican Washington Palm*		
(Myrsine guianensis)	Myrsine		
(Simaruba glauca)	Paradise Tree		
(Acoelorrhaphe wrightii)	Paurotis Palm		
(Tabebuia heterophylla)	Pink Tab or Trumpet Tree*		
(Tibouchina grandiflora)	Princess Flower Tree*		
(Tibouchina grandiflora)	Princess Flower Tree1*		
(Arecastrum romanzoffianum)	Queen Palm*		
(Lagerstromia speciosa)	Queens Crepe Myrtle*		
(Persea borbonia)	Red Bay		
(Acer rubrum)	Red Maple		
(Cocothrinax argentata)	Silver Palm		

(Tabebuia caraiba)	Silver Trumpet*		
(Pinus elliottii)	Slash Pine		
(Magnolia grandiflora)	Southern Magnolia		
(Magnolia virginiana)	Sweet Bay		
(Liquidambar styraciflua)	Sweet Gum		
(Plantanus occidentalis)	Sycamore		
(Myrica cerifera)	Wax Myrtle		
(Callistemon viminallis)	Weeping Bottlebrush*		
(Tecoma stans)	Yellow Elder		
Other			
	TOTALS	**0**	**0**

Shrubs/ground cover

	Shrub
	Ground Cover
	Vine

Shrub/Ground cover Species	Name	number	native
(Antigonon Leptopus)	Coral Honeysuckle		0
(Blechnum serrulatum)	Swamp Fern		0
(Catharanthus roseus)	Periwinkle		0
(Chrysobalanus icaco)	Cocoplum		0
(Conocarpus erectus sericeus)	Silver Buttonwood		0
(Conocarpus erectus)	Buttonwood		0
(Crinum americanum)	Swamp Lilly		0
(Forestiera segregata)	Florida Privet		0
(Glesminum Sempervirens)	Carolina Jessamine		0
(Hamelia patens)	Firebush		0
(Helianthus debilis)	Beach Sunflower		0
(Hymenocallis latifolia)	Spider Lily		0
(Ilex glabra)	Gallberry		0
(Lantana spp.)	Lantana species		0
(Lonicera)	Trumpet Honeysuckle		0
(Myrcianthes fragrans)	Simpson's Stopper		0
(Myrica cerifera)	Wax Myrtle		0
(Myrsine guianensis)	Myrsine		0
(Nephrolepis cordifolia)	Erect Swordfern		0
(Prunus caroliniana)	Cherry Laurel		0
(Spartina bakerii)	Cordgrass		0
(Sysirinchium)	Blue Eyed Grass		0
(Urechites lutea)	Wild Allamanda		0
(Vaccinium myrsinites)	Shiny Blueberry		0

(Viburnum obovatum)	Walter's Virburnum		0
(Zamia floridana)	Coontie		0
Other			0
	TOTALS	0	0

	tree	shrub	shade tree	palms	tree+shrub	Interior Shade
native	0	0	0	0	0	
other	0	0	0	0	0	
Total	0	0	0	0	0	0
interior	0		0			
Perimeter	0		0			

	%
Native	#DIV/0!
Shade	#DIV/0!
Int Shade	#DIV/0!

MINUTES

LOCAL PLANNING AGENCY/PLANNING ADVISORY BOARD
TO BE HELD JANUARY 30, 2020 AT 5:30PM
COMMISSION CHAMBERS
121 SW FLAGLER AVE.
STUART, FL 34994

LOCAL PLANNING AGENCY

Chair – Ryan Strom
Vice Chair – Li Roberts
Board Member – Michael Herbach
Board Member – Larry Massing
Board Member – Campbell Rich
Board Member – Bill Mathers
Board Member – Cristina de la Vega
Ex Officio – Garrett Grabowski

ADMINISTRATIVE

Development Director – Kev Freeman
Board Secretary – Jordan Pinkston

CALL TO ORDER

ROLL CALL
Present: Michael Herbach, Li Roberts, Campbell Rich, Ryan Strom, Bill Mathers, Li Roberts, Larry Massing, Cristina de la Vega
Absent:

APPROVAL OF MINUTES
Motion: Action: Approve.
Moved by: Massing
Seconded by: Herbach
Motion passed unanimously.

COMMENTS FROM THE PUBLIC ON NON-AGENDA ITEMS: None.

COMMENTS FROM THE BOARD MEMBERS:

Michael Herbach let the board know that he gave copies of the current state statutes and electrical vehicles.

Michael Mortell said that he has been working with staff to update the board by-laws and should have them to the board by the next meeting to adopt.

Ryan Strom changed order of the agenda, making item #1 first, item #3 second and item #2 third.

ACTION ITEMS: None.

ORDINANCES:

1. Amendment to City Tree Replacement code to comply with State Statue and to incorporate innovative storm water design. (RC)
   Ord 2432-2020: AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING CHAPTER V OF THE CITY'S LAND DEVELOPMENT CODE ENTITLED 'RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS' TO COMPLY WITH STATE STATUTE REGARDING TREE REMOVAL PERMITS AND TO PROMOTE INNOVATIVE STORMWATER TREATMENT AND LOW IMPACT DEVELOPMENT PRACTICES AND TO ALLOW THE CITY'S TREE REPLACEMENT FUND TO BE UTILIZED FOR INNOVATIVE STORMWATER TREATMENT SYSTEMS ON PUBLIC LANDS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

PRESENTATION: Kev Freeman, Development Director 5:46 PM

BOARD COMMENT:

Strom – explained format of meetings

Cristina – issues 24.c replacing pines with palm trees. She does not understand why that was the tree of choice. She thinks the list of palms is a small list and would like to use native palms. Understory develops a large list of palms and understory plants. She also wants clarification 24D, page 19.

Kev said that that is code and they are not proposing changes, we are only suggesting they should be replaced with like species. He said that they are moving palm trees and implanting canopy trees. He would like to explore a wider variety of trees.

Michael Herbach – he thinks that some of the problems are only pines trees and oaks in the flats. Consideration of soil should be considered by a consultant.

Li Roberts clarified what staff is proposing.

Kev clarified that plans will be prepared by licensed architects.

Suitable native species such as…

Li asked about the money that is in the tree fund being anticipated for staff to be using some of the money.

Kev clarified what he is proposing for storm water swells.

Li asked about built out areas that would benefit and what the city's responsibility would be.

Kev Freeman said they are currently looking at matching grant opportunities as well.

PUBLIC COMMENT: None.

MOTION:
Action: with change with species E and L
Moved by: Larry Massing
Second by: Cristina de la Vega
Motion passed unanimously.

2. STUART OCEAN RPUD - FIRST READING (QUASI-JUDICIAL)(RC): ORDINANCE No. 2435-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, TO APPPROVE A REZONING FROM R-3 MULTIFAMILY/OFFICE TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; FOR AN 11.04 ACRES PARCEL, OW NED BY SERRAGUI GROUP INVESTMENTS LLC, LOCATED ON THE SOUTH SIDE OF SE OCEAN BLVD BETW EEN THE POINTE ASSISTED LIVING FACILTY AND KINGSW OOD CONDO ASSOCIATION, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING STUART OCEAN TOWNHOMES RPUD CONSISTING OF EIGHTY (80) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT W ITH 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.

PRESENTATION: Tom Reetz, Senior Planner
Bob Raynes, Gunster Law Firm – handout given
Mike Houston, HJA Design Studio (Landscape Architect) ***give me all the names he introduced. *****

Todd – trees

Bob Raynes reviewed development conditions and revisions.

BOARD COMMENT:

Bob Raynes went over the development conditions and suggested revisions.

Ryan Strom asked if these changes had been discussed with staff.

Herbach asked about parking for mail pickup.

Bon said that he would add that to parking.

Li asked about the #2 change and what they anticipated the mail parking be qualified as.

Massing asked if staff has reviewed the changes before them.

Tom said that they have discussed changes, but have not reviewed the red lines.

Cristina asked how many parking spaces are for visitors.

Houston confirmed where guest spots are 38 on site. ……

……

Herbach – asked if it was a 55+ community. He asked about additional exists.

Bob Raynes said that we would need an easement for a secondary access.

Herbach asked about bus stops and expressed his concerns about current bus situations. He asked about recreational leases.

Omei Carlson said they are not planning a physical clubhouse and the association will own all of the amenities.

Li Roberts – discussed past project proposal entrances so roads were not staggered. The reason would be for traffic control.

Mortell said that he recalled the past proposal, but the reason that it was difficult was because of negotiations of easements.

Li Roberts – asked about density units 7.25 per acre and the size of the proposed units and greenspace.

Michael Houston said that this pervious, impervious questions because it is two stories.

Li Roberts asked about the B parcel that isn't adjoining.

Tom Reetz confirmed the nearby lots usage.

Li Roberts said that she is concerned about the grade of the lot and drainage and runoff.

Houston explained that they have looked at that.

Li Roberts asked for confirmation about what will be done with the wooden fence. She is concerned about trash collection. Concerned about firetruck turnaround, 11 parking spaces for 80 units, parking that belongs to the Kingswood swimming pool becoming a policing issue, amount of street parking, trail through the preserve area, grills, fences behind the property being too close, school buses.

Bob Raynes addressed the fencing concern.

Li Roberts addressed the error on the elevation of the rear of the building on the floor plans and recommended they update their plans. She said that she thinks it is too much for the site, but appreciates trying to add appealing housing into the City of Stuart.

Herbach – asked HOA that garages not be used for storage.

Massing said that would be difficult to enforce.

Cristina asked about the location of roads for Kingswood.

Houston said that is still an ongoing discussion.

Cristina said that it looks tight and asked about the amount of space the homeowners own behind each unit.

Todd Troxel – said that there are lot lines and they are fee simple lots that will be sold individually with 20 feet.

Cristina asked for a breakdown of the pervious land.

Houston clarified lot lines and open space.

Bob Ryanes clarified the spacing that they are seeing on the renderings.

Todd said that the requirement for open space is… and we are exceeding that.

Larry Massing said that it appears to be tight, parking would have to be enforced.

Ryan Strom is concerned about the amount of code enforcement needed for the existing pool at Kingswood, mail parking spaces, on-street parking, trash pickup

Girl – combined cans throughout the community.

Ryan Strom went into detail about concerns about trash logistics.

Tom Reetz said this is similar to other approved projects and how trash will be coordinated.

Kev Freeman said that those other projects are higher density, more stormwater treatment, etc. than what we are seeing today. Our public works department is not lenant and staff has addressed all of these issues and is very happy about how the project looks.

Ryan – said that he wanted to say that the applicant is only coming in with 2 stories, and I appreciate them not coming in with 3 stories or something with higher density.

Li Roberts – thinks the problems are it looks so tight because the lake piece looks removed, but if it was embedded into the property it would be more appeasing to the eye.

Kev Freeman said they are addressing their code and preserving the areas that are impostant.

Herbach said that there are too many unknowns. He addressed the bus stops being an issue.

Ryan Strom said that it is almost advised to have them come back after changes are made.

Li Roberts advised that the applicant did not want to hear her motion.

Houston addressed the school bus issue.

Li Roberts said she is asking for a location to be carved out of their site of where a bus could stop, so kids or people do not have to go offsite.

Houston addressed parking issue and expressed that this is a great addition to the City. He said that firetruck parking will be strongly enforced.

Herbach asked that the applicant come back once the board's issues are addressed.

Li Roberts said that she is worried about on-street parking.

Bob Raynes said that he has spoken with residents and they want to continue to do so. He offered to hear public comment and agree to a continuous of the item.

Cristina expressed that it is a great thing that the project is so low density compared to what could be put there.

Bob Ryanes agreed and said that they want to continue to move forward

PUBLIC COMMENTS:

1. ??? – concerned about safety of young children, traffic.

2. Jane cornett – suggested that this was premature. She described the different Kingswood phases, legal exists from the community, traffic, construction, drainage, lift station, would like to meet with city staff and bob ryane . legal representation for the residents.
3. Judy sabatino – concerned about traffic, school children,
4. Katie Gibbs – Kingswood residents, concerned about children, backyard size, playground area, safety, code enforcement, acreage of site of building.
5. Charles sheer – asked about the noise abatement during the construction phase,
6. ???? – concerned about the environment, addressed an eagles nest on the property
7. Ken Visaki – concerned about the retention pond and water table, storms with water runoff, traffic on roadways because they do not have sidewalks, older community with traffic.
8. Kingswood 3 – emergency access that fire department needs for their community.
9. Celeste zeran – concerned about length of project and open issues, lake with children, noise pollution, construction
10. Jane cooper – concerned about traffic, type of development in a 55+ community, trespassing, code enforcement.
11. Patty Weeling – children in between retirement communities.
12. Laura udobe – concerned about water runoff,
13. Same lady – said that she remembered that Kingswood was willing to move their entrance for the traffic patern, but did not have a board at the time.
14. Ivan –
15. Blanca - Concerned about traffic, no pool on the property
16. Stu Francel – addressed the pond, but thinks that kids will want to come swim in their pool. Concerned about traffic

BOARD COMMENT:

Bob Raynes addressed the traffic study, drainage; lift station, size of backyard, environmental study results,

Herbach said that he could use the pond as an irrigation source.

MOTION:
Action: Continue to March 19th LPA meeting.
Moved by: Michael Herbach
Second by: Larry Massing
Motion passed unanimously.

3. ORDINANCE No. 2434-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, BEING THE THIRD AMENDMENT OF ORDINANCE NO. 2307-2015, ALSO KNOW N AS THE "NEW AVONLEA PLANNED UNIT DEVELOPMENT (PUD)" CONSISTING OF 12.40 ACRES ZONED RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD), 16.24 ACRES ZONED

COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD), AND 20.4 ACRES OF WETLAND/UPLAND PRESERVE ZONED RPUD, FOR A TOTAL OF 49.04 ACRES; SAID PUD BEING GENERALLY LOCATED BETW EEN NE DIXIE HIGHWAY TO THE SOUTH, LAND ON BOTH SIDES OF GREEN RIVER PARKWAY ON THE W EST, LAND ON BOTH SIDES OF CARDINAL AVENUE ON THE EAST AND THE CITY BOUNDARY TO THE NORTH, BEING MORE FULLY DESCRIBED BY EXHIBIT "A" ATTACHED; AMENDING SAID PUD TO PROVIDE FOR THE APPROVAL OF THE MASTER PARCEL SITE PLAN FOR THE AVONLEA CROSSINGS PARCEL B (PARCEL 16); PROVIDING FOR A MASTER OFF-SITE INFRASTRUCTURE PLAN FOR THE ENTIRE PUD; PROVIDING FOR REVISED AND ADDITIONAL DEVELOPMENT CONDITIONS OF APPROVAL; PROVIDING FOR AMENDED AND NEW TIMETABLES FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT W ITH 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. (QJ) (RC)

PRESENTATION: Stephen Mayer, Senior Planner
Tim Hernandez, New urban Communities

BOARD COMMENT:

Li Roberts asked about the outside elevations on the townhomes.

Tim confirmed where the rear elevations will be facing.

Li Roberts asked about pricing.

Tim said they are still discussing if they should be for sale or for rent and discussed price points.

Li Roberts suggested changing the look of the road so it seems like an extension of the sidewalk between building 1 and 12. Adding corsswalks.. She asked about locations of mailboxes.

Tim confirmed where the mailboxes will be located.

Li Roberts asked about the existing sidewalks, grills.

Tim said that he would consider putting a grill in the pool area.

Li asked if they could add a bus pull off area in the future if there is a need for one.

Tim said that they are going to build it and the county or city can do whatever they want with it.

Kev Freeman said that we can come up with a condition that gives flexibility.

Ryan Strom asked about the dumpster locations.

Tim explained that they wanted to maximize parking and greenspace.

Li Roberts asked about fencing or foliage around the playground.

Cristina de la Vega asked about the amount and types of plants.

Tim explained the plants and percentages they have in the project.

PUBLIC COMMENTS:

MOTION:
Action: Approve. Flexible bus stop, paving crosswalks, landscaping for playground,
Moved by: Li Roberts
Second by: Larry Massing
Motion passed unanimously.

BOARD COMMENT:

STAFF UPDATE:

ADJOURNMENT:
Motion: Action: Adjourn.
Moved by: Herbach
Seconded by: cristina

Ryan Strom, Chair

Jordan Pinkston, Board Secretary

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Tom Reetz

Title of Item:

STUART SPRINGTREE RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2427-2020; 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 ASSIGNING A FUTURE LAND USE DESIGNATION OF "MULTI-FAMILY RESIDENTIAL" FOR THREE PARCELS EQUALING 13.59 ACRES ANNEXED BY ORDINANCE NO. 2352-2017, OWNED BY STUART 13 ACRES, LLC, TIERRA DEL LAGO, INC. AND STUART HARBOR MARINA AND YACHT CLUB, LOCATED WEST OF S.E. FEDERAL HIGHWAY, SOUTH OF S.E. HARRISON STREET, AND NORTH OF THE NATALIE ESTATES MOBILE HOME PARK WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE STUART–SPRINGTREE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF TWO HUNDRED EIGHTY (280) MULTI-FAMILY UNITS WITHIN SEVEN (7) INDIVIDUAL FOUR-STORY APARTMENT BUILDINGS; 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.

Summary Explanation/Background Information on Agenda Request:

Ordinance 2427-2020 returns to the Commission for completion of First Reading. On February 24, 2020, the City Commission heard all of the evidence from the applicant and intervenor. After closing the hearing at the conclusion of the presentations and during deliberation, the Commission unanimously approved Commissioner Matheson's Motion to Table which was treated as a Motion to Continue the matter to March 9, 2020. Commissioner Matheson asked the applicant to consider reducing the number of units by 10; redesign the lake to an irregular shape; work with the surrounding neighborhoods regarding the sidewalks, lighting and height of the buildings as well as meet with the County for traffic calming ideas.

The applicant has submitted a response to the City's traffic consultant and a revised traffic study concluding that Alden Avenue is projected to function acceptably as a local road with the proposed project. See **RTC-Springtree 2-27-2020** and **Springtree Traffic Report 2-27-2020 S&S**.

Michael Houston of HJA Studios, agent for the applicant, has submitted a revised lake design and littoral plantings which is described on the revised site plan. The applicant has informed staff that a traffic calming analysis for the Coral Gardens neighborhood will be finalized and presented at the hearing.

The vacant subject property is approximately 13.59 acres and consists of three parcels, located west of SE Federal Highway in an urban area on the south eastern edge of jurisdictional limits of the City of Stuart. The applicant is proposing to construct 280 multi-family garden-style residential units consisting of seven 4 story

garden-style apartment buildings all with elevators. For additional details and code reviews see attached staff report.

The property is comprised of both uplands and wetlands. The wetland has been qualified as a very low quality system which the South Florida Water Management Department requires no mitigation. The northern portion of the property contains pine flatwood forest which will be mostly retained as preserve. A lake at the development's center will have littoral planting at it's perimeter then transitioning onto it's bank with native trees. During First Reading, the applicant responded to each of the eleven conditions raised by the LPA including the addition of improved lighting, signage, landscape, a 6 foot wide sidewalk along Springtree Place and enhanced entry.

The proposed project consist of seven (7) four-story apartment buildings. In addition to the apartment buildings, there will be amenities such as a clubhouse, pool, dog park and car wash. The apartment access will be privately gated with two access points, one of from S.E. Springtree an existing open private road and from S.E. Harrison Street a Martin County maintained road to the north. The residents will also have opportunity to rent a garage for an automobile if desired. The property is bounded to the south by the Natilie Mobile Home Park which is in unincorporated Martin County. To the north is Coral Gardens single family and an Exon gas station with convenience store, also in Martin County. To the east is vacant land with a CPUD zoning and is within the City of Stuart. The main access to the property will be from Springtree, which has capacity for the additional trips related to the proposed development.

Funding Source:

N/A

Recommended Action:

Move approval of Ordinance No. 2427-2020 adopting a Residential Planned Unit Development zoning and assigning a future land use map change to multi-family.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ordinance No.2427-2020	2/28/2020	Ordinance add to Y drive
🗋	Ordinance No. 2427-2020 Exhibit D	2/28/2020	Ordinance add to Y drive
🗋	Ordinance 2427-2020 D1	2/15/2020	Ordinance add to Y drive
🗋	Ordinance 2427-2020 D2	2/15/2020	Ordinance add to Y drive
🗋	Staff Report	2/17/2020	Staff Report
🗋	Revised Traffic Report 2.27	2/28/2020	Backup Material
🗋	Response to traffic comments 2.27	2/28/2020	Backup Material
🗋	Comprehensive Plan Review	2/17/2020	Staff Report
🗋	Response letter to LPA conditions	2/15/2020	Backup Material
			Backup

Springtree Project narrative	2/15/2020	Material
Parking Statement 2.12	2/15/2020	Backup Material
Applicant response letter	1/22/2020	Backup Material
Stormwater Report- updated	1/22/2020	Backup Material
FWC correspondence	1/21/2020	Backup Material
Intervenor Application	2/15/2020	Backup Material
LPA Meeting Minutes	2/15/2020	Backup Material
Staff Code Review	2/28/2020	Backup Material

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2427-2020

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 ASSIGNING A FUTURE LAND USE DESIGNATION OF "MULTI-FAMILY RESIDENTIAL" FOR THREE PARCELS EQUALING 13.59 ACRES ANNEXED BY ORDINANCE NO. 2352-2017, OWNED BY STUART 13 ACRES, LLC, TIERRA DEL LAGO, INC. AND STUART HARBOR MARINA AND YACHT CLUB, LOCATED WEST OF S.E. FEDERAL HIGHWAY, SOUTH OF S.E. HARRISON STREET, AND NORTH OF THE NATALIE ESTATES MOBILE HOME PARK WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE STUART–SPRINGTREE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF TWO HUNDRED EIGHTY (280) MULTI-FAMILY UNITS WITHIN SEVEN (7) INDIVIDUAL FOUR-STORY APARTMENT BUILDINGS; 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 held a properly noticed hearing at a regularly scheduled City Commission to consider the application by Waypoint Residential Services, LLC for three contiguous parcels equaling 13.59 acres of land located west of S.E. Federal Highway, south of S.E. Harrison Street; and north of the Natalie Estates Mobile Home Park.

WHEREAS, the City of Stuart has determined the need to assign the future land use and a 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 development 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. **The RPUD Site Plan, Sheets SP-1, SP-2 & SP-3, prepared by HJA Design Studios, Landscape Architects, dated 10-09-19 and 12-02-19 and last revised on 2-28-20.**
b. **Cover Sheet, Boundary Survey and Topographic Survey, Sheets 2 thru 4, by Bowman Consulting Group Ltd., dated 06.28.2019.**
c. **Existing Tree Survey/Removal Plan, Sheet LP-1 Landscape Plans Sheets LP-2 thru LP-5, prepared by HJA Studios, Landscape Architects, dated 01.07.20 and last revised on 02.11.20.**
d. **Stuart Springtree Fire Truck Plan, Sheet 1 of 1, prepared by Bowman Consulting Group Ltd., dated 09.24.19**
e. **Stuart Springtree Garbage Truck Plan, Sheet 1 of 1, prepared by Bowman Consulting Group Ltd., dated 09.24.19**
f. **Architectural Floor Plans, by Group 4 Design, Inc, Sheets 4.1-C, 4.4-C, Unit Plan A-2, B-1, B-1C, C-1, S-1, all dated 01.06.20.**
g. **Architectural Building Elevations and Garage Elevations, by Group 4 Design, Inc., Sheets MIX 4.1, MIX 4.4 and Garage dated 01.06.20.**

SECTION 2: The Future Land Use designation in the City's Comprehensive Land Use Plan shall be established as "Multi-Family Density Residential". This ordinance may not become effective until 31 days after adoption. If challenged within 30 days after adoption, this ordinance may not become effective until the state land planning agency or the Administration

Commission, respectively, issues a final order determining that the adopted large-scale land use amendment complies as defined in s. 163.3184(1)(b).

SECTION 4: The Land Development (Zoning) District designation on the City of Stuart Official Zoning Map shall be established as "RPUD" Residential Planned Unit Development subject to the appeal period stated in Section 2, above.

SECTION 5: 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 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: This ordinance shall be effective upon the last of the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owner. However, the Future Land Use and Zoning Designations granted herein shall not be effective until thirty-one (31) days after adoption, and as otherwise provided by law.

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 ____ day of _____, 2020.

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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED this ___ day of _____, 2020.

ATTEST:

_____ _____

MARY R. KINDEL
CITY CLERK

MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____

MICHAEL J. MORTELL
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: Owner: Stuart 13 Acres, LLC

_____

Print Name: _____ By: _____

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by _____ owner.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

ACCEPTANCE AND AGREEMENT

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

WITNESSES: OWNER: Tierra Del Lago, Inc.

_____

Print Name: _____ By: _____

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by _____ owner.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

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: OWNER: Stuart Harbor Marina and Yacht Club

_____

Print Name: _____ By: _____

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by _____ owner.

_____

Notary Public, State of Florida

My Commission Expires:

8

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____day of _____, 2020, by Michael J. Meier, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION

PARCEL 1:

LOTS 51, 52, 53, 54 AND 55, CORAL GARDENS, PLAT NO. 1 ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3, PAGE 21, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

PARCEL 2:

ALL THAT PART OF THE FOLLOWING DESCRIBED LANDS LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U. S. HIGHWAY #1, VIZ. : THE SOUTH 3/15 OF THE NORTH 9/15 OF THE SUBDIVISION OF LOTS 18, 19 AND 20 OF HANSON GRANT, ACCORDING TO PLAT THEREOF FILED IN DADE COUNTY, FLORIDA, DECEMBER 30, 1901, IN BOOK "B", PAGE 59, IN THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA AND REFILED IN PALM BEACH COUNTY, FLORIDA, ON MARCH 25, 1910, IN BOOK 1, PAGE 11, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SAID LANDS BEING NOW, HOWEVER, IN MARTIN COUNTY, FLORIDA, BY REDIVISION OF COUNTIES.

LESS AND EXCEPT THEREFROM THAT PART CONVEYED BY TIERRA DEL LAGO, INC., A FLORIDA CORPORATION, GRANTOR TO ENGLE HOMES/PALM BEACH, INC., A FLORIDA CORPORATION, GRANTEE IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1360, PAGE 373, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

AND LESS AND EXCEPT THEREFROM THAT PART CONVEYED BY TIERRA DEL LAGO, INC., A FLORIDA CORPORATION, GRANTOR TO STUART 13 ACRES, LLC, A FLORIDA LIMITED LIABILITY COMPANY, GRANTEE IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2475, PAGE 1736, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA

PARCEL 3:

THE SOUTH 434.35 FEET (MEASURING 436.50 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF US HIGHWAY NO. 1) OF THE FOLLOWING DESCRIBED PARCEL:

ALL THAT PART OF THE FOLLOWING DESCRIBED LANDS LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF US HIGHWAY NO. 1 THAT LIE WITHIN THE SOUTH 3/15THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19, AND 20 OF THE HANSON GRANT ACCORDING TO THE PLAT THEREOF FILED IN DADE COUNTY, FLORIDA, DECEMBER 30, 1901 IN BOOK "B",

PAGE 59, IN THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA, AND RE-FILED IN PALM BEACH COUNTY FLORIDA, ON MARCH 25, 1910, IN BOOK 1, PAGE 11, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SAID LANDS BEING NOW, HOWEVER, IN MARTIN COUNTY, FLORIDA, BY RE-DIVISION OF COUNTIES.

(Legal Description cont.)

LESS THEREFROM THE FOLLOWING DESCRIBED PARCEL:

COMMENCE AT THE INTERSECTION OF THE WESTERLY RIGHT OF WAY LINE OF SAID U.S. HIGHWAY NO. 1, AND THE SOUTH LINE OF SAID NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19, AND 20; THENCE

SOUTH 66 DEGREES, 17 MINUTES,10 5SECONDS WEST 727.96 FEET MEASURED (727.78 DESCRIPTION) ALONG SOUTH LINE OF SAID NORTH 9/15THS OF SUBDIVISION OF LOTS 18, 19, AND 20 TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 66 DEGREES 17 MINUTES 10 SECONDS WEST 1575.25 FEET ALONG SAID SOUTH LINE OF NORTH 9/15THS OF SUBDIVISION OF LOTS 18, 19, 20; THENCE NORTH 23 DEGREES 47 MINUTES 05 SECONDS WEST 781.02 FEET TO THE NORTH LINE OF SAID SOUTH 3115THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19 AND 20; THENCE NORTH 66 DEGREES 21 MINUTES 10 SECONDS EAST 1498.84 FEET ALONG SAID NORTH LINE OF SOUTH 3/15THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19, AND 20; THENCE SOUTH 29 DEGREES 23 MINUTES 47 SECONDS EAST 783.19 FEET MEASURED (782.47 DESCRIPTION) TO THE POINT OF BEGINNING.

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:

   a. **The RPUD Site Plan, Sheets SP-1, SP-2 & SP-3, prepared by HJA Design Studios, Landscape Architects, dated 10-09-19 and 12-02-19 and last revised on 2-28-20.**
   b. **Cover Sheet, Boundary Survey and Topographic Survey, Sheets 2 thru 4, by Bowman Consulting Group Ltd., dated 06.28.2019.**
   c. **Existing Tree Survey/Removal Plan, Sheet LP-1 Landscape Plans Sheets LP-2 thru LP-5, prepared by HJA Studios, Landscape Architects, dated 01.07.20 and last revised on 02.11.20.**
   d. **Stuart Springtree Fire Truck Plan, Sheet 1 of 1, prepared by Bowman Consulting Group Ltd., dated 09.24.19**
   e. **Stuart Springtree Garbage Truck Plan, Sheet 1 of 1, prepared by Bowman Consulting Group Ltd., dated 09.24.19**
   f. **Architectural Floor Plans, by Group 4 Design, Inc, Sheets 4.1-C, 4.4-C, Unit Plan A-2, B-1, B-1C, C-1, S-1, all dated 01.06.20.**
   g. **Architectural Building Elevations and Garage Elevations, by Group 4 Design, Inc., Sheets MIX 4.1, MIX 4.4 and Garage dated 01.06.20.**

2. Any modifications to the Master 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, 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.

3. The maximum building height within the RPUD shall be 4 stories or 42'-6" to the roof eave and 59 feet to the highest point of the roof.. Height shall be measured from the

lowest permissible finished first floor elevation to the surface of a flat roof and to the eave of a pitched roof.

4. Notwithstanding any presence of premium parking consisting of garages, at no time shall any parking space be deemed unavailable for use due to an absence of a lease agreement for the use of said space.

5. Garages shall not be used for storage to the exclusion of a vehicle.

6. 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.

7. 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.

Landscaping

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

9. 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.

10. 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 Open Space and Native Preserve Area

11. Open Space. Not less than 41.0% of the RPUD shall be open space as depicted on the Site Plan by HJA Design Studios as described in Exhibit C. Required open space may include native vegetation areas, however, other required landscaping shall not count towards the open space requirement.

12. Excluding wetlands defined by the South Florida Water Management District, not less than 25% of the total pre-development site shall remain as undeveloped and recreated native vegetation area. The required native vegetation area may include open space areas; however, other required landscaping shall not count towards the native vegetation requirement. The location of the native vegetation shall comply with the project's landscape plan, by HJA Design Studios. The project shall adhere to the Preserve area mitigation and monitoring plan PAMP (to be prepared prior to building permit submittal). The owner and developer shall adhere to the provisions of the Monitoring Plan (included in PAMP) and permanent maintenance will be the responsibility of the owner.

Tree Mitigation

13. 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

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

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

16. 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.

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

Development and Construction

18. Project phasing shall be shown on the site and construction plans are subject to staff approval during plan review process. The first phase shall include work along Springtree Place, stormwater infrastructure and the clubhouse".

19. The Developer shall install landscaping and gates at the development's entry location at S.E. Harrison Street and S.E. Springtree Place as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit. The entry gates at Springtree Place entrance shall be made operational prior to issuance of a certificate of occupancy.

20. The property owner shall provide easements for licensed television services that can coexist together with power in a public utility easement. A Conservation easement shall be dedicated to state agencies with the City of Stuart having the option to have those same easements.

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

22. 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.

23. All utility improvements constructed by the developer within Florida's Department of Transportation's right-of-way, shall be constructed in a manner and form acceptable to

the FDOT. The developer shall grant any such utility easements necessary for this site as may be required by the FDOT.

24. The project's storm water facilities, specifically the 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. Littoral plantings and upland planting shall be provided per Landscape plan by HJA Design Studios at the lakes bank and entire perimeter.

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

27. Site work including but not limited to land preparation, lake 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.

28. Stuart - Springtree will provide two on-site trash compactors. "Stuart - Springtree will provide one (1) singular on-site trash compactor. The resident shall place trash into a general trash receptacle located on their floor. The apartment management is responsible for transferring the trash from the on-floor receptacle to the compactor by way of a rolling cart. The resident will not be responsible for transferring the trash to the compactor or be responsible for operation of the compactor. The trash within the compactor shall be picked up by the City of Stuart Sanitation Department.

Signage

29. 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.

Future Amendments

30. Owner shall not subject the Property to any condominium conversion and neither shall any portion of the Property be converted to units for sale in connection with a condominium conversion nor shall the title to any such units be transferred to any party other than being held as a single parcel for the purposes of apartment rental.

31. The City may elect at any time to assign a future land use designation of "Conservation" to the PUD's preserve areas without objection by the owner. Further, the City may at its discretion, take over maintenance of the preserve area(s) without objection by the owner.

Timetable for Development

32. Timetable for development shall be as follows:

Site and building permit application deemed sufficient for permit review under city codes and standards.	**March 1, 2021**
Final Certificate of Occupancy for all site and building improvements.	**March 1, 2024**

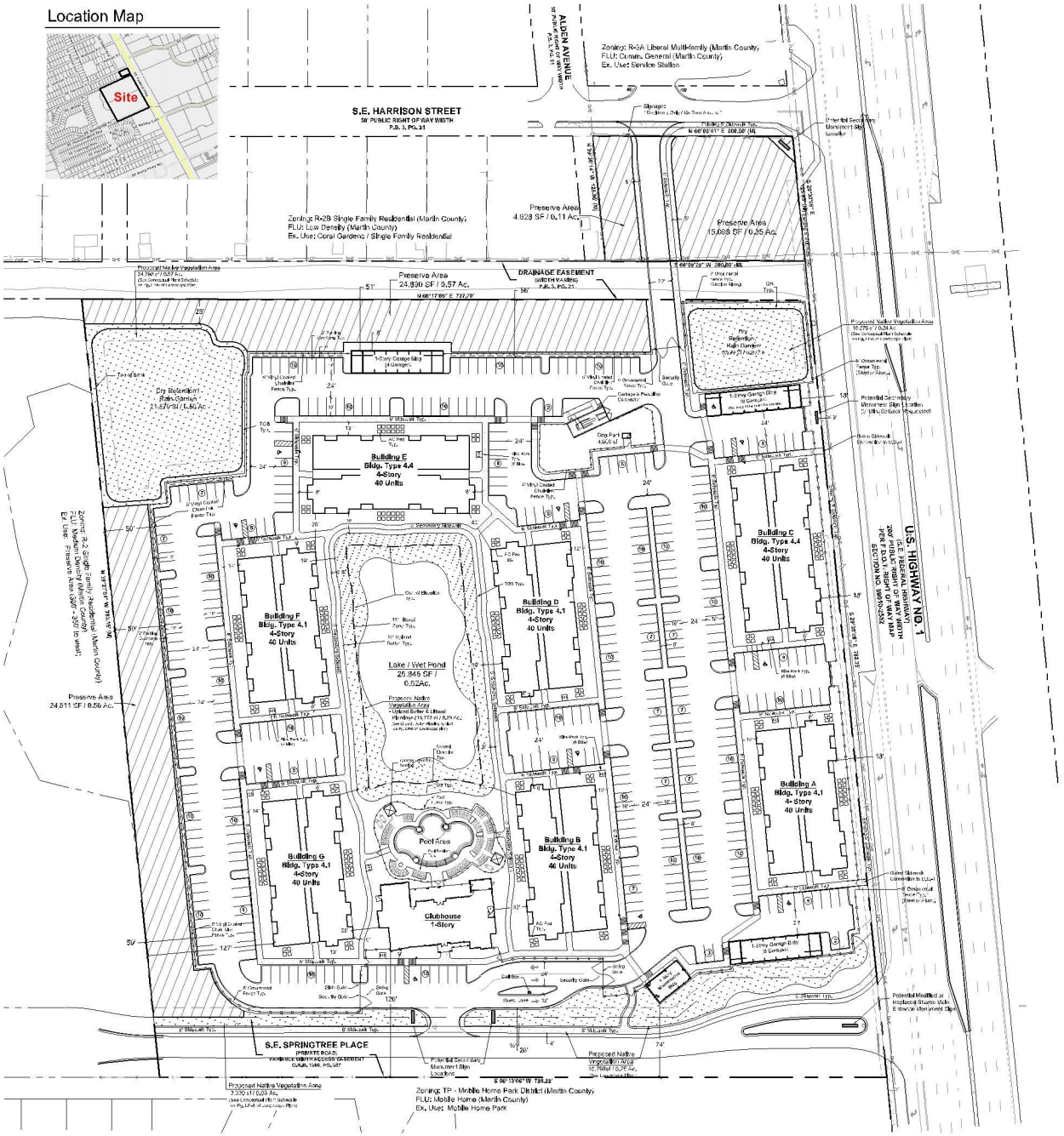
Allowable Uses

33. The following uses shall be permitted:

a. Multi-Family Residential

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

d. This residential facility shall not operate as an age restricted community in accordance with Florida Law.



Site Data

Total Site Area	13.59 Ac. / 592,032 sf
Development Site Area	12.40 Ac. / 540,086 sf
Springtree Access Easement Area	1.19 Ac. / 51,948 sf
Proposed Future Land Use	Multi-family Residential
Proposed Zoning	RPUD (30 DU/ AC)
Proposed Use	Multi-family Apartments
Proposed Dwelling Units	280 Units

Density

Maximum Density - 30 DU/Ac. (13.59 Ac. x 30)	407 Max. Units
Proposed Density	280 Units
Proposed Gross Site Density	20.60 DU / Ac.

Open Space Data

Required Open Space:	177,610 sf / 4.08 Ac. / 30%
Provided Open Space:	226,320 sf / 5.19 Ac. / 38%
Dry Retention Areas	30,569 sf / 0.70 Ac.
Native Preserve / Landscape Areas (Excludes Interior Landscape Islands / Area)	195,548 sf / 4.49 Ac.

Impervious Area

Building Coverage	87,749 sf	2.01 Ac.	15%
Vehicular Use Area / Pavement	238,108 sf	5.47 Ac.	40%
Wet Pond / Lake Surface	26,846 sf	0.62 Ac.	5%
Total:	352,703 sf	8.10 Ac.	60%

Pervious Area

Dry Retention Areas	30,569 sf	0.70 Ac.	6%
Native Preserve / Landscape Areas	195,548 sf	4.49 Ac.	32%
Interior Landscape Islands / Area	13,009 sf	0.30 Ac.	2%
Total:	239,329 sf	5.49 Ac.	40%

Native Upland Preserve Data

Development Site Area (Excludes Springtree Access Easement)	12.40 Ac. / 540,086 sf
Required Native Preserve Area: (540,086 sf x 25%)	135,022 sf / 3.10 Ac. / 25%
Provided Native Preserve Area:	135,096 sf / 3.10 Ac. / 25%
Ex. Native Preserve	69,129 sf / 1.59 Ac.
Proposed Native Vegetation Areas	65,967 sf / 1.51 Ac.

Parking / Unit Data

Recommended ITE Parking Required — 428 Spaces

Unit Desc	Quantity	ITE Ratio	Spaces	Reference
Studio	28	1	28	ITE 5th Ed. Mid-rise General Urban/Suburban
1 br, 1 ba	124	1	124	ITE 5th Ed. Mid-rise General Urban/Suburban
2 br, 2 ba	108	2	216	ITE 5th Ed. Mid-rise General Urban/Suburban
3 br, 2 ba	20	3	60	ITE 5th Ed. Mid-rise General Urban/Suburban
Total/Avg	280	1.53	428	34 Spaces less than provided

Total Provided Parking (1.65 spaces per unit) — 462 Spaces

Standard Parking Spaces	428 Spaces
Handicap Parking Spaces (462 x 2% = 10 Req.)	10 Spaces
Detached Garages (1 Garage Handicap accessible per ADA Requirements)	24 Spaces

Building Setbacks & Separations

Front Building Setback (From East Property Line along U.S. Hwy 1)	18'
Side Building Setback (From South Property Line)	74'
Side Building Setback (From North Property Line)	51'
Rear Building Setback (From West Property Line)	127'
Building Setback from Lake Top of Bank	18'
Separation Between Buildings	26'
Building Separation from Ex. Preserve Area	10'
Pavement Separation from Ex. Preserve Area	5'

General Notes

1. Grills, trash cans, pet waste stations and site lighting to be located and specified on final construction plans.
2. Mail delivery and pickup to be provided in clubhouse.
2. Pull box and conduit to be provided for future vehicular electric charging station(s) to be located at clubhouse.

Legend: Ex. Preserve Area; Proposed Native Vegetation Area

Scale: 1" = 50'

0' 25' 50' 100' 150'

North

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STUART - SPRINGTREE

Florida

City of Stuart

RPUD Site Plan

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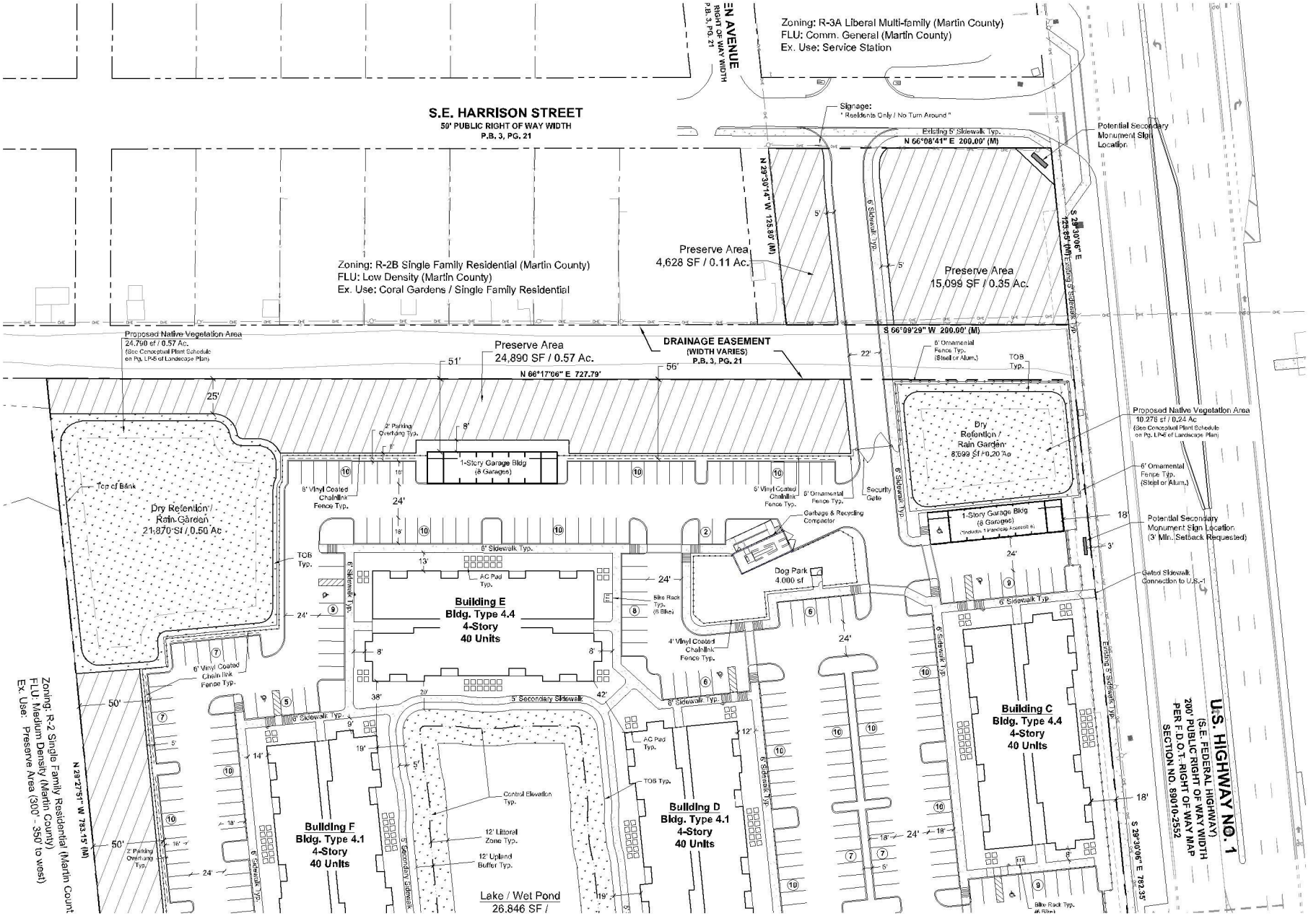
Job No.	19029
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates:	10-09-19
	12-02-19
Revision Dates:	1-24-20
	2-11-20 2-28-20

SP-1



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STUART - SPRINGTREE

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RPUD Site Plan

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Job No.	19029
Drawn By	TT
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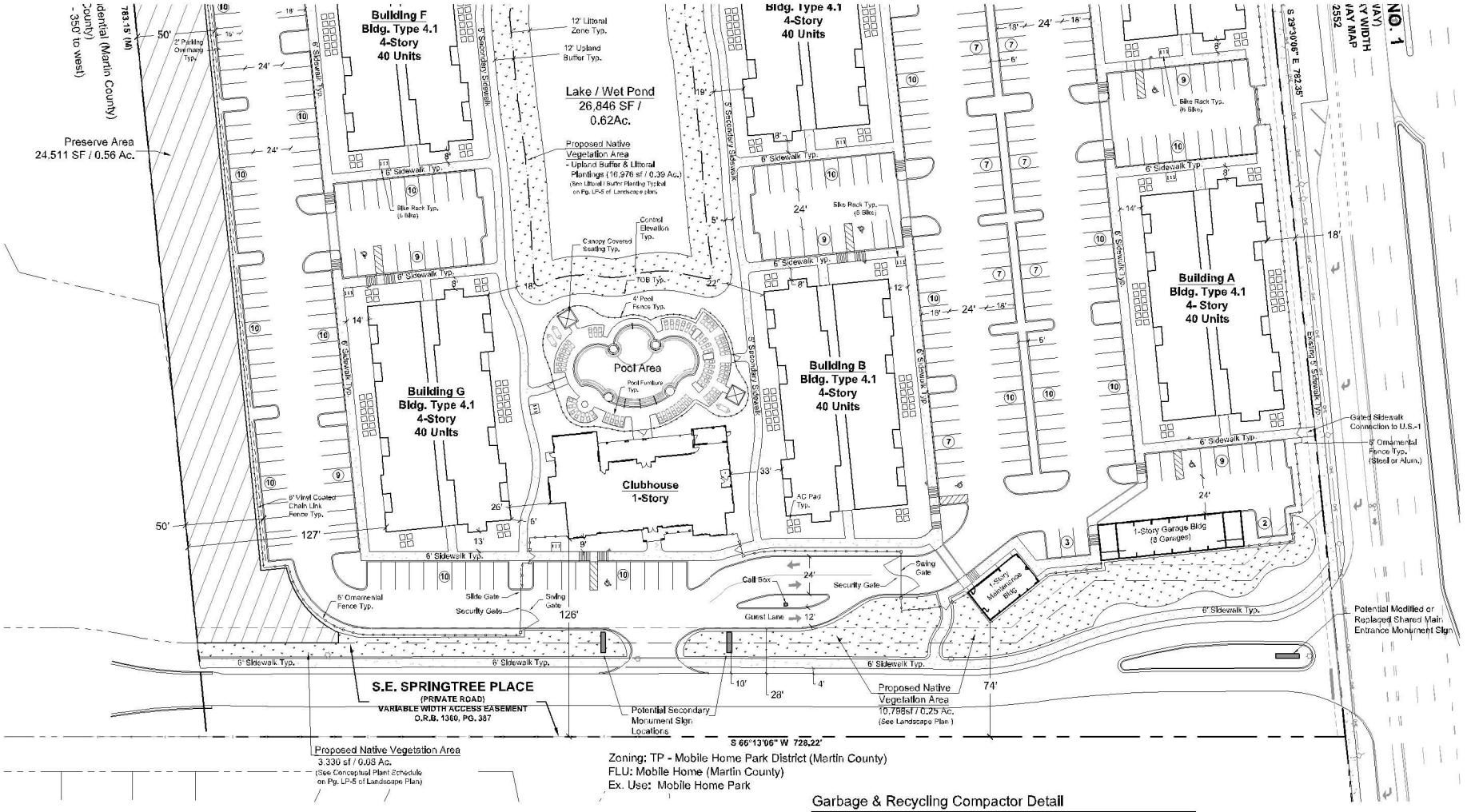
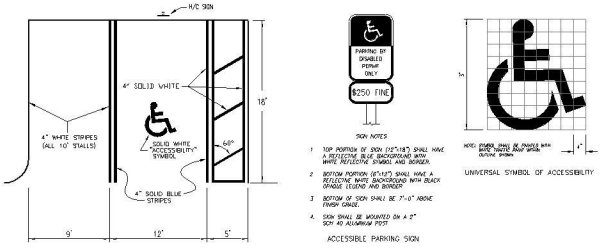
Submittal Dates	10-09-19
	12-02-19
Revision Dates	1-24-20
	2-11-20

SP-2

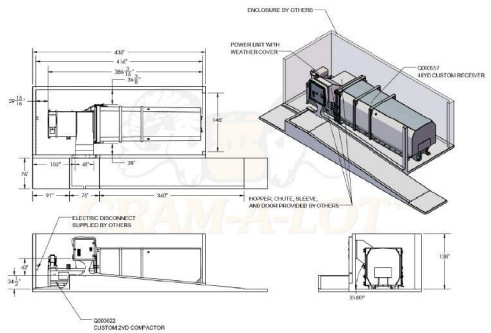


Zoning: TP - Mobile Home Park District (Martin County)
FLU: Mobile Home (Martin County)
Ex. Use: Mobile Home Park

Parking Space Detail



Garbage & Recycling Compactor Detail



Legend

Ex. Preserve Area

Proposed Native Vegetation Area

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

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STUART - SPRINGTREE

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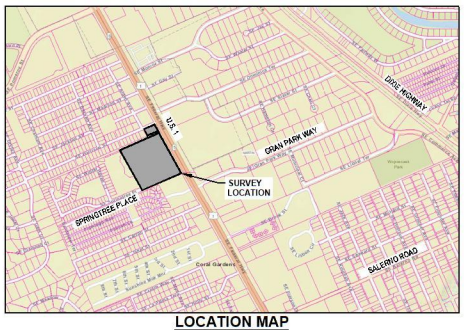
Job No.	19029
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	10-09-19
	12-02-19
Revision Dates	1-24-20
	2-11-20

SP-3

ALTA / NSPS LAND TITLE SURVEY
BOUNDARY AND TOPOGRAPHIC SURVEY
SPRINGTREE HOMES
A PORTION OF LOTS 18, 19, AND 20 OF THE HANSON GRANT
STUART, MARTIN COUNTY, FLORIDA



LOCATION MAP
NOT TO SCALE

WAYPOINT RESIDENTIAL

PARCELS 1 AND 2

LEGAL DESCRIPTION: (PER TITLE COMMITMENT)

PARCEL 1:

LOTS 51, 52, 53, 54 AND 55, CORAL GARDENS, PLAT NO. 1 ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3, PAGE 21, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

PARCEL 2:

ALL THAT PART OF THE FOLLOWING DESCRIBED LANDS LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U. S. HIGHWAY #1, VIZ. : THE SOUTH 3/15 OF THE NORTH 9/15 OF THE SUBDIVISION OF LOTS 18, 19 AND 20 OF HANSON GRANT, ACCORDING TO PLAT THEREOF FILED IN DADE COUNTY, FLORIDA, DECEMBER 30, 1901, IN BOOK "B", PAGE 59, IN THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA AND REFILED IN PALM BEACH COUNTY, FLORIDA, ON MARCH 25, 1910, IN BOOK 1, PAGE 11, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SAID LANDS BEING NOW, HOWEVER, IN MARTIN COUNTY, FLORIDA, BY REDIVISION OF COUNTIES.

LESS AND EXCEPT THEREFROM THAT PART CONVEYED BY TIERRA DEL LAGO, INC., A FLORIDA CORPORATION, GRANTOR TO ENGLE HOMES/PALM BEACH, INC., A FLORIDA CORPORATION, GRANTEE IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 1360, PAGE 373, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

AND LESS AND EXCEPT THEREFROM THAT PART CONVEYED BY TIERRA DEL LAGO, INC., A FLORIDA CORPORATION, GRANTOR TO STUART 13 ACRES, LLC, A FLORIDA LIMITED LIABILITY COMPANY, GRANTEE IN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2475, PAGE 1736, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

TITLE COMMITMENT:

FIRST AMERICAN TITLE INSURANCE COMPANY
FILE NUMBER: NCS-962854-ORL
COMMITMENT DATE: APRIL 30, 2019 @ 8:00 A.M.

SCHEDULE B-II EXCEPTIONS:

ITEMS 1 THROUGH 8 ARE STANDARD EXCEPTIONS - NO COMMENT

9. PLAT OF CORAL GARDENS PLAT 1 RECORDED IN PLAT BOOK 3, PAGE 21, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA. (AS TO PARCEL 1)
AFFECTS PARCEL 1 AS SHOWN ON SURVEY

10. PERPETUAL EASEMENT IN FAVOR OF THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION RECORDED IN OFFICIAL RECORDS BOOK 1077, PAGE 2761, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA. (AS TO PARCEL 1)
AFFECTS PARCEL 1 AS SHOWN ON SURVEY

11. MAP OF THE SUBDIVISION OF MILES AND HANSON GRANT RECORDED IN PLAT BOOK B, PAGE 59 IN DADE COUNTY, FLORIDA AND PLAT BOOK 1, PAGE 11, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA. (AS TO PARCEL 2)
AFFECTS PARCEL 2 AS SHOWN ON SURVEY

12. PERPETUAL EASEMENT IN FAVOR OF THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION RECORDED IN OFFICIAL RECORDS BOOK 1064, PAGE 1040, RE-RECORDED IN OFFICIAL RECORDS BOOK 1077, PAGE 2083, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA. (AS TO PARCEL 2)
AFFECTS PARCEL 2 AS SHOWN ON SURVEY

13. LICENSE AGREEMENT BY AND BETWEEN TIERRA DEL LAGO, INC., A FLORIDA CORPORATION AND ENGLE HOMES/PALM BEACH, INC., A FLORIDA CORPORATION, RECORDED IN OFFICIAL RECORDS BOOK 1360, PAGE 395, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA. (AS TO PARCEL 2)
AFFECTS PARCEL 2 - DOCUMENT IS ILLEGIBLE - NOT SHOWN ON SURVEY

14. ORDINANCE NO. 2352-2017 RECORDED IN OFFICIAL RECORDS BOOK 2930, PAGE 845, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA. (AS TO PARCELS 1 AND 2)
AFFECTS PARCEL 1 AND 2 - BLANKET IN NATURE - NOT SHOWN ON SURVEY

15. 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).
NO COMMENT

PARCEL 3

LEGAL DESCRIPTION: (PER TITLE COMMITMENT)

THE SOUTH 434.35 FEET (MEASURING 436.50 FEET ALONG THE WESTERLY RIGHT-OF-WAY LINE OF US HIGHWAY NO. 1) OF THE FOLLOWING DESCRIBED PARCEL:

ALL THAT PART OF THE FOLLOWING DESCRIBED LANDS LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF US HIGHWAY NO. 1 THAT LIE WITHIN THE SOUTH 3/15THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18,19, AND 20 OF THE HANSON GRANT ACCORDING TO THE PLAT THEREOF FILED IN DADE COUNTY, FLORIDA, DECEMBER 30, 1901 IN BOOK "B", PAGE 59, IN THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA, AND RE-FILED IN PALM BEACH COUNTY FLORIDA, ON MARCH 25, 1910, IN BOOK 1, PAGE 11, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SAID LANDS BEING NOW, HOWEVER, IN MARTIN COUNTY, FLORIDA, BY RE-DIVISION OF COUNTIES.

LESS THEREFROM THE FOLLOWING DESCRIBED PARCEL:

COMMENCE AT THE INTERSECTION OF THE WESTERLY RIGHT OF WAY LINE OF SAID U.S. HIGHWAY NO. 1, AND THE SOUTH LINE OF SAID NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19, AND 20; THENCE SOUTH 66 DEGREES, 17 MINUTES,10 SSECONDS WEST 727.96 FEET MEASURED (727.78 DESCRIPTION) ALONG SOUTH LINE OF SAID NORTH 9/15THS OF SUBDIVISION OF LOTS 18, 19, AND 20 TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 66 DEGREES 17 MINUTES 10 SECONDS WEST 1575.25 FEET ALONG SAID SOUTH LINE OF NORTH 9/15THS OF SUBDIVISION OF LOTS 18, 19, 20; THENCE NORTH 23 DEGREES 47 MINUTES 05 SECONDS WEST 781.02 FEET TO THE NORTH LINE OF SAID SOUTH 3115THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19 AND 20; THENCE NORTH 66 DEGREES 21 MINUTES 10 SECONDS EAST 1498.84 FEET ALONG SAID NORTH LINE OF SOUTH 3/15THS OF THE NORTH 9/15THS OF THE SUBDIVISION OF LOTS 18, 19, AND 20; THENCE SOUTH 29 DEGREES 23 MINUTES 47 SECONDS EAST 783.19 FEET MEASURED (782.47 DESCRIPTION) TO THE POINT OF BEGINNING.

TITLE COMMITMENT:

FIRST AMERICAN TITLE INSURANCE COMPANY
FILE NUMBER: NCS-962845.ORL
COMMITMENT DATE: MAY 29, 2019 @ 8:00 A.M.

SCHEDULE B-II EXCEPTIONS:

ITEMS 1 THROUGH 8 ARE STANDARD EXCEPTIONS - NO COMMENT

9. PLAT OF THE HANSON GRANT, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK "B", PAGE 59, IN THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA AND RE-FILED IN IN PLAT BOOK 1, PAGE 11, IN THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.
AFFECTS SUBJECT PARCEL (PARCEL 3) AS SHOWN ON SURVEY

10. PERPETUAL EASEMENT IN FAVOR OF THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, RECORDED APRIL 5, 1994 IN OFFICIAL RECORDS BOOK 1064, PAGE 1040 AND RE-RECORDED IN OFFICIAL RECORDS BOOK 1077, PAGE 2083, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.
AFFECTS SUBJECT PARCEL (PARCEL 3) AS SHOWN ON SURVEY

11. ACCESS AND UTILITY EASEMENT AGREEMENT, RECORDED DECEMBER 30 , 1998 IN OFFICIAL RECORDS BOOK 1360, PAGE 387, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.
AFFECTS SUBJECT PARCEL (PARCEL 3) AS SHOWN ON SURVEY

12. CITY ORDINANCE NO. 2352-2017, RELATED TO ANNEXATION, RECORDED JUNE 8, 2017 IN OFFICIAL RECORDS BOOK 2930, PAGE 845, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.
AFFECTS SUBJECT PARCEL (PARCEL 3) - BLANKET IN NATURE - NOT SHOWN ON SURVEY

13. 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).
NO COMMENT

SURVEYOR'S NOTES:

1. THIS IS A BOUNDARY AND TOPOGRAPHIC SURVEY AS DEFINED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE. SAID SURVEY MEETS THE "STANDARDS OF PRACTICE" FOR SURVEYING AND MAPPING, AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THE TOPOGRAPHIC INFORMATION IS BASED UPON A GROUND SURVEY PERFORMED IN JUNE 2019. THE CONTOUR INTERVAL IS ONE FOOT.
3. THE BOUNDARY SURVEY SHOWN HEREON WAS PREPARED UTILIZING THE DESCRIPTION AS SHOWN IN THE TITLE COMMITMENT AS PROVIDED BY THE CLIENT.
4. THE COORDINATES AND BEARINGS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, 2007 ADJUSTMENT, FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE. THIS REFERENCE WAS ESTABLISHED BY USING TOPCON GR5 RECEIVERS WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION NETWORK AND VERIFIED BY MULTIPLE OCCUPATIONS ON THE FOLLOWING PUBLISHED NATIONAL GEODETIC SURVEY CONTROL POINT:

   PID: AJ5257 - - FOUND FLANGE-ENCASED STAINLESS STEEL ROD STAMPED "GCY D15 2001",
   N: 1023556.75 E: 911406.77
5. THE BEARING BASIS SHOWN HEREON REFERS TO THE OBSERVED BEARING OF SOUTH 29°30'06" EAST FOR THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1.
6. THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED UPON THE FOLLOWING MARTIN COUNTY BENCHMARKS:

   "GP-C.G" - FOUND NAIL & DISK IN CONCRETE SIDEWALK STAMPED "GP-C.G",
   ELEVATION = 16.27 FEET (NAVD 88)

   "IS-6" - FOUND 2" BRASS DISK IN CONCRETE OF A SIGN BASE STAMPED "IS-6",
   ELEVATION = 17.76 FEET (NAVD 88)
7. THIS SURVEY WAS PERFORMED UTILIZING G.P.S.-R.T.K. PROCEDURES AND LIDAR PROCEDURES WITH MULTIPLE MEASUREMENTS, AND HAS A STATISTICAL HORIZONTAL AND VERTICAL POSITIONAL PRECISION OF LESS THAN 0.10 FEET.
8. ALL DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
9. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND SEAL OR ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR.
10. ADDITIONS OR DELETIONS TO THIS SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
11. TABLE "A" ITEM 3: THE LANDS BOUND BY THIS SURVEY ARE LOCATED WITHIN AN AREA HAVING A FLOOD ZONE DESIGNATION "X" (AREA OF MINIMAL FLOOD HAZARD) BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP NUMBERS 12085C0163G AND 12085C0164G, DATED MARCH 16, 2015, WHICH ARE THE CURRENT FLOOD INSURANCE RATE MAPS FOR THE COMMUNITY THESE PARCELS ARE SITUATED IN.
12. TABLE "A" ITEM 4: THE GROSS LAND AREA OF THE SUBJECT PARCELS IS ±13.59 ACRES.
13. TABLE "A" ITEM 6: ZONING INFORMATION SHOWN ACCORDING TO SITE INVESTIGATION REPORT PREPARED BY BOWMAN CONSULTING GROUP.
14. TABLE "A" ITEM 7: THERE ARE NO BUILDINGS ON THE SITE.
15. TABLE "A" ITEM 8: THERE ARE NO PARKING SPACES ON THE SITE.
16. TABLE "A" ITEM 11: NO UNDERGROUND UTILITIES WERE LOCATED OTHER THAN SHOWN.
17. TABLE "A" ITEM 16: THERE IS NO OBSERVABLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
18. TABLE "A" ITEM 17: THERE IS NO OBSERVABLE EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES. THERE IS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
19. THE SURVEY DEPICTS THE SAME PROPERTY CONTAINED IN TITLE COMMITMENT FILE NUMBER: NCS-962854-ORL (PARCELS 1 AND 2) AND NCS-962845-ORL (PARCEL 3) PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY.
20. THE SUBJECT PARCEL IS CONTIGUOUS WITH NO GAPS OR GORES OR OVERLAPS.
21. THE TOPOGRAPHIC ELEVATION INFORMATION SHOWN IS BASED UPON DATA COLLECTED BY BOWMAN CONSULTING GROUP THROUGH THE USE OF AN UNMANNED AERIAL SYSTEM CARRYING A LIDAR SENSOR AND SUPPLEMENTED WITH ADDITIONAL GROUND SURVEY DATA. THE DATA WAS VERIFIED BY GROUND DATA COLLECTION ON THE VARIMUS GROUND CLASSIFICATIONS AND FOUND TO HAVE A VERTICAL ACCURACY OF +/- 0.12 FOOT. HARD SURFACE ELEVATIONS WERE COLLECTED USING STANDARD GROUND BASED SURVEY PROCEDURES.

INDEX OF SHEETS:

SHEET 1 OF 4 LEGAL DESCRIPTIONS; TITLE EXCEPTIONS; LOCATION MAP; SURVEYOR'S NOTES

SHEET 2 OF 4 BOUNDARY SURVEY

SHEET 3 OF 4 TOPOGRAPHIC SURVEY

SHEET 4 OF 4 TOPOGRAPHIC SURVEY

NOT VALID WITHOUT ALL SHEETS LISTED IN INDEX

SURVEYOR'S CERTIFICATION:

TO: **WAYPOINT RESIDENTIAL SERVICES, LLC, A DELAWARE LIMITED LIABILITY COMPANY, ITS SUCCESSORS AND/OR ASSIGNS**
FIRST AMERICAN TITLE INSURANCE COMPANY
GREENBURG TRAURIG, LLP

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, 2, 3, 4, 5, 6(b), 7(a)(b)(1), 8, 9, 11, 13, 16, 17, 20, AND 21 OF TABLE A THEREOF.

PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT PROPER FIELD PROCEDURES, INSTRUMENTATION AND ADEQUATE SURVEY PERSONNEL WERE EMPLOYED IN ORDER TO ACHIEVE RESULTS COMPARABLE TO THOSE OUTLINED IN THE "MINIMUM ANGLE, DISTANCE AND CLOSURE REQUIREMENTS FOR SURVEY MEASUREMENTS WHICH CONTROL LAND BOUNDARIES FOR ALTA/NSPS LAND TITLE SURVEYS."

ALSO

I FURTHER CERTIFY, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY SHOWN HEREON WAS PREPARED IN ACCORDANCE WITH THE "STANDARDS OF PRACTICE" FOR SURVEYING AND MAPPING IN THE STATE OF FLORIDA AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

JUNE 26, 2019
DATE OF LAST FIELDWORK FLORIDA

RICHARD E. BARNES, JR.
SURVEYOR AND MAPPER
REGISTRATION No. 5173

BOWMAN CONSULTING GROUP, LTD., INC.
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER 8030
(LB 8030 = LICENSED BUSINESS NUMBER 8030)

Bowman CONSULTING

Bowman Consulting Group, Ltd.
301 SE Ocean Blvd, Suite 301
Stuart, FL 34994
Phone: (772) 335-1413
Fax: (772) 220-7561
www.bowmanconsulting.com
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COVER SHEET
SPRINGTREE HOMES
STUART
MARTIN COUNTY FLORIDA

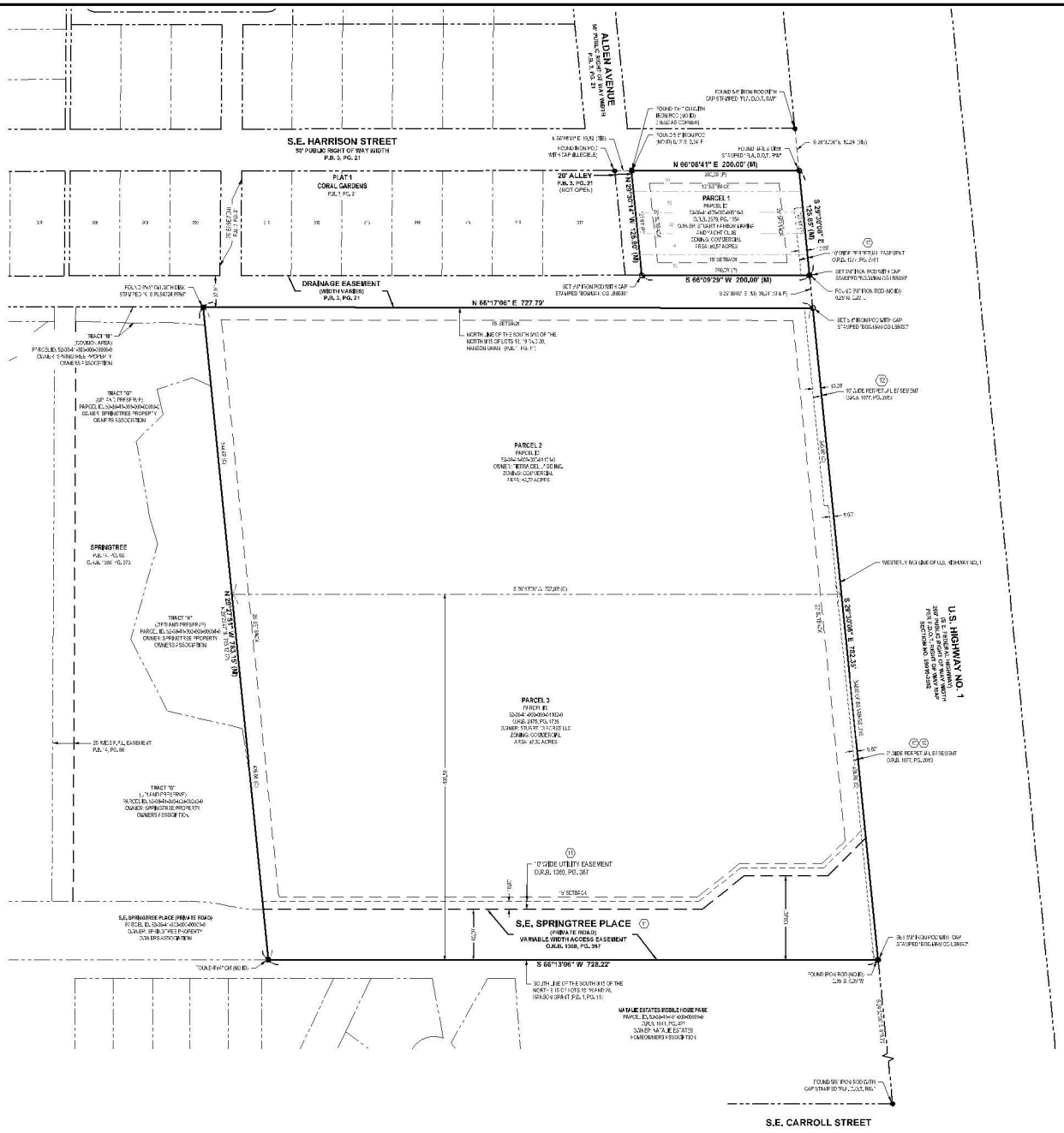
PROJECT NO.
30210-01-001

REVISIONS	
DATE	DESCRIPTION

10-180 JS FIELD	RT DRAWN	RB CHKD

SCALE: N/A
JOB No. 30210-01-001
DATE: 5/28/2019
FILE: 30210-D-BP-001

SHEET 1 OF 4



0 60 120 Feet

THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 60' OR SMALLER

LEGEND:

ARV	AIR RELEASE VALVE
BFP	BACKFLOW PREVENTER
(C)	CALCULATED DATA
CLF	CHAINLINK FENCE
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CRB	COMMUNICATIONS RISER BOX
CONC.	CONCRETE
(D)	DEED DATA
E	EASTING
EL.	ELEVATION
FH	FIRE HYDRANT
F.P.L.	FLORIDA POWER AND LIGHT COMPANY
F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION
G.P.S.	GLOBAL POSITIONING SYSTEM
HDPE	HIGH DENSITY POLYETHYLENE PIPE
ID.	IDENTIFICATION
INV	INVERT
LP	LIGHT POLE
(M)	MEASURED DATA
N.	NORTHING
NAVD	NORTH AMERICAN VERTICAL DATUM
O.R.B.	OFFICIAL RECORDS BOOK
(P)	PLAT DATA
P.B.	PLAT BOOK
PG.	PAGE
PVC	POLYVINYLCHLORIDE PIPE
R/W	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
R.T.K.	REAL TIME KINEMATIC
SV	SEWER VALVE
TYP.	TYPICAL
WV	WATER VALVE
	IRRIGATION CONTROL VALVE
	FIBER OPTIC HANDHOLE
	FIBER OPTIC MARKER
	SIGN
	GUY ANCHOR
	CONCRETE POWER POLE
	WOOD POWER POLE
	SEWER MANHOLE
	STORM MANHOLE
	STORM INLET
	TELEPHONE MANHOLE
	TRAFFIC SIGNAL HANDHOLE
	FOUND CONCRETE MONUMENT WITH IDENTIFICATION
	NAIL & DISK WITH IDENTIFICATION
	FOUND IRON ROD OR PIPE WITH IDENTIFICATION
	SET 5/8" IRON ROD WITH CAP STAMPED "BOWMAN CG LB8000"
	DENOTES TITLE COMMITMENT EXCEPTION NUMBER
	CONTOUR LINE
	FENCE LINE
OHE	OVERHEAD ELECTRICAL
x 10.28	SPOT ELEVATION
	ASPHALT PAVEMENT
	CONCRETE

TREE LEGEND:

	OAK TREE WITH SIZE
	PALM TREE WITH SIZE
	PINE TREE WITH SIZE
	UNKNOWN TREE WITH SIZE

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BOUNDARY SURVEY
SPRINGTREE HOMES
STUART

FLORIDA

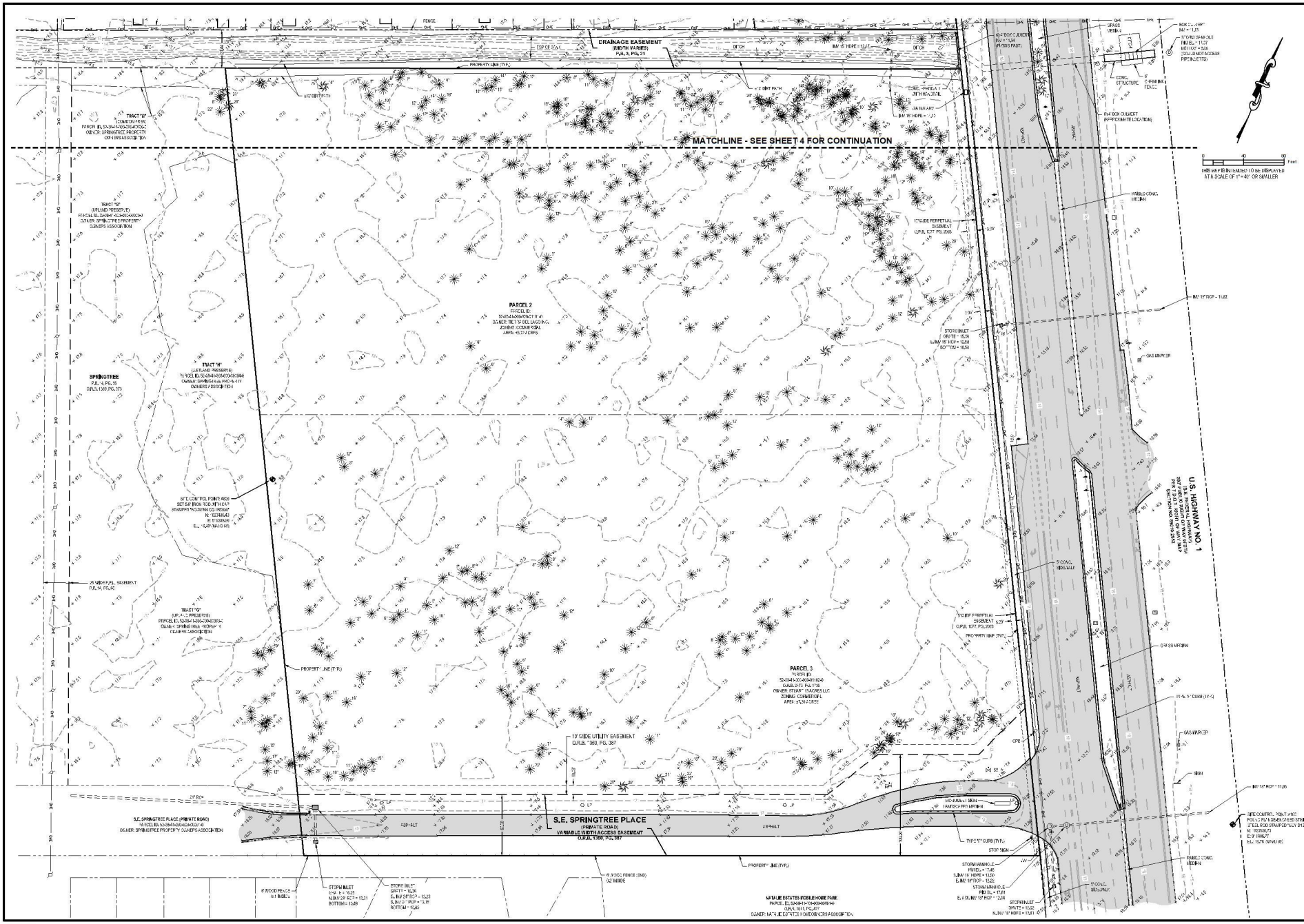
MARTIN COUNTY

PROJECT NO.
30210-01-001

REVISIONS	
DATE	DESCRIPTION
10-18-19	
JS FIELD	RT DRAWN / RB CHKD

SCALE: 1" = 60'
JOB No. 30210-01-001
DATE: 5/28/2019
FILE: 30210-D-BP-001

SHEET 2 OF 4



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TOPOGRAPHIC SURVEY
SPRINGTREE HOMES
STUART
MARTIN COUNTY FLORIDA

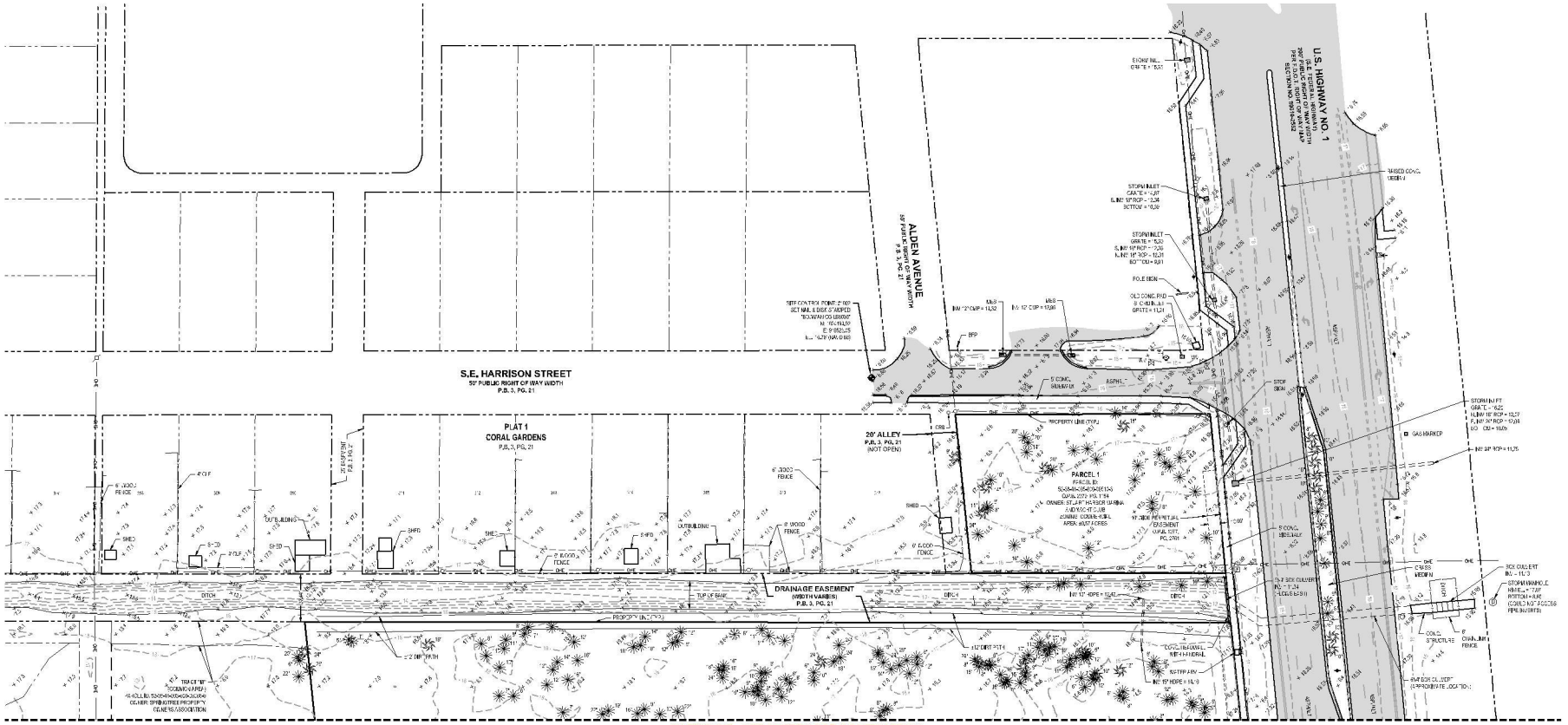
PROJECT NO.
30210-01-001

REVISIONS

DATE	DESCRIPTION
10-18-19	JS

FIELD	DRAWN	CHKD
	RT	RB

SCALE: 1" = 40'
JOB No. 30210-01-001
DATE: 5/28/2019
FILE: 30210-D-BP-001
SHEET 3 OF 4



THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 40' OR SMALLER

0 40 80 Feet

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TOPOGRAPHIC SURVEY
SPRINGTREE HOMES
STUART
FLORIDA
MARTIN COUNTY

PROJECT NO.
30210-01-001

REVISIONS

DATE	DESCRIPTION
10-18-19	

JS	RT	RB
FIELD	DRAWN	CHKD

SCALE: 1" = 40'
JOB No. 30210-01-001
DATE: 5/28/2019
FILE: 30210-D-BP-001

SHEET 4 OF 4



03092020 CC M

Existing Tree Chart

Tree No.	Species	Size DBH	Protected	Status
1	Slash Pine	20	Yes	Remove
2	Slash Pine	20	Yes	Remove
3	Slash Pine	14	Yes	Remove
4	Slash Pine	15	Yes	Remove
5	Slash Pine	8	No	Preserve
6	Slash Pine	7	No	Preserve
7	Slash Pine	8	No	Preserve
8	Slash Pine	14	Yes	Preserve
9	Slash Pine	7	No	Preserve
10	Slash Pine	10	Yes	Preserve
11	Slash Pine	8	No	Preserve
12	Slash Pine	8	No	Preserve
13	Slash Pine	8	No	Preserve
14	Slash Pine	8	No	Preserve
15	Slash Pine	8	No	Preserve
16	Slash Pine	6	No	Preserve
17	Slash Pine	12	Yes	Preserve
18	Slash Pine	8	No	Preserve
19	Slash Pine	10	Yes	Preserve
20	Slash Pine	12	Yes	Preserve
21	Slash Pine	16	Yes	Remove
22	Slash Pine	16	Yes	Preserve
23	Slash Pine	24	Yes	Preserve
24	Slash Pine	8	No	Preserve
25	Slash Pine	8	No	Preserve
26	Slash Pine	10	Yes	Preserve
27	Sabal Palm	26	No	Preserve
28	Live Oak	5	Yes	Preserve
29	Live Oak	4	No	Preserve
30	Sabal Palm	18	No	Preserve
31	Slash Pine	8	No	Preserve
32	Slash Pine	11	Yes	Preserve
33	Slash Pine	10	Yes	Preserve
34	Slash Pine	11	Yes	Preserve
35	Slash Pine	8	No	Preserve
36	Slash Pine	7	No	Preserve
37	Slash Pine	8	No	Preserve
38	Slash Pine	12	Yes	Preserve
39	Slash Pine	14	Yes	Preserve
40	Slash Pine	13	Yes	Preserve
41	Slash Pine	12	Yes	Preserve
42	Slash Pine	16	Yes	Preserve
43	Slash Pine	16	Yes	Preserve
44	Slash Pine	10	Yes	Preserve
45	Slash Pine	12	Yes	Preserve
Tree No.	Species	Size DBH	Protected	Status
46	Slash Pine	18	Yes	Preserve
47	Slash Pine	14	Yes	Preserve
48	Slash Pine	12	Yes	Preserve
49	Slash Pine	8	Yes	Preserve
50	Slash Pine	12	Yes	Preserve
51	Slash Pine	13	Yes	Preserve
52	Slash Pine	24	Yes	Preserve
53	Slash Pine	16	Yes	Preserve
54	Slash Pine	16	Yes	Preserve
55	Live Oak	8	Yes	Preserve
56	Slash Pine	11	Yes	Preserve
57	Slash Pine	11	Yes	Preserve
58	Slash Pine	9	No	Preserve
59	Slash Pine	10	Yes	Remove
60	Slash Pine	10	Yes	Remove
61	Slash Pine	10	Yes	Remove
62	Slash Pine	8	No	Preserve
63	Slash Pine	8	No	Preserve
64	Slash Pine	10	Yes	Remove
65	Slash Pine	12	Yes	Remove
66	Slash Pine	8	No	Preserve
67	Slash Pine	6	No	Preserve
68	Slash Pine	6	No	Preserve
69	Slash Pine	10	Yes	Preserve
70	Sabal Palm	24	No	Preserve
71	Slash Pine	18	Yes	Preserve
72	Slash Pine	24	Yes	Preserve
73	Slash Pine	24	Yes	Preserve
74	Slash Pine	8	No	Preserve
75	Slash Pine	15	Yes	Preserve
76	Slash Pine	24	Yes	Preserve
77	Slash Pine	20	Yes	Preserve
78	Slash Pine	8	No	Preserve
79	Slash Pine	12	Yes	Preserve
80	Slash Pine	12	Yes	Preserve
81	Slash Pine	11	Yes	Preserve
82	Slash Pine	13	Yes	Preserve
83	Slash Pine	24	Yes	Preserve
84	Slash Pine	8	No	Preserve
85	Slash Pine	15	Yes	Preserve
86	Slash Pine	18	Yes	Preserve
87	Slash Pine	16	Yes	Preserve
88	Slash Pine	10	Yes	Preserve
89	Slash Pine	16	Yes	Preserve
90	Slash Pine	15	Yes	Preserve

Tree No.	Species	Size DBH	Protected	Status
91	Slash Pine	31	Yes	Preserve
92	Slash Pine	9	No	Preserve
93	Slash Pine	8	No	Preserve
94	Slash Pine	10	Yes	Remove
95	Slash Pine	14	Yes	Remove
96	Slash Pine	20	Yes	Remove
97	Slash Pine	14	Yes	Remove
98	Slash Pine	10	Yes	Remove
99	Slash Pine	12	Yes	Remove
100	Slash Pine	11	Yes	Remove
101	Slash Pine	10	Yes	Remove
102	Slash Pine	12	Yes	Remove
103	Slash Pine	12	Yes	Remove
104	Slash Pine	10	Yes	Remove
105	Slash Pine	12	Yes	Remove
106	Slash Pine	12	Yes	Remove
107	Slash Pine	10	Yes	Remove
108	Slash Pine	10	Yes	Remove
109	Slash Pine	12	Yes	Remove
110	Slash Pine	14	Yes	Remove
111	Slash Pine	10	Yes	Remove
112	Slash Pine	12	Yes	Remove
113	Slash Pine	10	Yes	Remove
114	Slash Pine	16	Yes	Remove
115	Slash Pine	18	Yes	Remove
116	Slash Pine	20	Yes	Remove
117	Slash Pine	14	Yes	Remove
118	Slash Pine	24	Yes	Remove
119	Slash Pine	20	Yes	Remove
120	Slash Pine	12	Yes	Remove
121	Slash Pine	24	Yes	Remove
122	Slash Pine	12	Yes	Remove
123	Slash Pine	30	Yes	Remove
124	Slash Pine	12	Yes	Remove
125	Slash Pine	11	Yes	Remove
126	Slash Pine	24	Yes	Remove
127	Slash Pine	16	Yes	Remove
128	Slash Pine	14	Yes	Remove
129	Slash Pine	12	Yes	Remove
130	Slash Pine	30	Yes	Remove
131	Slash Pine	22	Yes	Remove
132	Slash Pine	30	Yes	Remove
133	Slash Pine	36	Yes	Remove
134	Slash Pine	35	Yes	Remove
135	Slash Pine	22	Yes	Remove
Tree No.	Species	Size DBH	Protected	Status
136	Slash Pine	24	Yes	Remove
137	Slash Pine	10	Yes	Remove
138	Slash Pine	14	Yes	Remove
139	Slash Pine	10	Yes	Remove
140	Slash Pine	13	Yes	Remove
141	Slash Pine	10	Yes	Remove
142	Slash Pine	10	Yes	Remove
143	Slash Pine	10	Yes	Remove
144	Slash Pine	15	Yes	Remove
145	Slash Pine	12	Yes	Remove
146	Slash Pine	12	Yes	Remove
147	Slash Pine	12	Yes	Remove
148	Slash Pine	10	Yes	Remove
149	Slash Pine	13	Yes	Remove
150	Slash Pine	14	Yes	Remove
151	Slash Pine	12	Yes	Remove
152	Slash Pine	12	Yes	Remove
153	Slash Pine	12	Yes	Remove
154	Slash Pine	12	Yes	Remove
155	Slash Pine	12	Yes	Remove
156	Slash Pine	20	Yes	Remove
157	Slash Pine	16	Yes	Remove
158	Slash Pine	12	Yes	Remove
159	Slash Pine	10	Yes	Remove
160	Slash Pine	16	Yes	Remove
161	Slash Pine	14	Yes	Remove
162	Slash Pine	12	Yes	Remove
163	Slash Pine	14	Yes	Remove
164	Slash Pine	14	Yes	Remove
165	Slash Pine	20	Yes	Remove
166	Slash Pine	14	Yes	Remove
167	Slash Pine	20	Yes	Remove
168	Slash Pine	12	Yes	Remove
169	Slash Pine	14	Yes	Remove
170	Slash Pine	12	Yes	Remove
171	Slash Pine	10	Yes	Remove
172	Slash Pine	10	Yes	Remove
173	Slash Pine	12	Yes	Remove
174	Slash Pine	10	Yes	Remove
175	Slash Pine	12	Yes	Remove
176	Slash Pine	12	Yes	Remove
177	Slash Pine	10	Yes	Remove
178	Slash Pine	10	Yes	Remove
179	Slash Pine	8	No	Remove
180	Slash Pine	10	Yes	Remove

Tree No.	Species	Size DBH	Protected	Status
181	Slash Pine	14	Yes	Remove
182	Slash Pine	14	Yes	Remove
183	Slash Pine	6	No	Remove
184	Slash Pine	12	Yes	Remove
185	Slash Pine	12	Yes	Remove
186	Slash Pine	10	Yes	Remove
187	Slash Pine	12	Yes	Remove
188	Slash Pine	12	Yes	Remove
189	Slash Pine	10	Yes	Remove
190	Slash Pine	11	Yes	Remove
191	Slash Pine	12	Yes	Remove
192	Slash Pine	12	Yes	Remove
193	Slash Pine	12	Yes	Remove
194	Slash Pine	8	No	Preserve
195	Slash Pine	6	No	Preserve
196	Slash Pine	7	No	Preserve
197	Slash Pine	8	No	Preserve
198	Slash Pine	20	Yes	Preserve
199	Slash Pine	11	Yes	Preserve
200	Slash Pine	14	Yes	Remove
201	Slash Pine	6	No	Preserve
202	Slash Pine	10	Yes	Preserve
203	Slash Pine	8	No	Preserve
204	Slash Pine	8	No	Preserve
205	Slash Pine	11	Yes	Preserve
206	Slash Pine	16	Yes	Preserve
207	Slash Pine	20	Yes	Preserve
208	Slash Pine	20	Yes	Preserve
209	Slash Pine	11	Yes	Preserve
210	Slash Pine	6	No	Remove
211	Slash Pine	18	Yes	Preserve
212	Slash Pine	15	Yes	Remove
213	Slash Pine	18	Yes	Remove
214	Slash Pine	20	Yes	Remove
215	Slash Pine	10	Yes	Remove
216	Slash Pine	11	Yes	Remove
217	Slash Pine	10	Yes	Remove
218	Slash Pine	11	Yes	Remove
219	Slash Pine	28	Yes	Remove
220	Slash Pine	19	Yes	Remove
221	Slash Pine	22	Yes	Remove
222	Slash Pine	18	Yes	Remove
223	Slash Pine	20	Yes	Remove
224	Slash Pine	20	Yes	Remove
225	Slash Pine	16	Yes	Remove
Tree No.	Species	Size DBH	Protected	Status
226	Slash Pine	14	Yes	Remove
227	Slash Pine	10	Yes	Remove
228	Slash Pine	18	Yes	Remove
229	Slash Pine	24	Yes	Remove
230	Slash Pine	20	Yes	Remove
231	Slash Pine	24	Yes	Remove
232	Slash Pine	14	Yes	Remove
233	Slash Pine	12	Yes	Remove
234	Slash Pine	18	Yes	Remove
235	Slash Pine	16	Yes	Remove
236	Slash Pine	14	Yes	Remove
237	Slash Pine	12	Yes	Remove
238	Slash Pine	12	Yes	Remove
239	Slash Pine	19	Yes	Remove
240	Slash Pine	18	Yes	Remove
241	Slash Pine	12	Yes	Remove

Legend

- Ex. Trees to be Preserved
- Ex. Trees to be Removed

Protected Tree Removal Summary

Protected Specimen Trees (Hardwood)

Total Inches (DBH) to be Removed	0 Inches
Total Inches (DBH) for Replacement	0 Inches

Protected Specimen Pines (Softwood)

Total Inches (DBH) to be Removed	1,945 Inches
Total Inches (DBH) to be Replaced (1,945 x 1.5)	2,917.5 Inches

Notes

1. See Sheet LP-5 for applicable details and notes related to Tree Protection Barricades.
2. See Tree Mitigation data on Sheet LP-2 for proposed replacement inches.

Scale: 1" = 50'

0' 25' 50' 100' 150'

North

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STUART - SPRINGTREE

Florida

City of Stuart

Existing Tree Survey / Removal Plan

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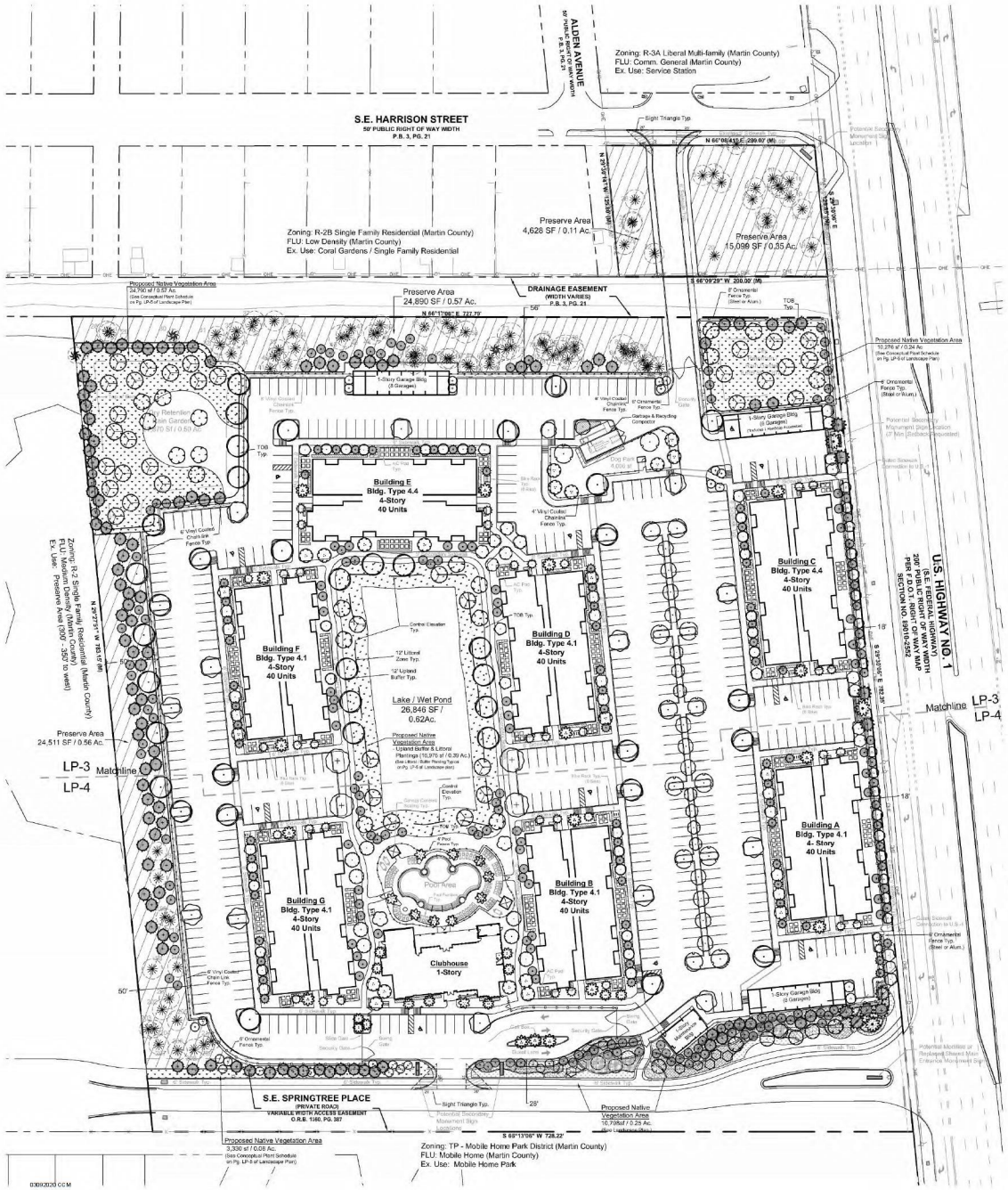
Job No. 19029
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 10-09-19
12-02-19 1-07-20
Revision Dates 2-11-20

LP-1



Landscape Data

Required Landscape Area (20% of the total site gross area)

Total Gross Site Area	13.59 Ac. / 592,032 sf
Required Area (592,032 sf x 20%)	2.72 Ac. / 118,407 sf
Provided Area	5.62 Ac. / 245,014 sf (41%)

1 Tree per 1,500 sf of Development Site (Min. 50% Shade Trees)

Development Site (excludes ex. on-site preserve area)	522,811 sf (12.0 Ac.)
Total Trees Required (522,811 sf / 1,500 sf)	**349 Total Trees**
Total Trees Provided	**349 Total Trees**
Shade Trees	276 Trees
Palms @ 1:1 Ratio	39 Trees
Palms @ 2:1 Ratio	34 Trees (68 Palms / 2)
Total Req. Trees Provided	349 Trees

*Note: Does not include additional trees provided for mitigation / tree replacement. See data below.

Shade Tree Requirement (Minimum 50% of Required Trees)

Shade Trees Required (349 Required Trees x 50%)	175 Trees (50%)
Shade Trees Provided	276 Trees (79%)

Native Tree Requirement (Minimum 50% of Required Trees)

Native Trees Required (349 Req. Trees x 50%)	175 Trees (50%)
Native Trees Provided	185 Trees (53%)

Perimeter Landscape Buffer Requirements

Between Parking Areas and Abutting Right-of-way: (East Property)

A landscaped strip of land not less than ten feet in depth shall be located between parking areas and the abutting right-of-way / street, 1 tree for every 25 LF of required landscape strip. A hedge, wall, berm or other durable landscape barrier placed in a continuous manner.

Adjacent to U.S. Highway No. 1 (East Property) : 186 LF

Trees Required: (186 LF / 25)	8 Trees
Trees Provided:	8 Trees
Shade Trees	7 Trees
Palms @ 2:1 Ratio	1 Tree (2 Palms / 2)
Trees Provided	8 Trees

Transitional Landscape Buffer: (North Property)

One Tree Per 30 LF. Buffer shall include a buffer screen the width of which is 25 percent of the width of the required buffer. The buffer screen shall include a six-foot high wall or fence.
Sec. 6.04.06 B (4) - No Structure, mechanical equipment, trash receptacles, parking area or internal driveways shall be located in the common boundary buffer within 15 feet of the property line.

North Property abutting Single family: 564 LF

Required Buffer Width :	50' (25' + 10' for each additional bldg. story)
Provided Buffer Width :	56' Average
Required Buffer Screen :	13.75 ' (55' Buffer width x 25%)
Provided Buffer Screen :	50' Average Ex. Preserve / Native Vegetation Area

Trees Required / Provided: N/A, 50' Average Existing Preserve / Naive Vegetation Area Provided

Parking Area Landscaping adjacent to streets: (South Property)

A landscaped strip of land not less than ten feet in width shall be located between the parking area and the abutting street, 1 tree for every 30 LF of required landscape strip. A hedge, wall, berm or other durable landscape barrier placed in a continuous manner.

Adjacent to SE Springtree Place: 605 LF

Trees Required:(605 LF / 30)	20 Trees
Trees Provided:	25 Trees
Shade Trees	19 Trees
Palms @ 2:1 Ratio	6 Trees (10 Palms / 2)
Trees Provided	25 Trees

West Property Landscape Buffer: (No Landscape Buffer Required)

The abutting property to the westis undeveloped and is an existing preserve tract for the adjacent single family Springtree development. We are providing an enhanced 50' preserve area alorg the west property with additional 128 proposed native trees as shown on plan. This provides a much larger connected preserve area with a continuation of the existing native vegetation / habitat.

Interior / Parkirg Area Landscape Requirements

Required Landscaping between Building Walls and Parking Areas:

Multi-family development shall provide a landscaped strip between the building walls and parking areas. 1 Tree per 20 LF and continuous hedge shall be placed between the building perimeter which is adjacent to parking areas. LF calculations shall exclude building entrances and A/C pads.

Building Type 4.1 : 1,100 LF Total (220 LF per building x 5 building)	
Trees Required: (1,100 LF / 20)	55 Trees
Trees Provided:	56 Trees
Building Type 4.4 : 476 LF Total (238 LF per building x 2 building)	
Trees Required: (476 LF / 20)	24 Trees
Trees Provided:	24 Trees
Clubhouse : 100 LF Total (100 LF per building x 1 building)	
Trees Required: (100 LF / 20)	5 Trees
Trees Provided:	6 Trees
Total Trees Required:	84 Trees
Total Trees Provided:	86 Trees
Shade Trees	48 Trees (57%)
Palms @ 1:1 Ratio	20 Trees
Palms @ 2:1 Ratio	18 Trees (36 Palms / 2)
Trees Provided	86 Trees

Interior / Terminal Landscape Island Requirement:

Each interior island shall contain a min. of 1 tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24". Not less than 50% of trees used in parking area interior landscaping shall be shade trees.

Trees Required:	69 Trees
Trees Provided:	70 Trees
Shade Trees	60 Trees (87%)
Palms @ 1:1 Ratio	3 Trees
Palms @ 2:1 Ratio	7 Trees (14 Palms / 2)
Trees Provided	70 Trees

Interior Parking Median Requirement:

Interior landscaped medians shall be provided between every interior row of parking spaces and not less than six feet in width. Interior meciars shall be landscaped with not less than 1 tree every 20 LF. No trees shall be located more than 50 feet apart. Any hedge materials located within an interior landscaped median shall be maintained at a Max. height 24 ".

Total LF of Parking Median : 365 LF

Trees Required: (365 LF / 20)	18 Trees
Trees Provided:	18 Trees (18 Shade Trees / 100%)

* Tree Replacement / Mitigation Data

Trees provided for Mitigation / Tree replacement are in addition to required trees per Section 6.04 Landscaping.

Protected Specimen Trees (Hardwood):

Inches to be Removed	0 Inches
Required Replacement Inches	0 Inches

Protected Specimen Pines (Softwood):

Inches to be Removed	1,945 Inches
Required Replacement Inches (1,945 x 1.5)	2,917.5 Inches
Provided On-site Replacement Inches	2,932 Inches
107 - Slash Pines @ 2.5" DBH	267.5 inches
8 - Royal Palms @ 18' CT	68 inches
40 - Sabal Palms @ 18' CT	260 inches
70 - Sabal Palms @ 18' CT	595 inches
60 - Sabal Palms @ 22' CT	750 inches
20 - Washingtonia Palms @ 18' CT	170 inches
53 - Washingtonia Palms @ 25' CT	821.5 inches
Total inches Provided	2,932 inches

Notes:
- See "Trees for Mitigation" Category within Tree Schedule on Sheet LP-5 for total provided mitigation inches per tree
- Additional trees provided for Mitigation are shown on plan with gray solid hatch

Legend

Existing Trees to be Preserved
(See Existing Tree Chart on Sheet LP-1 for more detailed info)

Ex. Preserve Area

Proposed Native Vegetation Area

Scale: 1" = 50'

0' 25' 50' 100' 150'

North

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City of Stuart
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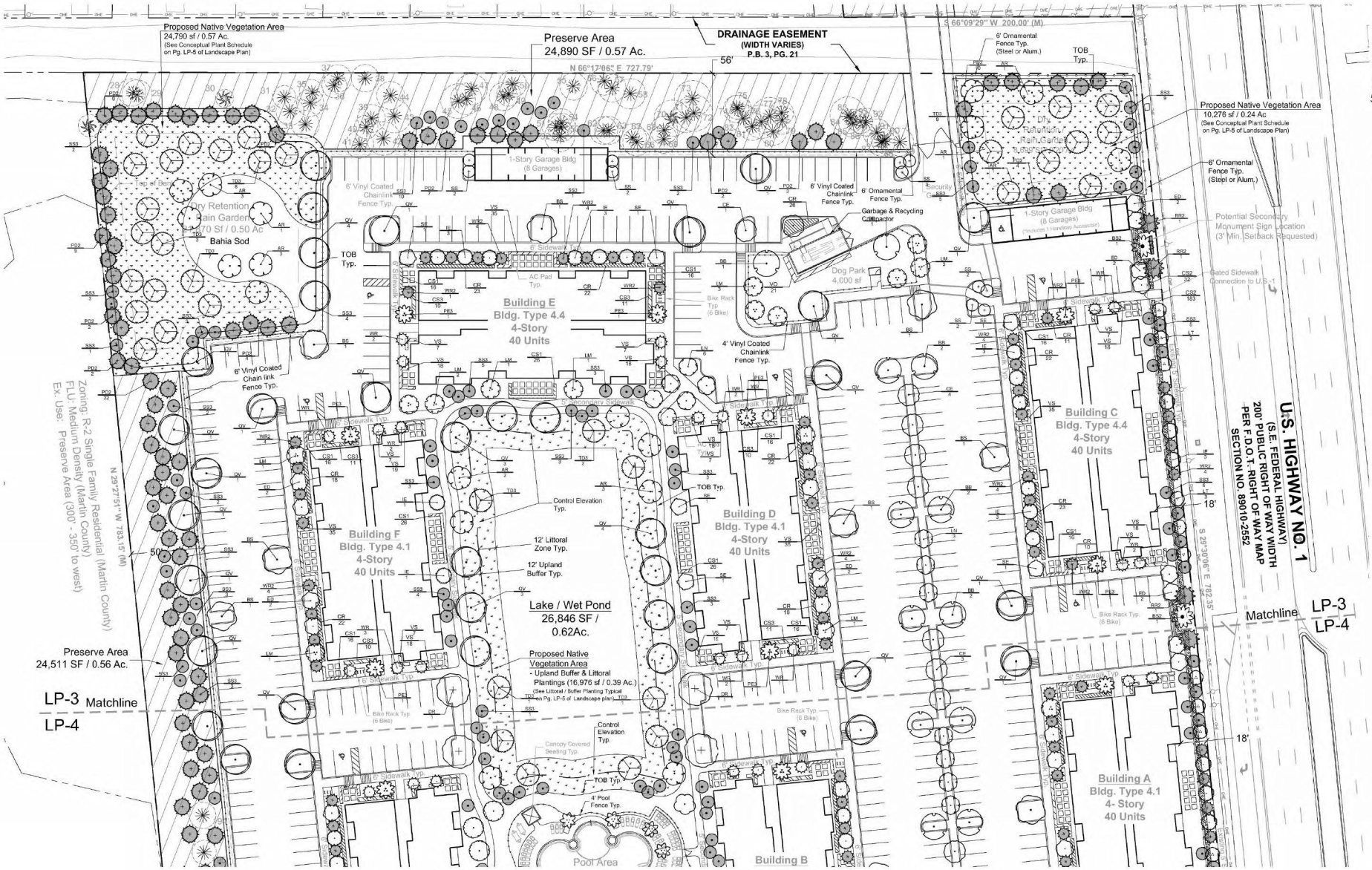
Job No. 19029
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 10-09-19
12-02-19 1-07-20
Revision Dates 2-11-20

LP-2



Legend

Existing Trees to be Preserved
(See Existing Tree Chart on Sheet LP-1 for more detailed info)

Ex. Preserve Area

Proposed Native Vegetation Area

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

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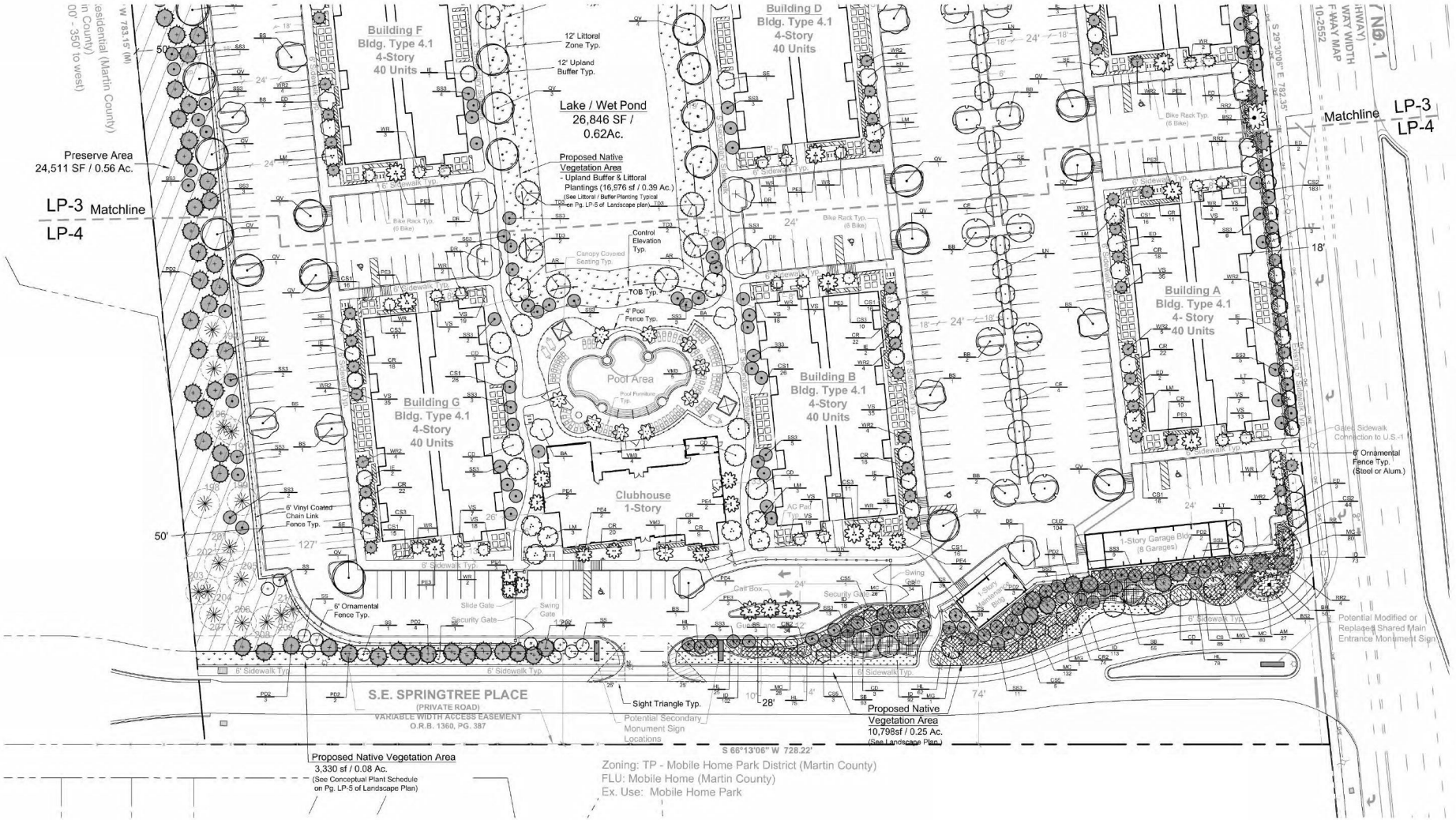
Job No. 19029
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 10-09-19
12-02-19 1-07-20
Revision Dates 2-11-20

LP-3



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STUART - SPRINGTREE

City of Stuart Florida

Landscape Plan

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Legend

- # Existing Trees to be Preserved (See Existing Tree Chart on Sheet LP-1 for more detailed info)
- Ex. Preserve Area
- Proposed Native Vegetation Area

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

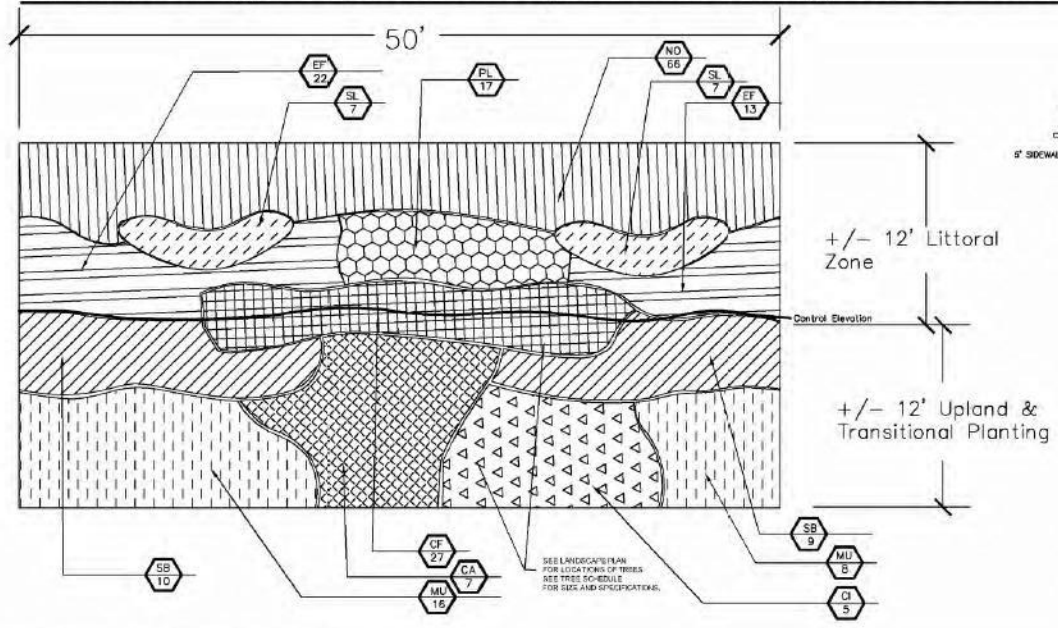
Job No.	19029
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	10-09-19
	12-02-19 1-07-20
Revision Dates	2-11-20

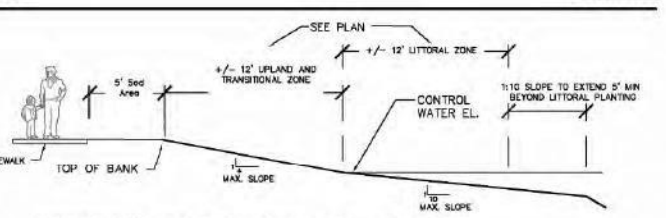
LP-4

03092020 CC M

50' Section of Typical Lake Littoral & Upland Buffer Planting Zone - 24" Width

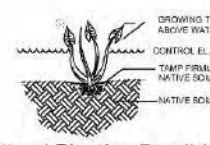
N.T.S.





Littoral / Upland Buffer Zone - Cross Section

N.T.S.



Littoral Planting Detail / Notes

N.T.S.

1. ALL PLANT MATERIALS SHALL BE PLANTED AND MAINTAINED IN A NATURAL ARRANGEMENT.
2. LITTORAL PLANTING ESTABLISHMENT SHALL BE COMPLETED ON STABILIZED SLOPES CONFORMING TO GRADES SET FROM CONTROL ELEVATION AND THE APPROVED CONSTRUCTION DRAWINGS.
3. PLANT SPECIES MAY BE SUBSTITUTED WITH SIMILAR NATIVE SPECIES INDIGENOUS TO THE REGION BASED ON AVAILABILITY FROM LOCAL NATIVE NURSERIES.
4. THE SLOPES OF CONSTRUCTED LAKE FROM THE TOP OF THE BANK TO THE CONTROL ELEVATION SHALL BE IMMEDIATELY STABILIZED AND / OR SODDED TO THE SATISFACTION OF THE GROWTH MANAGEMENT DEPARTMENT UPON COMPLETION OF THE LAKE CONSTRUCTION.

Plant List - Upland Buffer Zone

QTY (50' TYP)	QTY (TOTAL)	SYMBOL	SPECIES(BOTANICAL/COMMON)	SPECIFICATION
19	270	SB*	SPARTINA BAKERI / SMOOTH CORDGRASS	3' O.C., 1 GAL, FULL
7	100	CA*	CALLICARPA AMERICANA / BEAUTYBERRY	5' O.C., 3 GAL, FULL
24	341	MU*	MUHLENBERGIA CAPILLARIS / MUHLY GRASS	3' O.C., 1 GAL, FULL
5	71	CI*	CHRYSOBALANUS ICACO / COCOPLUM	5' O.C., 3 GAL, FULL

*=FLORIDA NATIVE

Plant List - Littoral Zone

QTY (50' TYP)	QTY (TOTAL)	SYMBOL	SPECIES(BOTANICAL/COMMON)	SPECIFICATION
14	199	SL*	SAGITTARIA LATIFOLIA / DUCK POTATO	2' O.C., BARE ROOT
66	937	NO*	NYMPHEA ODORATA / FRAGRANT WATER LILY	2' O.C., BARE ROOT
35	497	EF*	ELEOCHARIS FLAVESCENS / SPIKE RUSH	2' O.C., BARE ROOT
27	383	CF*	CANNA FLACCIDA / GOLDEN CANNA LILY	2' O.C., BARE ROOT
17	241	PL*	PONTEDERIA LANCEOLATA / PICKEREL WEED	2' O.C., BARE ROOT

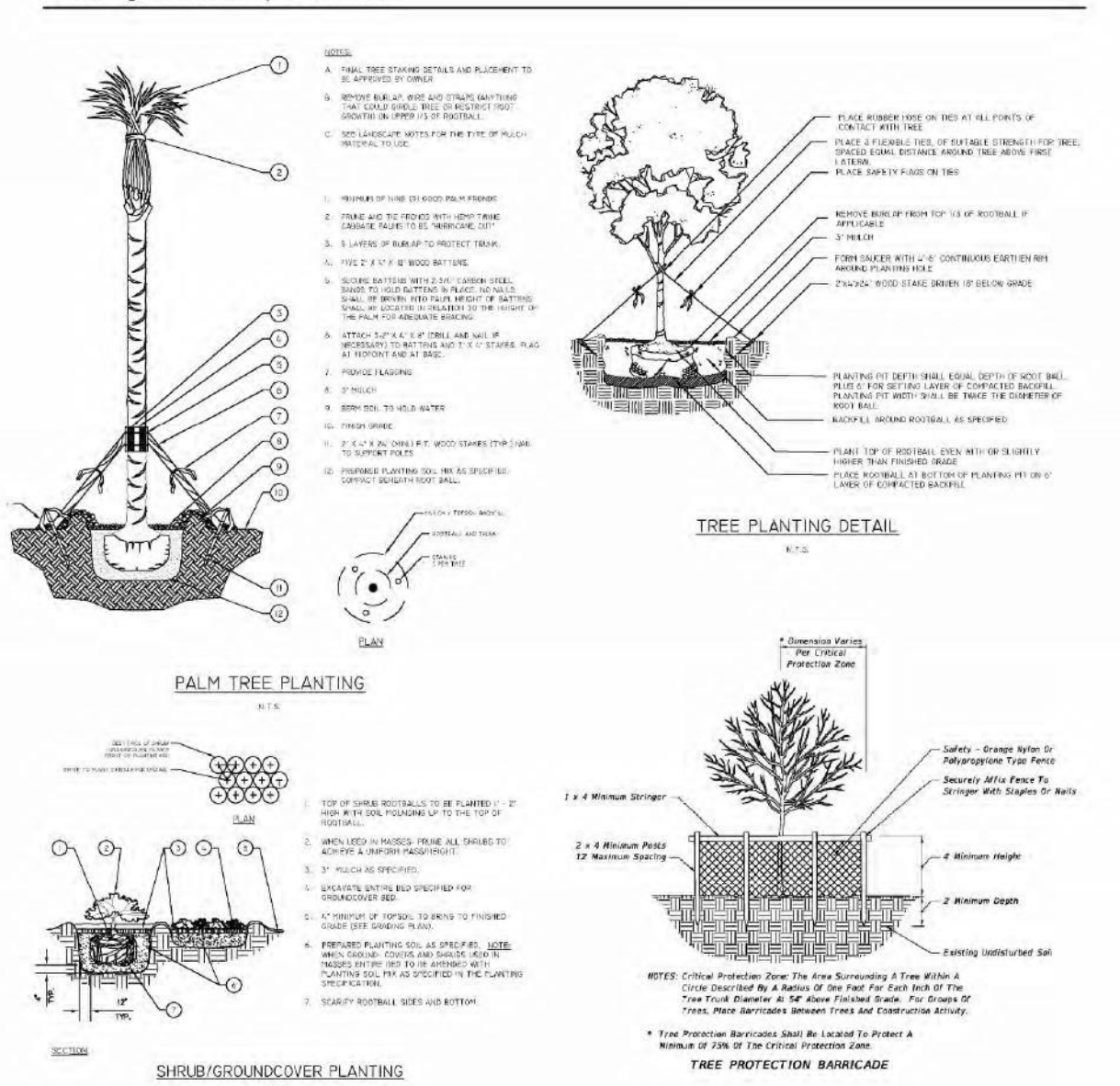
*=FLORIDA NATIVE

* QUANTITIES ARE FOR A TYPICAL 50' SECTION. LINEAR FOOTAGE OF LITTORAL / UPLAND BUFFER SHOWN AROUND PERIMETER OF LAKE IS 712 LF. THEREFORE QUANTITIES SHOULD BE MULTIPLIED BY 14.2 (712 LF / 50) AS SHOWN ABOVE . SEE LANDSCAPE PLAN FOR LOCATION OF TREES. SEE TREE SCHEDULE FOR SIZE AND SPECIFICATIONS.

Proposed Native Vegetation Area - Conceptual Plant Schedule

SPECIES	QTY	SIZE	% / SPACING
Chrysobalanus icaco / Coco Plum	278	3 gal	20% @ 60" oc
Muhlenbergia capillaris / Pink Muhly	772	1 gal	20% @ 36" oc
Myrica cerifera / Wax Myrtle	139	3 gal	10% @ 60" oc
Serenoa repens / Saw Palmetto	386	1 gal	10% @ 36" oc
Spartina bakeri / Sand Cord Grass	1,543	1 gal	40% @ 36" oc

Planting / Landscape Details



03092020 CCM

General Landscape Notes

1. Plant materials used in conformance with the provisions of this landscape code shall conform to the Standards for Florida No. 1 or better as given in "Grades and Standards for Nursery Plants" Part I and Part II, 1963, State of Florida, Department of Agriculture, Tallahassee.
2. Tree locations may be adjusted for sitepermit application based on final construction and utility plans. Alternative plant species and enhanced landscaping beyond minimum requirements may be permitted subject to review and approval by the City of Stuart prior to installation. Trees and shrubs may be substituted based on availability.
3. For existing or proposed utilities no tree shall be planted where it could, at mature height conflict with overhead power lines. Large trees (height at maturity of no more than 30') from the nearest overhead power line. Medium height tree (height at maturity between 20' and 30' shall be offset at least 20') and small trees (height at maturity of less than 20') require no offset. Palms should be planted at a distance equal to or greater than the average frond length plus two (2) feet from power lines.
5. No tree, shrubs, hedges or vines shall be planted within 5' of an existing or proposed utility pole, guy wire or pad-mounted transformer. Tree species shall be selected as to minimize conflicts with existing or proposed utilities.
6. Ground cover used in lieu of grass shall be planted so as to present a finished appearance and reasonable complete coverage within three months of installation. All landscaped areas shall be sodded or otherwise covered with ground cover.
7. Mulch shall be installed in all planting areas to a minimum depth of three inches. The use of cypress mulch is prohibited
8. All landscaping within a visibility triangle shall provide unobstructed cross-visibility at a level between three feet and six feet and shall comply with the most current edition of the State of Florida DOT Roadway and Traffic Design Standards, Index 546 regarding visibility triangles.
9. Any hedge materials located within an interior landscaped island shall be maintained at a height of not more than 24 inches.
10. All above ground utilities shall be screened in accordance with City of Stuart requirements.
11. All required landscaping installed pursuant to this landscape code shall be installed according to accepted good planting practices.
12. All prohibited, exotic, and invasive species shall be removed from the entire site prior to the issuance of a certificate of occupancy.
13. All native vegetation which is not located in areas requiring their removal as reflected by an approved plan document shall be retained in an undisturbed state as provided in Chapter V, Resource Protection Related Development Standards.
14. To assure the health and survival of protected trees that are not to be removed, the contractor shall avoid the following kinds of tree injuries during all development activities: a. Mechanical injuries to roots, trunk, and branches; b. Injuries by chemical poisoning; c. Injuries by grade changes; d. Injuries by excavations, fill and; e. Injuries by paving.
15. Prior to any land preparation or other development activities a protective barrier easily visible to equipment operators shall be placed around all protected trees so as to encompass the entire tree protection zone.
16. No attachment, wires (other than supportive wires), signs or permits may be fastened to any protected tree.
17. No equipment, construction materials or debris of any kind shall be placed within the protective barrier.
18. Sod species, quantities and callouts shall be provided on final landscape construction plans at the time of site permit.

General Irrigation Notes

1. All landscape & sod areas shall be irrigated by an automated system that provides 100% coverage and overlap.
2. Irrigation systems shall conform to the following standards: Irrigation systems shall be continuously maintained in working order and shall be designed not to overlap water zones or to water impervious areas.
3. No irrigation system shall be installed or maintained abutting any public street which causes water from the system to overspray onto the roadway or to strike passing vehicular traffic.

4. Irrigation Water Source: To Be Determined

5. Irrigation system shall provide a moisture sensing controller other than rain switch to monitor rain levels and irrigation needs.

Xeriscape Landscape Requirement

To obtain a development permit, an applicant shall attain a minimum of 50 points from the following table of design options. As used in the table, "list" means the list of drought tolerant species set forth in the most current South Florida Water Management District's Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape

Design Options:	Points	Points Received
(1) Utilization of moisture sensing controller other than rain switch	5	5
(2) Plan submitted with low, moderate and high water usage zones indicated on the landscape plan	5	
(3) Grasses / ground covers:		
25 - 50 % of the grasses / ground covers are made up of drought tolerant grass species from the list	5	
51 % ormore of the grasses / ground covers are made up of drought tolerant grass species from the list	10	10
(4) Shrubs:		
25 - 50 % of the required shrubs are made up of drought tolerant species from the list	5	
51 % or more of the required shrubs are made up of drought tolerant species from the list	10	10
(5) Trees:		
25 - 50 % of the required trees are made up of drought tolerant species from the list	5	
51 % or more of the required trees are made up of drought tolerant species from the list	10	10
(6) Extra shade trees in vehicular use areas:		
25 % more than the required shade trees planted in the vehicular use areas	5	5
50 % more than the required shade trees planted in the vehicular use areas	10	
(7) Sod area less than 50 percent of provided landscape area	10	
(8) Utilization of compacted mulched planting beds at least three inches in depth in all planted areas except ground covers. (Use of Cypress Mulch prohibited)	10	10

Total Points Provided: 50 Points

Shrub / Groundcover Schedule

SHRUB SCHEDULE

	SHRUB AREAS	QTY	BOTANICAL / COMMON NAME	SIZE	DETAILS	NATIVE	SPACING
**	AM	27	Asparagus meyer / Foxtail Fern	3 gal	* Full pot	No	24" o.c.
*	BH	50	Bougainvillea x 'Helen Johnson' / Dwarf Bougainvillea	3 gal	*Full Pot	No	24" o.c.
*	CR2	108	Chrysobalanus icaco / Green Cocoplum	3 gal	20 - 24" HT., FULL	Yes	36" o.c.
	CR	429	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum	3 gal	20 - 24" HT., FULL	Yes	30" o.c.
*	CS3	102	Clusia guttifera / Small-Leaf Clusia	3 gal	24" Ht. Min.	Yes	30" o.c.
*	CS2	259	Clusia guttifera / Small-Leaf Clusia	7 gal	36" Ht., Full	Yes	30" o.c.
*	CU2	104	Coccoloba uvifera / Sea Grape	7 gal	36" Ht., Full	Yes	42" o.c.
*	CS	163	Conocarpus erectus ' sericeus' / Silver Buttonwood	3 gal	24" Ht., full	Yes	30" o.c.
*	CS1	353	Conocarpus erectus ' sericeus' / Silver Buttonwood	3 gal	24" Ht., full	Yes	24" o.c.
**	HL	291	Hymenocallis latifolia / Spider Lily	1 gal	* Full pot	Yes	24" o.c.
*	ID	398	Ilex vomitoria 'Schillings Dwarf' / Dwarf Schillings Holly	3 gal		Yes	24" o.c.
**	MC	266	Muhlenbergia capillaris / Pink Muhly	1 gal	Full	Yes	36" o.c.
**	SB	148	Spartina bakeri / Sand Cord Grass	1 gal	Full	Yes	36" o.c.
	VO	21	Viburnum odoratissimum / Sweet Viburnum	3 gal	24" Ht. Min.	No	36" o.c.
	VS	589	Viburnum suspensum / Sandankwa Viburnum	3 gal	24" Ht. Min.	No	24" o.c.

* **Drought Tolerant Shrub Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Required / Code Shrubs 2,689 Shrubs
Drought Tolerant Shrubs Provided 1,641 Shrubs (61%)

** **Drought Tolerant Grasses / Ground Covers Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Required (Code) Grasses / GC 652 Grasses / GC
Drought Tolerant Grasses / GC Provided 652 Grasses / GC (100%)

Native Shrub Requirement (50% Minimum)

Total Required / Code Shrubs 2,689 Shrubs
Native Shrubs Provided 2,029 Shrubs (75%)

Native Grasses / Ground Cover Requirement (50% Minimu m)

Total Required (Code) Grasses / GC 652 Grasses / GC
Native Grasses / Ground Covers Provided 579 Grasses / GC (88%)

TREE SCHEDULE

	CODE PALMS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
		VM3	10	Adonidia merrillii / Christmas Palm 1:1 Tree Ratio	10' ct. Min., Triple Specimen	No	
*		BS2	3	Bismarckia nobilis 'Silver' / Silver Bismark Palm 2:1 Tree Ratio	10' CT Min.	No	
		PE4	12	Ptychosperma elegans / Alexander Palm 1:1 Tree Ratio	10' CT. Min, Double Specimen	No	
		PE3	17	Ptychosperma elegans / Alexander Palm 1:1 Tree Ratio	10' ct. Min., Triple Specimen	No	
*		RR	1	Roystonea regia / Royal Palm 2:1 Tree Ratio	18' ct.	Yes	
*		SS	26	Sabal palmetto / Cabbage Palmetto 2:1 Tree Ratio	13 @ 16' ct., 13 @ 20' ct.	Yes	
*		WR	38	Washingtonia robusta / Mexican Fan Palm 2:1 Tree Ratio	18 @ 16' ct., 20 @ 18' ct.	No	
	CODE TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
		AR	18	Acer rubrum 'Florida Flame' / Florida Flame Red Maple	12' HT. x 6' Spr. Min,	Yes	
*		BB	14	Bucida buceras 'Shady Lady' / Shady Lady Black Olive	12' HT. x 6' Spr. Min,	No	
*		BA	2	Bulnesia arborea / Verawood	12' HT. x 6' Spr. Min,	No	
*		BS	13	Bursera simaruba / Gumbo Limbo	12' HT. x 6' Spr. Min,	Yes	
*		CD	15	Coccoloba diversifolia / Pigeon Plum	12' HT. x 6' Spr. Min,	Yes	
*		CE	13	Conocarpus erectus / Green Buttonwood	12' HT. x 6' Spr. Min,	Yes	
*		CS5	9	Conocarpus erectus 'Sericeus' / Silver Buttonwood	12' HT. x 6' Spr. Min,	Yes	
*		DR	4	Delonix regia / Royal Poinciana	12' HT. x 6' Spr. Min,	No	
*		ED	23	Elaeocarpus decipiens TM / Japanese Blueberry Tree	12' HT. x 6' Spr. Min,	No	
*		IE	28	Ilex x attenuata 'Eagleston' / Eagleston Holly	12' HT. x 6' Spr. Min,	Yes	
*		LM	22	Lagerstroemia x ' Muskogee ' / Muskogee Crape Myrtle	12' Ht. x 6' Spr. Min., Multi-trunk	No	
*		LN	13	Lagerstroemia x 'Natchez' / Natchez Crape Myrtle	12' HT. x 6' Spr. Min,	No	
*		LT	14	Lagerstroemia x 'Tuscarora' / Crape Myrtle Coral Pink	12' Ht. x 6' Spr. Min., Multi-trunk	no	
		MG	3	Magnolia grandiflora 'D.D. Blanchard' / Southern Magnolia	12' HT. x 6' Spr. Min,	Yes	
*		QV	39	Quercus virginiana / Southern Live Oak	12' HT. x 6' Spr. Min,	Yes	
*		SE	10	Senna surattensis / Glossy Shower	12' HT. x 6' Spr. Min,	No	
*		TD3	36	Taxodium distichum / Bald Cypress	12' HT. x 6' Spr. Min,	Yes	
	TREES FOR MITIGATION (ADDITIONAL)	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
		PD2	107	Pinus elliotti / Slash Pine * Pine Mitigation (Softwoods)	2.5" DBH Min., 12' Ht. x 6' Spr. Min.	Yes	267.5 inches
		RR2	8	Roystonea regia / Royal Palm * Pine Mitigation (Softwoods)	18' ct.	Yes	68 Inches
		SS3	170	Sabal palmetto / Cabbage Palmetto * Pine Mitigation (Softwoods)	40 @ 16' ct., 70 @18' ct., 60 @ 22' ct.	Yes	1,605 Inches
		WR2	73	Washingtonia robusta / Mexican Fan Palm * Pine Mitigation (Softwoods)	20 @ 18' ct., 53 @ 25' ct.	No	991.5 Inches

* **Drought Tolerant Tree Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Requirec / Code Trees 349 Trees
Drought Tolerant Trees Provided 291 Trees (83%)

Native Tree Requirement (50% Minimum)

Native Trees Required (349 Required Trees x 50%) 175 Trees (50%)
Native Trees Provided 185 Trees (53%)

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STUART - SPRINGTREE

Florida

City of Stuart
Landscape Specifications

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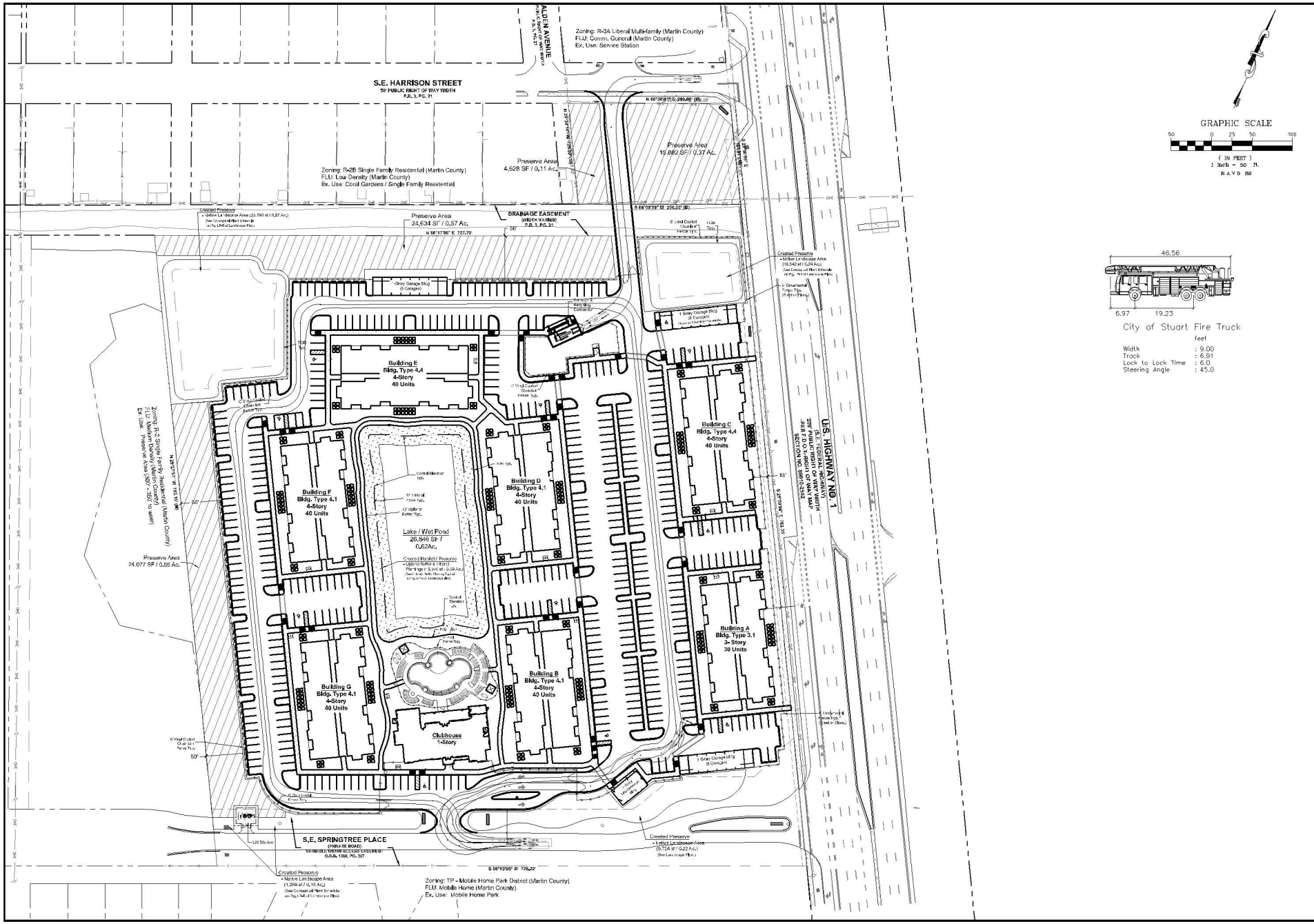
Job No. 19029
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 10-09-19, 12-02-19, 1-07-20
Revision Dates 2-11-20

LP-5



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STUART - SPRINGTREE
FIRE TRUCK PLAN

FLORIDA

CITY OF STUART

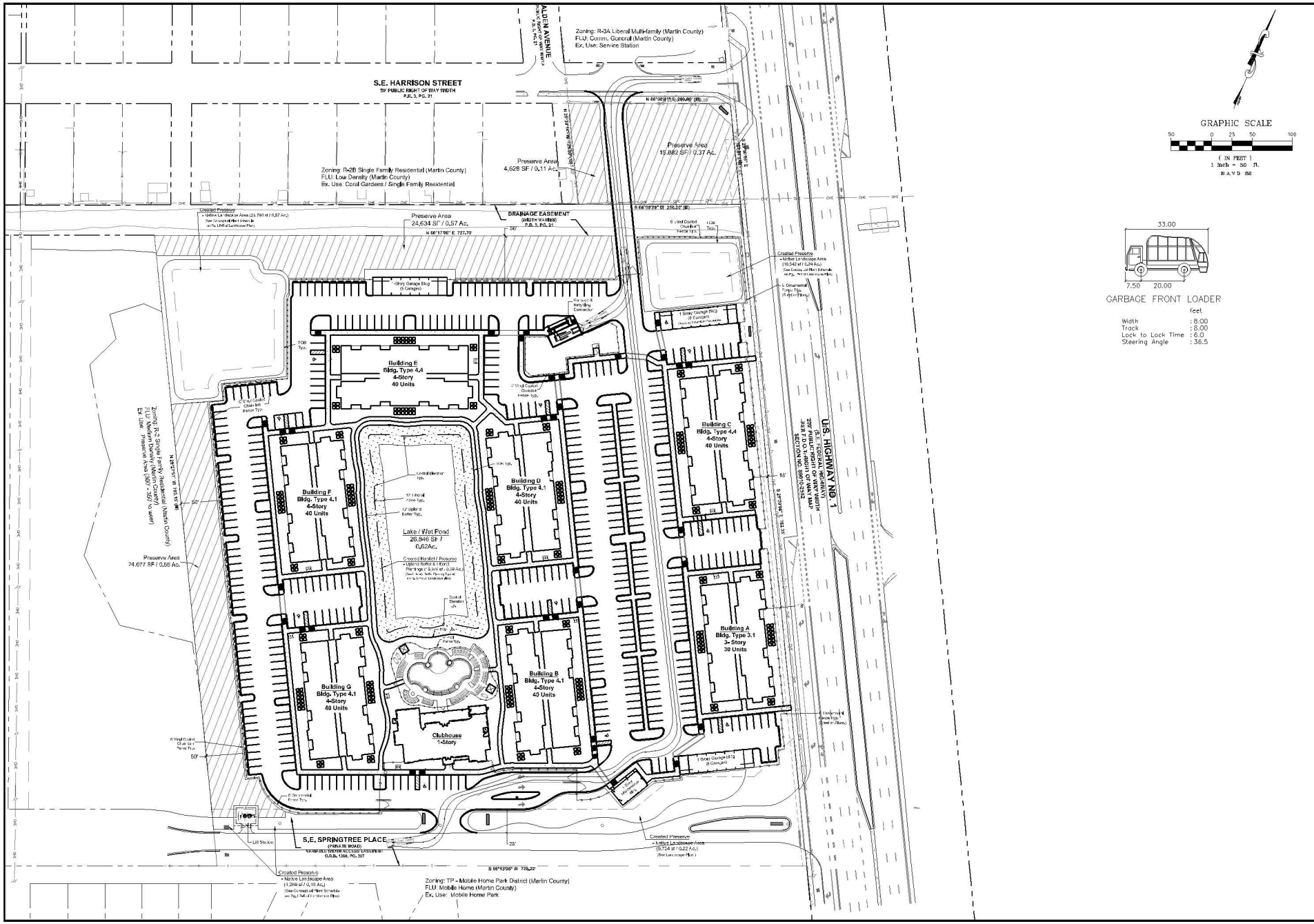
PROJECT NO.
30210-01-002

REVISIONS

DATE	DESCRIPTION

JMB	HE
DRAWN	CHKD

SCALE: 1" = 50'
JOB No. 30210-01-002
DATE: 9/24/2019
FILE:
SHEET 1 OF 1



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STUART - SPRINGTREE
GARBAGE TRUCK PLAN

FLORIDA

CITY OF STUART

PROJECT NO.
30210-01-002

REVISIONS

DATE	DESCRIPTION

JMB	HE
DRAWN	CHKD

SCALE: 1" = 50'
JOB No. 30210-01-002
DATE: 9/24/2019
FILE:
SHEET 1 OF 1



LEFT SIDE ELEVATION



REAR ELEAVTION



RIGHT SIDE ELEVATION

PAINT COLORS - SHERWIN WILLIAMS

HIGH REFLECTIVE WHITE
SW 7757

GOSSAMER VEIL
SW 9165

RAINWASHED
SW 6211

JASPER STONE
SW 9133



TYPICAL MIX 4.1 UNIT BUILDING FRONT ELEVATION - MATERIAL AND COLOR ALLOCATION

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LEFT SIDE ELEVATION



REAR ELEAVTION



RIGHT SIDE ELEVATION

PAINT COLORS - SHERWIN WILLIAMS

HIGH REFLECTIVE WHITE
SW 7757

GOSSAMER VEIL
SW 9165

RAINWASHED
SW 6211

JASPER STONE
SW 9133



TYPICAL MIX 4.4 UNIT BUILDING FRONT ELEVATION - MATERIAL AND COLOR ALLOCATION

Stuart - Multi Family - FL Waypoint Residential

architecture | interiors | planning

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MIX 4.4

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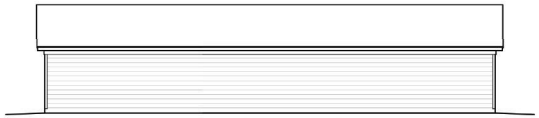


REAR ELEAVTION



TYPICAL SIDE ELEVATION

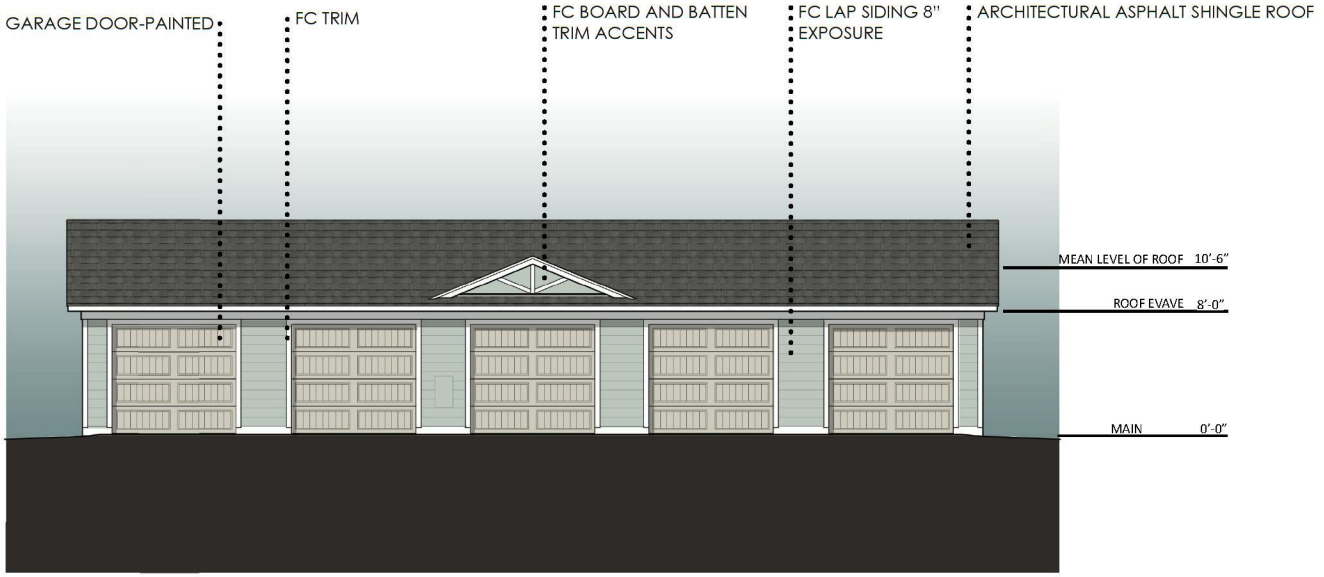
PAINT COLORS - SHERWIN WILLIAMS

HIGH REFLECTIVE WHITE
SW 7757

GOSSAMER VEIL
SW 9165

RAINWASHED
SW 6211

JASPER STONE
SW 9133



TYPICAL GARAGE BUILDING FRONT ELEVATION - MATERIAL AND COLOR ALLOCATION

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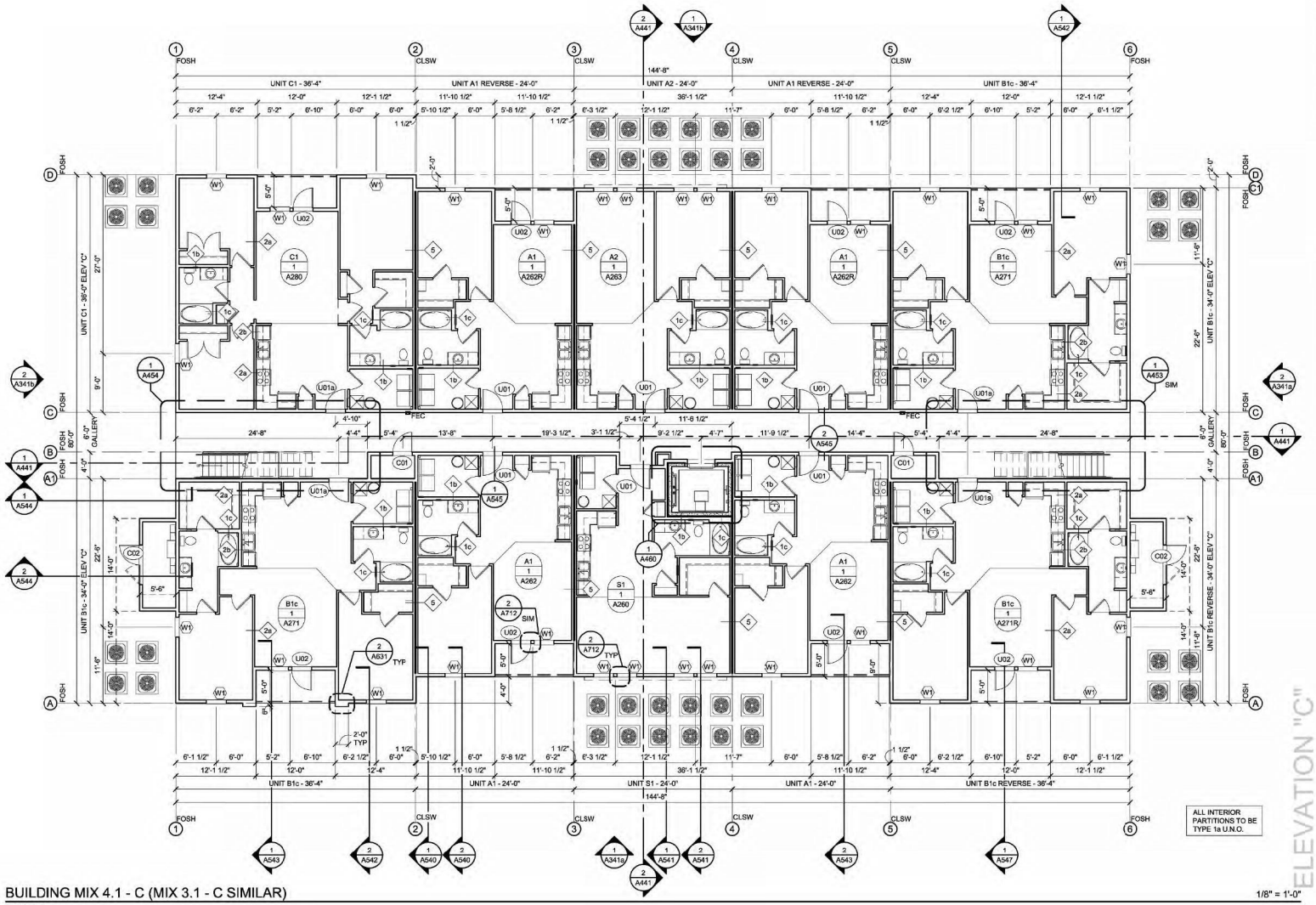

BUILDING MIX 4.1 - C (MIX 3.1 - C SIMILAR)

FLOOR 1

1/8" = 1'-0"

ELEVATION "C"

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03092020 CCM

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architecture | interiors | planning

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DO NOT SCALE THE DRAWINGS. IF NOT SHOWN, VERIFY CORRECT DIMENSIONS WITH THE ARCHITECT. SCALE NOTED IS FOR FULL "ANSI D" SIZE PRINTS.

CONTRACTOR SHALL CHECK & VERIFY ALL JOB SITE CONDITIONS.

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Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
04			
05			
06			
07			
08			
09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:

Drawn By: JAX

Checked By: JAX/KLK

Project Name:

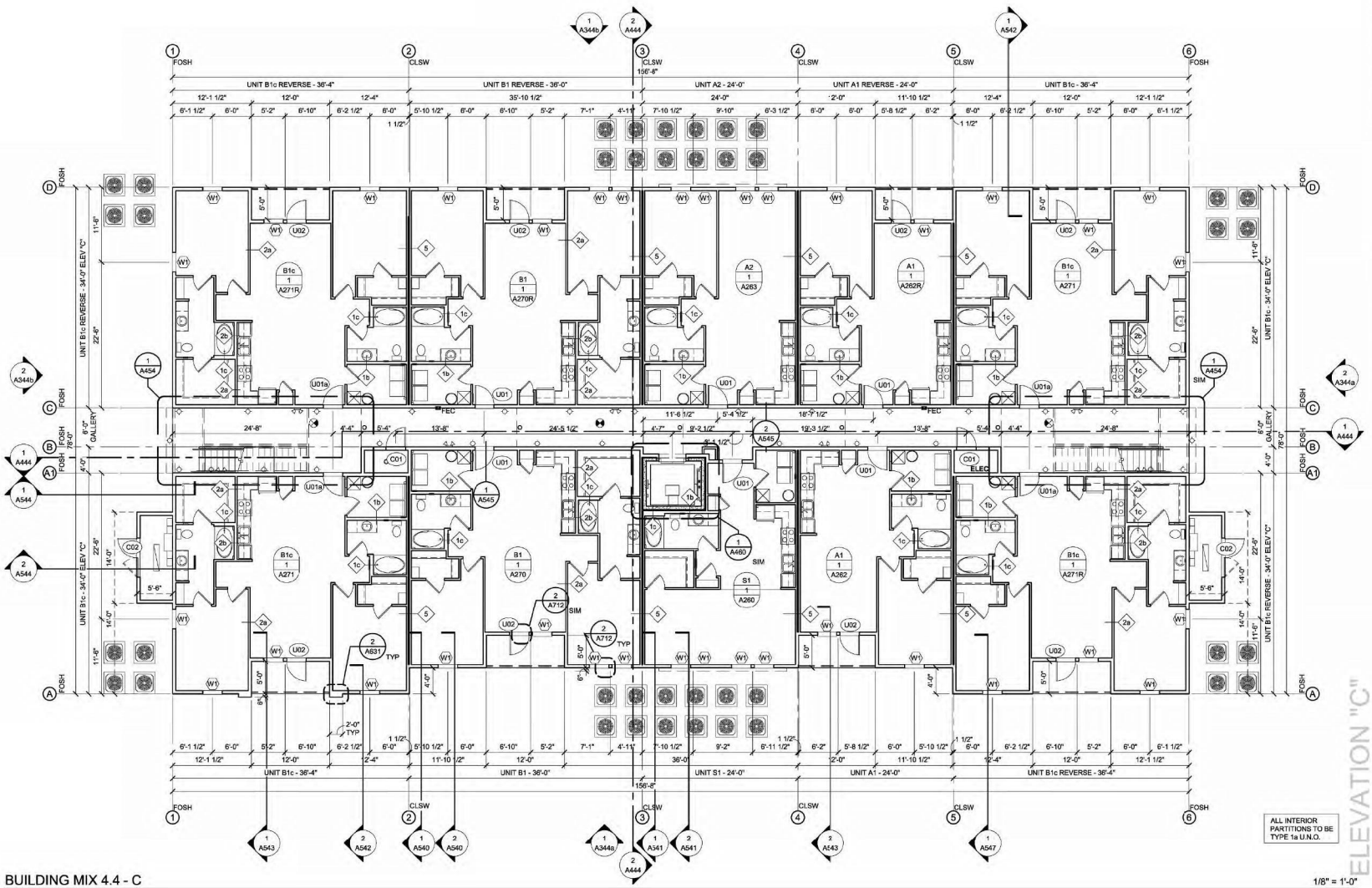
MULTI-FAMILY

Drawing Name:

BUILDING MIX 4.1 - C

FLOOR 1

A241a



BUILDING MIX 4.4 - C

FLOOR 1

1/8" = 1'-0"

ELEVATION "C"

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GROUP 4 DESIGN
Architectural Services LLC
architecture | interiors | planning

1520 Prudential Drive
Jacksonville, Florida 32207
904.353.5900 (o) 904.353.5968 (f)
AA26003932

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CONTRACTOR SHALL CHECK & VERIFY ALL JOB SITE CONDITIONS.

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Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
04			
05			
06			
07			
08			
09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:

Drawn By: JAX

Checked By: JAX/KLK

Project Name:

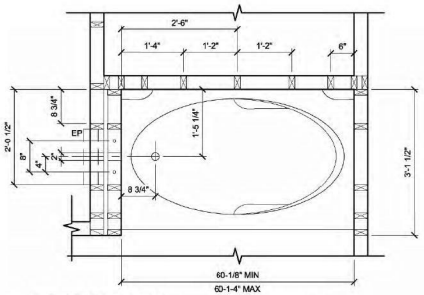
MULTI-FAMILY

Drawing Name:

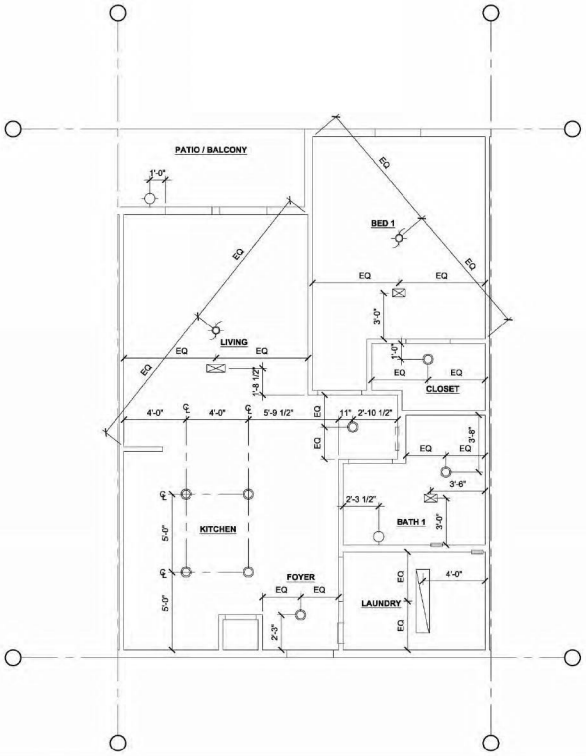
BUILDING MIX 4.4- C

FLOOR 1

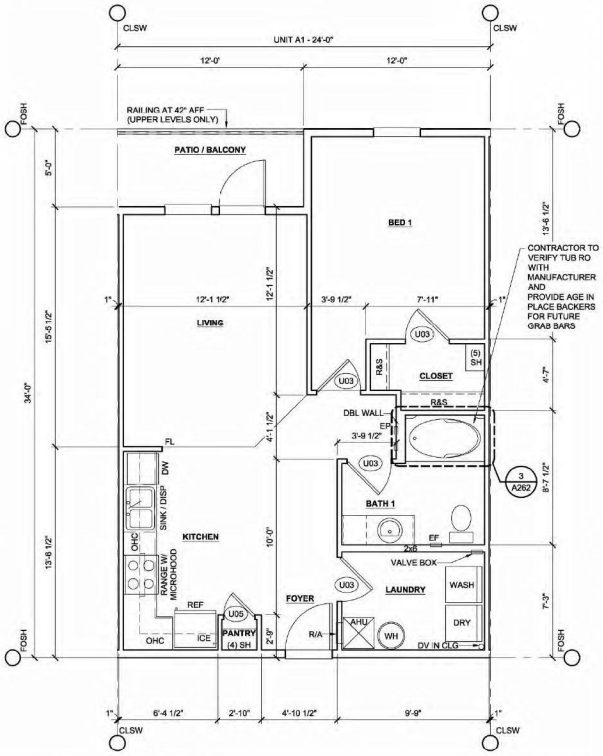
A244a



3 ENLARGED DETAIL 3/4" = 1'-0"



2 RCP - UNIT A1 1/4" = 1'-0"



1 FLOOR PLAN - UNIT A1 1/4" = 1'-0"
AREA: 756 SF A/C

UNIT GENERAL NOTES

1. REFER TO BUILDING MIX PLAN(S) FOR WINDOW & EXTERIOR DOOR TYPES AND LOCATIONS.
2. REFER TO ACCESSIBILITY DIAGRAMS ON SHEETS A04 THROUGH A04b FOR ADDITIONAL INFORMATION.
3. REFER TO UNIT INTERIOR REFERENCE PLANS ON CORRESPONDING INTERIOR DESIGN DRAWINGS FOR FLOORING EXTENTS AND TRANSITIONS, TOILET ACCESSORY LOCATIONS, & CLOSET SHELVING AND CABINETRY INFORMATION.

PARTITION NOTES

1. PARTITION TYPE '1' TYP AT ALL INTERIOR NONLOAD-BEARING WALLS, UNO.
2. SEE OVERALL FLOOR PLANS FOR LOAD BEARING PARTITION TYPE INFORMATION AND LOCATIONS

BALCONY TYPICAL NOTES

1. WALL SCONCE TO BE MOUNTED AT 6'-8" TO THE BOTTOM OF LIGHT FIXTURE

DRAFTSTOPPING NOTES

1. SEE GENERAL PROJECT NOTES AND CONDITIONS ON SHEET A01b FOR EFFECTIVE DRAFTSTOPPING MATERIALS.
2. FLOOR / CEILING ASSEMBLY DRAFTSTOPPING
   2.1 PROVIDE DRAFTSTOPPING IN FLOOR / CEILING ASSEMBLIES BETWEEN EACH DWELLING UNIT.
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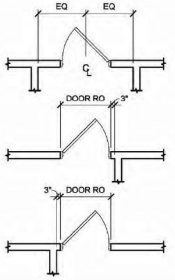
TYPICAL DOOR PLACEMENT



RCP NOTES

1. ALL CEILING HEIGHTS ARE 9'-0" AFF, UNO.
2. DIMENSIONS ARE TO CENTERLINE OF FIXTURE, UNO.
3. LIGHT FIXTURES TO BE CENTERED IN ROOM OR TRAY CEILING UNLESS NOTED / DIMENSIONED OTHERWISE.
4. WALL SCONCES IN BATH AND POWDER ROOMS SHALL BE CENTERED ABOVE THE VANITY, UNO.
5. CONTRACTOR TO VERIFY ALL CODE REQUIRED CLEARANCES ARE MAINTAINED AROUND LIGHTING IN CLOSETS. NOTIFY ARCHITECT IF ANY LIGHTS NEED TO BE RELOCATED.

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architecture | interiors | planning
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Jacksonville, Florida 32207
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AA26003952

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FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
04			
05			
06			
07			
08			
09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:
Drawn By: JAX
Checked By: JAX/KLK
Project Name:
MULTI-FAMILY
Drawing Name:
UNIT PLAN
A1

A262

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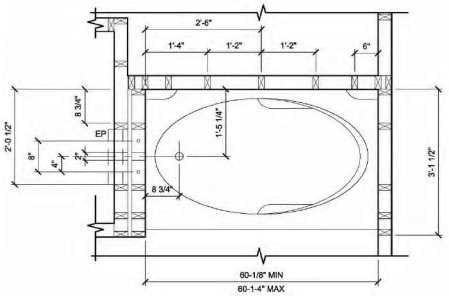
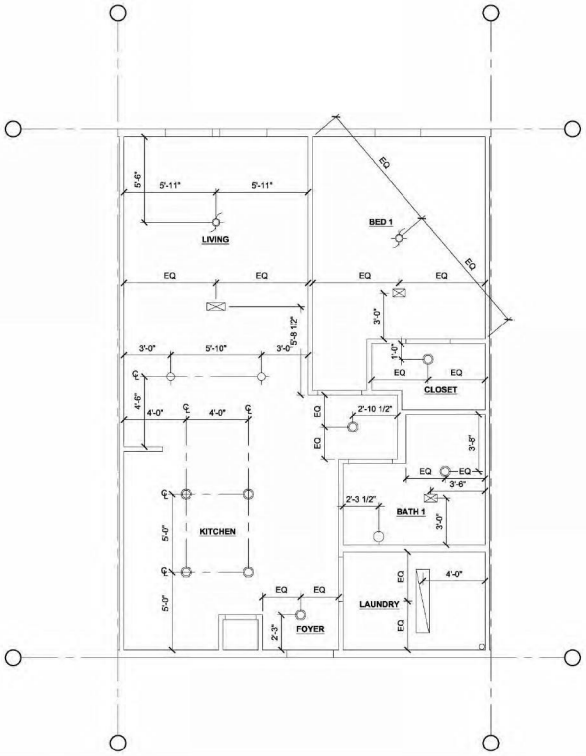
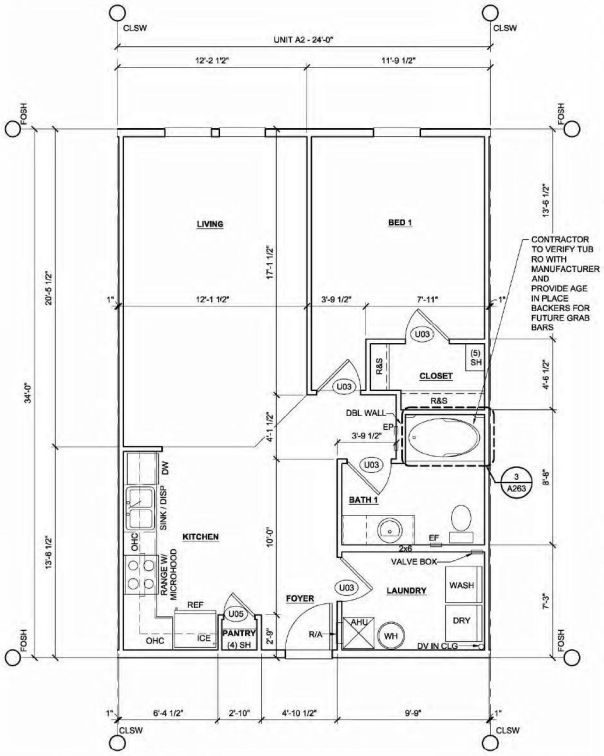


3 ENLARGED DETAIL 3/4" = 1'-0"



2 RCP - UNIT A2 1/4" = 1'-0"



1 FLOOR PLAN - UNIT A2 1/4" = 1'-0"
AREA: 816 SF A/C

UNIT GENERAL NOTES

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PARTITION NOTES

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2. SEE OVERALL FLOOR PLANS FOR LOAD BEARING PARTITION TYPE INFORMATION AND LOCATIONS

BALCONY TYPICAL NOTES

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DRAFTSTOPPING NOTES

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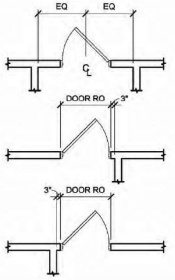
TYPICAL DOOR PLACEMENT



RCP NOTES

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Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
04			
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06			
07			
08			
09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:
Drawn By: JAX/AMT
Checked By: JAB
Project Name:
MULTI-FAMILY
Drawing Name:
UNIT PLAN
A2

A263

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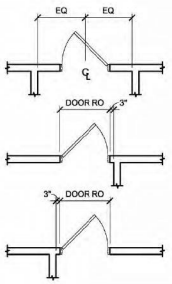
TYPICAL DOOR PLACEMENT



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PARTITION NOTES

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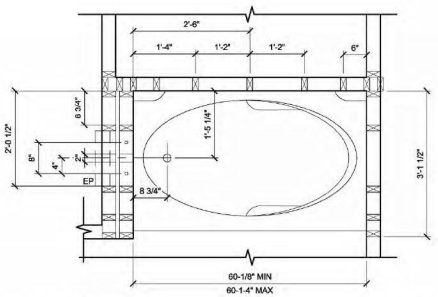
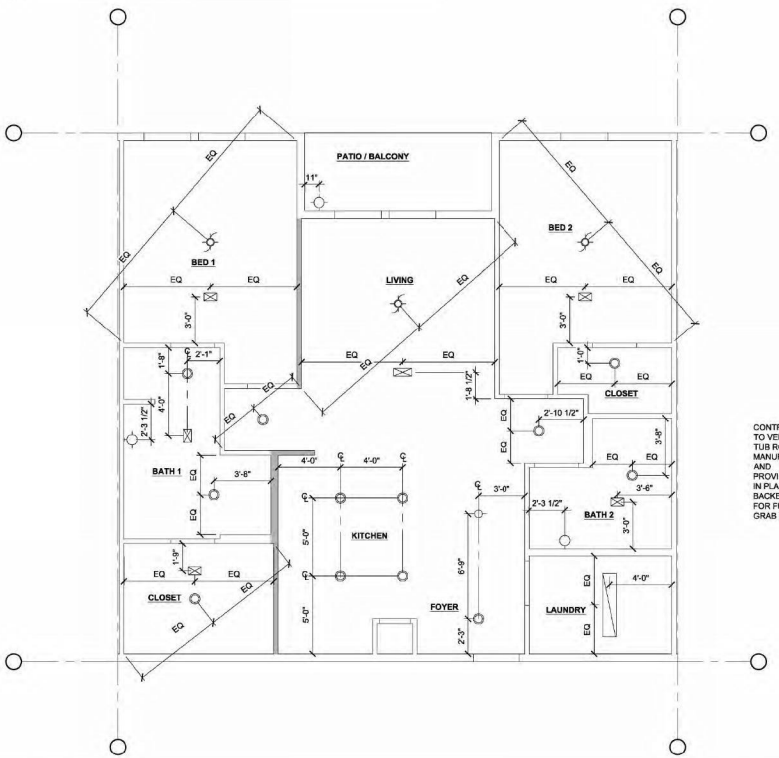
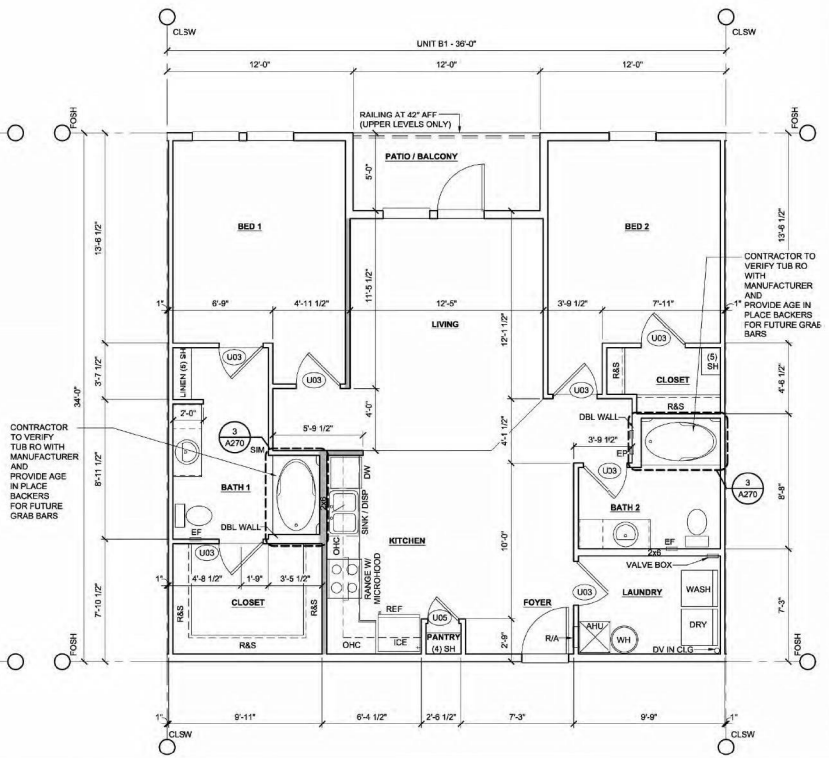


3 ENLARGED DETAIL 3/4" = 1'-0"



2 RCP - UNIT B1 1/4" = 1'-0"



1 FLOOR PLAN - UNIT B1 1/4" = 1'-0"
AREA: 1164 SF A/C

Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
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09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:
Drawn By: JAX
Checked By: JAX/KLK
Project Name:
MULTI-FAMILY
Drawing Name:
UNIT PLAN
B1

A270

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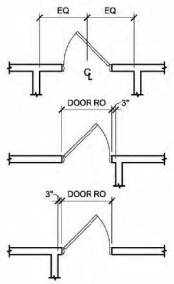
TYPICAL DOOR PLACEMENT



RCP NOTES

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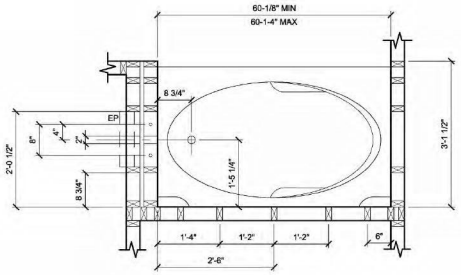

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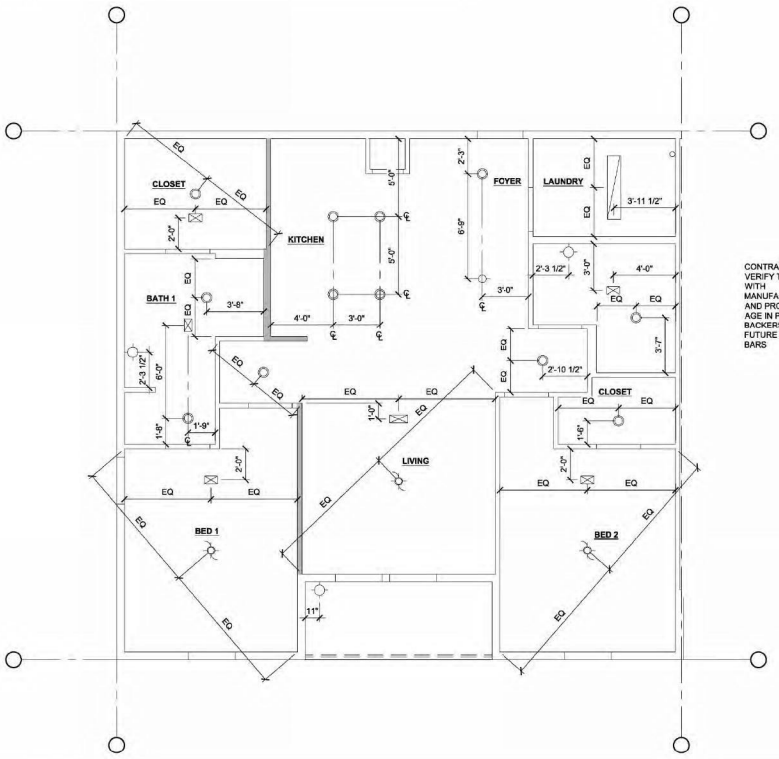
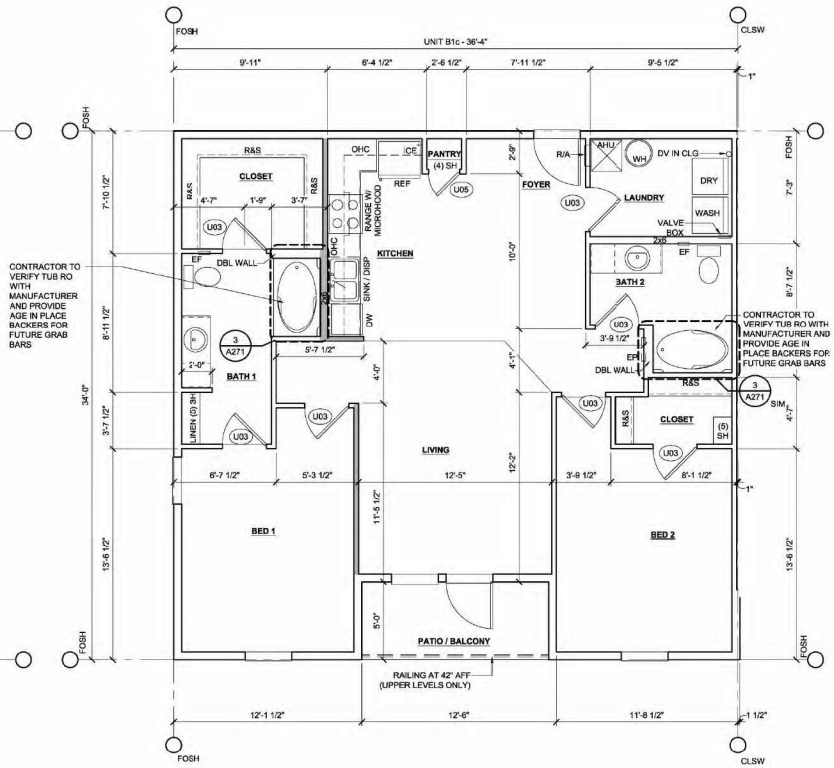


2 RCP - UNIT B1c 1/4" = 1'-0"



1 FLOOR PLAN - UNIT B1c 1/4" = 1'-0"
AREA: 1176 SF A/C

Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

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SUMMIT CONTRACTING GROUP, INC.

Project Number:	
Drawn By:	JAX/AMT
Checked By:	JAX/KLK
Project Name:	
	MULTI-FAMILY
Drawing Name:	
	UNIT PLAN
	B1c

A271

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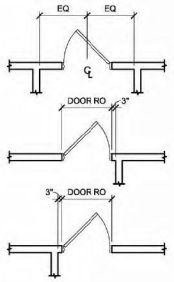
TYPICAL DOOR PLACEMENT



RCP NOTES

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BALCONY TYPICAL NOTES

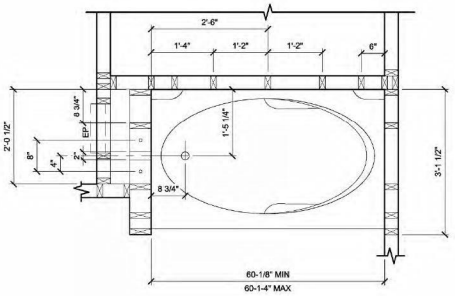
1. WALL SCONCE TO BE MOUNTED AT 6'-8" TO THE BOTTOM OF LIGHT FIXTURE

UNIT GENERAL NOTES

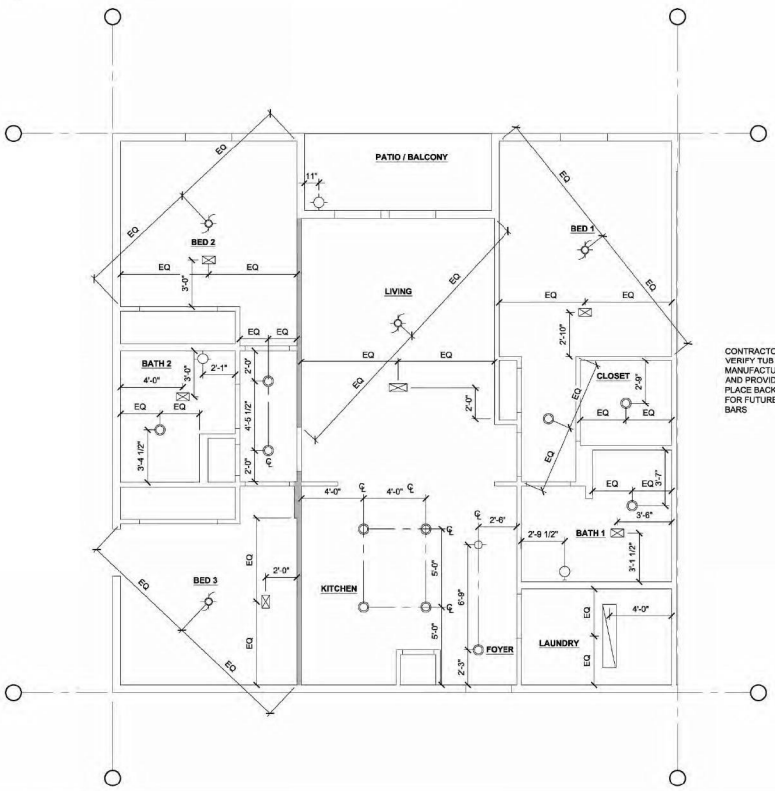
1. REFER TO BUILDING MIX PLAN(S) FOR WINDOW & EXTERIOR DOOR TYPES AND LOCATIONS.
2. REFER TO ACCESSIBILITY DIAGRAMS ON SHEETS A04 THROUGH A04b FOR ADDITIONAL INFORMATION.
3. REFER TO UNIT INTERIOR REFERENCE PLANS ON CORRESPONDING INTERIOR DESIGN DRAWINGS FOR FLOORING EXTENTS AND TRANSITIONS, TOILET ACCESSORY LOCATIONS, & CLOSET SHELVING AND CABINETRY INFORMATION.

PARTITION NOTES

1. PARTITION TYPE '1' TYP AT ALL INTERIOR NONLOAD-BEARING WALLS, UNO.
2. SEE OVERALL FLOOR PLANS FOR LOAD BEARING PARTITION TYPE INFORMATION AND LOCATIONS

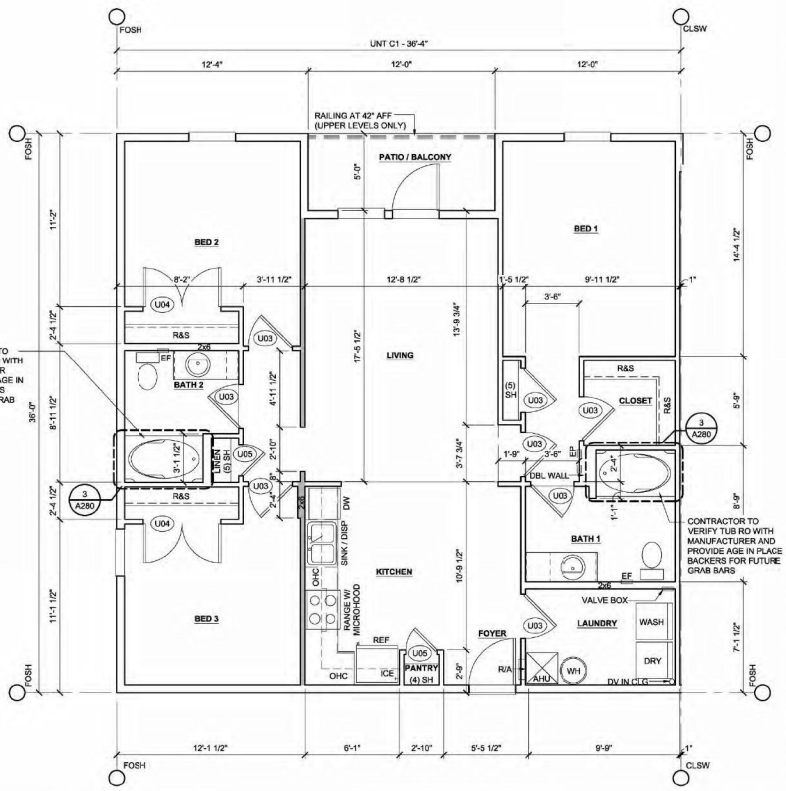


3 ENLARGED DETAIL 3/4" = 1'-0"



2 RCP - UNIT C1 1/4" = 1'-0"

CONTRACTOR TO VERIFY TUB RO WITH MANUFACTURER AND PROVIDE AGE IN PLACE BACKERS FOR FUTURE GRAB BARS



1 FLOOR PLAN - UNIT C1 1/4" = 1'-0"
AREA: 1248 SF A/C

GROUP 4 DESIGN
Architectural Services LLC
architecture | interiors | planning

1520 Prudential Drive
Jacksonville, Florida 32207
904.353.5900 (o) 904.353.5968 (f)
AA26003952

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CONTRACTOR SHALL CHECK & VERIFY ALL JOB SITE CONDITIONS.

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Karie L. Kovacocy, AIA
FL AR98408

Issues and Revisions

No.	Date	By	Description
01	01.06.20	JAX	PERMIT SET
02			
03			
04			
05			
06			
07			
08			
09			

SUMMIT CONTRACTING GROUP, INC.

Project Number:
Drawn By: JAX
Checked By: JAX/KLK
Project Name:
MULTI-FAMILY
Drawing Name:
UNIT PLAN
C1

A280

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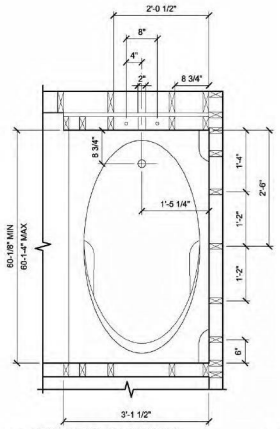
03092020 CCM



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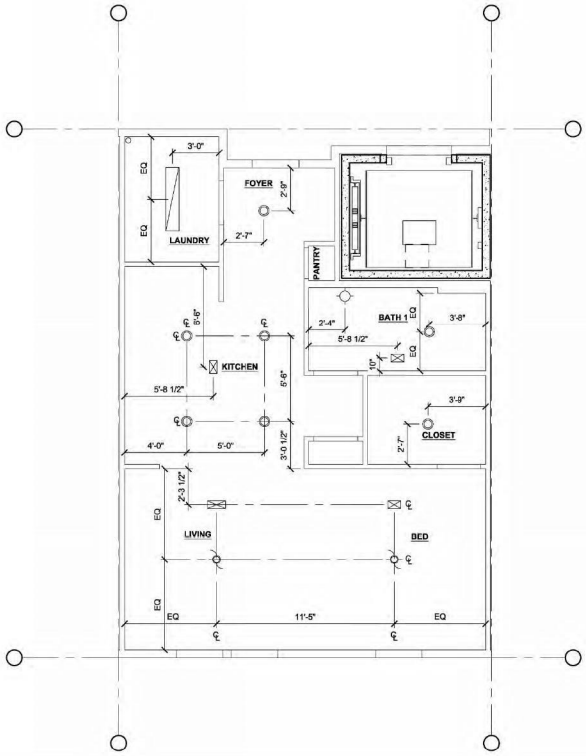
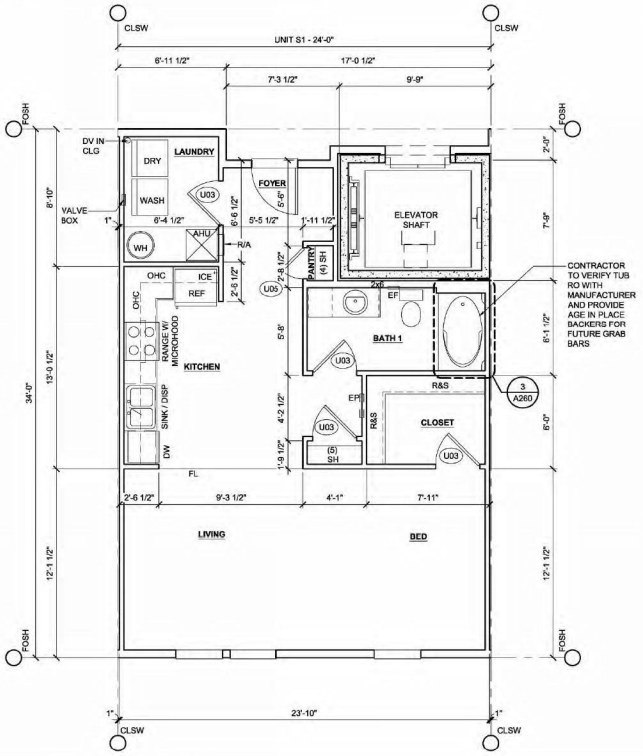


2 RCP - UNIT S1 1/4" = 1'-0"



1 FLOOR PLAN - UNIT S1 1/4" = 1'-0"
AREA: 707 SF A/C

UNIT GENERAL NOTES

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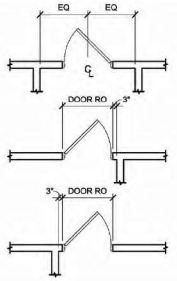
BALCONY TYPICAL NOTES

1. WALL SCONCE TO BE MOUNTED AT 6'-8" TO THE BOTTOM OF LIGHT FIXTURE

DRAFTSTOPPING NOTES

1. SEE GENERAL PROJECT NOTES AND CONDITIONS ON SHEET A01b FOR EFFECTIVE DRAFTSTOPPING MATERIALS.
2. FLOOR / CEILING ASSEMBLY DRAFTSTOPPING
   2.1 PROVIDE DRAFTSTOPPING IN FLOOR / CEILING ASSEMBLIES BETWEEN EACH DWELLING UNIT.
   2.2 DRAFTSTOPPING IN FLOOR / CEILING ASSEMBLIES SHALL BE LOCATED ABOVE AND IN LINE WITH EACH DWELLING UNIT SEPARATION.
3. ATTIC DRAFTSTOPPING
   3.1 DRAFTSTOPPING OF ATTIC SPACES SHALL BE PROVIDED AS SHOWN ON ROOF PLANS.

TYPICAL DOOR PLACEMENT



RCP NOTES

1. ALL CEILING HEIGHTS ARE 9'-0" AFF, UNO.
2. DIMENSIONS ARE TO CENTERLINE OF FIXTURE, UNO.
3. LIGHT FIXTURES TO BE CENTERED IN ROOM OR TRAY CEILING UNLESS NOTED / DIMENSIONED OTHERWISE.
4. WALL SCONCES IN BATH AND POWDER ROOMS SHALL BE CENTERED ABOVE THE VANITY, UNO.
5. CONTRACTOR TO VERIFY ALL CODE REQUIRED CLEARANCES ARE MAINTAINED AROUND LIGHTING IN CLOSETS. NOTIFY ARCHITECT IF ANY LIGHTS NEED TO BE RELOCATED.

GROUP 4 DESIGN
Architectural Services LLC
architecture | interiors | planning
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904.353.5900 (o) 904.353.5968 (f)
AA26003952

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Karie L. Kovacocy, AIA
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02			
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Project Number:
Drawn By: JAX
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MULTI-FAMILY
Drawing Name:
UNIT PLAN
S1

A260

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03092020 CCM

CITY OF STUART
City Commission
February 24, 2020

Project Name: Stuart - Springtree RPUD	**Property Owner:** Stuart 13 Acres, LLC; Tierra Del Lago, Inc. and Stuart Harbor Marina & Yacht Club
Project No.: Z19100015	**Applicant/Petitioner:** Waypoint Residential Services, LLC
Ordinance No: 22427-2020	**Agent/Representative:** Michael Houston, HJA Design Studios
	Case Planner: Tom Reetz
Location: West of S.E. Federal Highway, south of S.E. Harrison Street and north of the Natalie Estates Mobile Home Park.	



1

PROJECT SUMMARY		
Property Size (area)		13.59 Acres
Present Use		Undeveloped
Subject Property Land Use		Unassigned – Martin County
Adjacent FLU	*North*	Martin County – Low Density Residential/Commercial
	South	Martin County - Mobile Home
	East	City of Stuart - Commercial
	West	Martin County – Medium Density Residential
Subject Property Zoning		
Adjacent Zoning	*North*	Martin County - R-3A Residential
	South	Martin County - Trailer Park
	East	City of Stuart - CPUD
	West	Martin County – R-2 Residential
Proposed Land Use Designation		Multi-family
Proposed Zoning District		Residential Planned Unit Development RPUD
Proposed Use		280 Multi-Family Apartments
City Approvals		Building Department – No comments at this time. Fire Department – See comments attached Public Works – See comments attached Police Department – No comments at this time
Brief Explanation		The intent of this application is to request a large-scale future land use map (FLUM) amendment to the City's Comprehensive Plan Residential Planned Unit Development assigning a "Multi-Family Density Residential" land use, and a Zoning designation of (RPUD) on the City of Stuart Zoning Map. The subject property is 13.59 acres. The property is currently undeveloped. The intent of this project is to allow 280 attached multi-family apartment homes within 7 four story buildings to be developed on the site while upgrading the drainage and enhancing the upland preserve.
Staff Recommendation: Staff recommends approval for the Future Land Use designation to Multi-Family Density Residential and zoning district designation to RPUD (Residential Planned Unit Development).		

STAFF REPORT AND RECOMMENDATION

I. LEGAL NOTICE REQUIREMENTS

A. Requirements for Application – The applications for the Future Land Use amendment to Multi-Family Density Residential, and zoning district designation to RPUD have been noticed in accordance with the requirements set forth in Sections 11.01.02, 11.01.09, and 11.02.00 of the Land Development Regulations.

B. Site Posting Date: 12-31-2019

C. Mail Notice Postmark: 12-31-2019 to property owners within 300 feet

D. Publication Date: 10 days prior to Second Reading

II. LARGE SCALE COMPREHENSIVE PLAN AMENDMENT AND ZONING MAP AMENDMENT ORDINANCE NO. 2427-2020

III. APPLICATION: Dated October 9, 2019

IV. HISTORY OF THE SITE

The vacant subject property is approximately 13.59 acres and consists of three parcels, located west of SE Federal Highway in an urban area on the south eastern edge of jurisdictional limits of the City of Stuart.

The City Commission unanimously approved the annexing of the three parcels into the City of Stuart on May 8, 2017 in accordance with Ordinance 2352/2017 recorded in Book 2930 Page 845. At the time the subject property received approval for annexation into the City of Stuart the City Commission determined that development of said lands shall be in accordance with the regulatory requirements of Martin County until such a time as amendments to the City's Comprehensive Land Use Plan and Official Zoning Map become effective.

Martin County future land use designations for the property are Commercial Limited with R-3A, Liberal Multiple Family and R-2, Residential zoning designations on the two larger parcels and Commercial General future land use and R-3A, Liberal Multiple Family and R-2, Residential on the smallest parcel.

V. ANALYSIS

A. Site and Area Characteristics

The subject property consists of three vacant parcels located west of SE Federal Highway with an established principle access off SE Springtree Place, an open road with a private residential street classification extending approximately 724.8 feet in length of the subject property. SE Springtree Place currently serves as access to the established Springtree residential subdivision.

Property immediately abutting to the north of the subject property is within Martin County jurisdiction and consists of Coral Gardens, an established residential single-family community with single family residences. The north eastern portion of the subject property abuts established commercial retail properties that front US1 and Harrison Street. Future land use designations on abutting properties to the north include Low Density Residential and Commercial General, with SE Harrison Street providing some separation between the subject property and the existing single-family residences abutting most of the northern property line. Properties to the north have an R-2B – Residential and R-3A, Liberal Multiple Family zoning district designation.

To the east of the subject property is SE Federal Highway (US1) with vacant lands included within the City of Stuart's jurisdiction further east of US1. Those vacant lands have a Commercial Future Land Use Designation and a B-1 Business Limited zoning district designation. Further south east of the subject property is the existing Gran Park at Port Salerno, an industrial development with Limited Industrial future land use and zoning district designations.

Property to the south of the proposal site is within Martin County jurisdiction and consists of the Natalie Estates Mobile Home/HOA "Co-op" with a Mobile Home Future land use and Trailer Park (TP) zoning district designation.

To the west is a preserve associated with the single-family portion of the previously developed Springtree community and managed by that association. This property has a Medium Density Residential Future Land Use and an R-2, Residential zoning district designation and is within Martin County's jurisdiction.

B. Project Description

The applicant is proposing to construct 280 multi-family garden-style residential units consisting of seven 4 story garden-style apartment buildings all with elevators. On-site amenities include a clubhouse which will include a fitness facility along with a cyber-café, game room, TV viewing and other entertainment opportunities. The contemporary clubhouse pool and pool deck have been carefully designed to allow a wide range of uses and users to enjoy this lake-side setting. A 5ft wide recreation walk has been planned around the community lake and will connect to all of the apartment buildings.

The applicant has estimated that more than 60% of residents will have pets. To accommodate this need, the project will offer on-site amenities including a dog washroom in its clubhouse along with a dedicated dog park.

The project will include a trash compactor onsite along with recycling receptacles. The project will offer valet trash to its residents to help control disposition of trash in order to keep a clean and orderly site.

Access to the community will be from the existing SE Springtree Place, located within the southern portion of the application site, together with an access point at SE Harrison Street to the north connecting to US1 via a traffic signal at SE Monroe St. The access on SE Springtree Place runs through the site to the Springtree community who use it as their only point of egress to US-1 via an easement over the application property.

The proposed floor plans consist of 28 studio, 124 one bed/one bath, 108 two bed/two bath and 20 three bed/two bath apartments equaling 280 total units. The four-story apartment buildings will measure 42 ft. 6 inches to the roof eave and 59 ft to the highest element of the roof.

The vegetative characteristics of the site are described generally in the submitted environmental report and are described as remnants of pine flatwoods that have been negatively impacted and by both human impact (off road trails, camping, etc.) and extensive invasive exotic vegetation. The northern portion of the site includes quality pine flatwoods with much less human and exotic impact. The project is proposing the preservation and creation of 3.11 acres of pineland upland habitat or just over 25% of the site with much of that being in that northern area. The north and west boundaries include upland preserves varying in width but generally 50' wide. These preserve areas as well as the area along Springtree Place will be supplemented with extensive native tree and shrub plantings where the existing habitat allows which will create high quality habitat connecting existing upland habitats on the north and south as well as dry retention areas. The area south of Harrison Street will be preserved entirely with the exception of the area needed for the access road.

The project includes the following:

- The preservation and creation of 3.11 acres of high- quality preserve areas along three sides of the parcel or 25% of the property.
- Removal of invasive exotic vegetation throughout the site prior to allow re- planting and re- vegetation of pine flatwood habitat.
- A multi- family community with a variety of on-site amenities.
- The creation of recreational lake walk that provide connectivity for pedestrians throughout the proposed project.
- Building setbacks from the north, south and western edges of the subject property to achieve a greater separation distance and accommodate buffers from existing single family and RV/ trailer park residences.
- Provision of 41 % open space or 5.62 acres where a minimum of 30% is required.

Traffic Study: A traffic Statement has been prepared by Bowman Consulting to assess trip distribution and assignment has incorporated the characteristics of the proposed development as well as the surrounding network configuration. The traffic analysis was performed in accordance with the City of Stuart Code, Section 4.00.00 Traffic Impact Analysis. The project meets the thresholds of Section 4.00.00. The results of the analysis show that the roadways are projected to operate acceptably with the addition of the proposed development and the project meets Stuart's concurrency requirements.

Parking Provisions: City of Stuart Land Development Code, Sec. 6.01.13. - Off-street parking schedule, requires 2 parking spaces per unit when 2 or more bedrooms are proposed and 1.5 spaces per unit when 1 bedroom is proposed. Parking within the subject property is proposed to include 462 spaces where 467 spaces are required. The reduction in provision of parking spaces will achieve adequate parking provision within the community and includes 10 accessible parking spaces and 24 detached garages. The subject property site plan has been designed to achieve an unobstructed access through the parking areas to ensure emergency service vehicles may navigate through the property safely and effectively.

Architectural Details: Architectural details are included on each of the four sides of the proposed apartment units with the entry to the development via US1 and SE Springfield Place offering a high standard of design and scale. Materials proposed for the apartment buildings include lap siding exposure divided into multiple color blocks; asphalt shingle roofs; composite shutters and full lower single hung vinyl windows.

Comprehensive Plan policy A5.6. requires the City of Stuart to maintain a height limitation of the greater of 45 feet or four stories of occupiable space for all buildings. The four-story apartment buildings extend to 42 ft. 6 inches to the eave and a maximum of 59 ft. to the highest element of the roof. The heights proposed are consistent with the Comprehensive Plan four story height limit requirement included in Policy A5.6.

Landscaping & Buffers: The landscape as proposed meets the requirements of the City's approved plant list and exceeds the 50% native requirements and 25% preservation of native vegetation on the property.

Landscape buffers have been provided on the northern and western sides of the subject property with 50' landscape buffers in the form of preserve areas. Along the property fronting US1 a 10' wide landscape buffer has been provided. The southern boundary includes S.E. Springtree Place as an existing right of way with no scope to provide any extensive buffer along this edge of the property. Throughout the subject property a series of dry retention areas are also intended to accommodate native plantings, adding an extensive visual and environmental amenity to the project. The landscape plan provides details of the proposed shade trees and other species included in the buffer areas.

Internal to the property the applicant has provided the necessary plantings according to the height of the respective buildings. Additional landscaping will be provided within the trail areas, around the dry detention areas and within the public open space areas. The site has been designed to preserve as much upland vegetation as possible. In addition, all utility boxes are intended to be landscaped to be fully screened.

Preservation Areas & Open Space: The proposed final site plan and landscape plan makes provision for the preservation of 3.11 acres or 25% on the subject property. Open space provision measures at 5.62 acres or 41% where a minimum of 30% is required on properties with an RPUD zoning district designation.

Signage: A signage program will be proposed as part of the site plan application. The signage will include a proposed monument sign intended to identify the Springtree Apartments development to the public. The sign will be located at the main vehicular entrance off from US1 and S.E. Springtree Place approximately 10 feet from the right of way. The sign will be less than ten feet tall by a fifteen feet wide base. The sign will include the project address and name of the residential community.

C. Future Land Use Amendment and Comprehensive Plan Consistency Review

Please also refer to Staff Comprehensive Plan review attached to this report. Staff also find that the proposed use is consistent with the proposed Multi-Family Future Land Designation:

> *This land-use category allows for two or more dwelling units per building. Includes single family detached, duplex/townhomes, apartments, condominiums, patio homes, garden homes, and adult living facilities, foster homes and zero-lot-line residences. Also, public facilities, churches day care centers, schools and electric distribution substations are allowed.*

Section 11.01.05G.1 (large-Scale Comprehensive Plan Amendments) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission:

1. *The existing land use pattern;*

   The existing land use pattern surrounding the project area consist of single-family residences, a mobile home community, industrial uses and vacant land. The majority of the vacant land near the project consists of the undeveloped site in which Slater Street was abandoned and recently developer interest has been for a mixed-use development whose commercial parcels could benefit from the proposed multi-family land uses.

2. *The possible creation of an isolated land use classification unrelated to adjacent and nearby classifications;*

   No, the proposed multifamily project will benefit the recent commercial development along US1.

3. *The population density pattern of the area and possible increase or overtaxing of the load on public facilities such as schools, utilities and streets;*

   No. The multifamily land use and the proposed project will rely on Martin County Utilities for services which has sufficient capacity to service the proposed project. The school capacity will be coordinated with the Martin County school board and

concurrency will be reserved at the time of construction plan permitting for the Stuart-Springtree Apartments. The streets have adequate capacity to handle the proposed RPUD.

The possible overloading of the City's sewage collection, treatment and disposal facilities;

The property will not connect to the City's sewage collection, treatment and disposal facilities. The property is within the Martin County Utilities service district.

4. *The possible overloading of the City's drainage system;*

   All development on the site would be required to comply with applicable City of Stuart stormwater management requirements with review and permitting from the South Florida Water Management District.

5. *The existing classification boundaries in relation to existing conditions on the subject property;*

   There are no issues in this regard.

6. *The existence of changed or changing conditions which make the passage of the proposed amendment necessary or appropriate;*

   The county/city has shown a trend toward development of residential uses and the need for apartment housing to support the local workforce and young professionals.

7. *The impact of the proposed amendment upon living conditions in the adjacent neighborhood;*

   The type and intensity of development that would be feasible on the subject property would not create an adverse impact to nearby neighborhoods. The site is buffered from abutting neighborhoods the north and west with preserve.

8. *The impact of the amendment upon the flow of light and air to adjacent areas;*

   The type and intensity of development that would be feasible on the subject property would not create an adverse impact upon the flow of light and air to adjacent areas.

9. *The impact of the proposed amendment upon property values in the adjacent area;*

   The change in land use designation from commercial to residential would likely result in an increase in property values in the adjacent area with the development of the site from its current vacant condition and also allowing for a local customer base for the surrounding commercial activities.

10. *The existence of other adequate sites in the City for the proposed land use classifications already permitting such use.*

The goal of the proposed amendment is to allow for uses that are in demand. The subject location is ideal for multifamily units.

D. Rezoning and Land Development Code Consistency Review

The application has been reviewed for consistency with the City's LDC. Approval of the rezoning to RPUD would allow for attached housing to be constructed at the site.

E. Technical Review by Other Agencies

The City Building, Public Works, Fire, and Police Departments have reviewed the applications and have offered their comments. See attachment to this agenda item. Each department will provide specific comments at final site approval for permitting.

The applicant will be responsible to meet all federal, state and local permitting and environmental standards. Further, the applicant will also be required to demonstrate full compliance at all times.

VI. LOCAL PLANNING AGENCY BOARD RECOMMENDATION

On January 30, 2020, the Local Planning Agency unanimously approved the project with the following conditions:

1. Address bus stops to make them safer
2. Extend ornamental fence on the west side of the road
3. Increase parking calculation to 484, but garages can be included in the calculation
4. Include exterior trash cans, grills, signage, exterior lighting in site plan
5. Implement a car wash station
6. Solution to mail delivery and mailboxes
7. Work to get permission to add sidewalk connection through "preserve" area
8. Indicate the correct unit count and submit the floor plans
9. Address charging stations
10. Include rules or deed restrictions regarding dogs
11. Submit a detailed construction activity plan

Since then, the applicant has responded to each of the eleven conditions including the addition of improved lighting, signage, landscape, a 6 foot wide sidewalk along Springtree Place and enhanced entry and has had conversations with the Department of Transportation agreeing to a temporary access off U.S.1 thus avoiding using Springtree Place during the construction phase.

VII. STAFF RECOMMENDATION (APPROVAL WITH CONDITIONS)

Staff has determined that the proposed future land use amendment to Multi-Family Density Residential and rezoning to RPUD is consistent with the goals, objectives and

policies of the Comprehensive Plan and the regulations in the Land Development Code. Staff offers no objection to the requests.

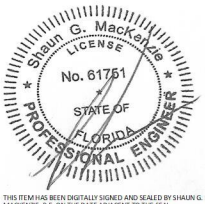
TRAFFIC IMPACT ANALYSIS

Springtree
Martin County, FL

Prepared for:
Bowman Consulting Group, Ltd., Inc.
Port St. Lucie, Florida

Prepared by:

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030



Digitally signed by Shaun MacKenzie
Date: 2020.02.28 08:40:58 -05'00'

Shaun G. MacKenzie P.E.
PE Number 61751

027011
February 2020
Revised January 2020
Revised November 2019
Revised September 2019
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CA 29013

EXECUTIVE SUMMARY

MacKenzie Engineering & Planning, Inc. was retained to prepare an analysis of the traffic impacts from Springtree. The site is located at the northwest corner of Springtree Place and Federal Highway, Stuart, Florida, Parcel ID 52-38-41-000-000-01101-0 and 52-38-41-000-000-01102-0.

The applicant proposes 280 mid-rise multi-family dwelling units. The development is planned for completion by the end of 2024. The analysis was performed for the 2024 roadway conditions.

The traffic analysis was performed in accordance with the City of Stuart Code, Section 4.00.00 Traffic Impact Analysis. The project meets the thresholds of Section 4.00.00. The results of the analysis show that the roadways are projected to operate acceptably with the addition of the proposed development and the project meets Stuart's concurrency requirements.

The proposed project is expected to generate the following net external and driveway trips:

- 1,524 daily, 94 AM peak hour (24 in/70 out), and 119 PM peak hour (73 in/46 out)

All roadway segments are projected to operate acceptably in 2024 with the proposed development.

Based on project traffic volumes, the driveways are projected to operate acceptably. Turn lanes are not recommended.

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LIST OF EXHIBITS

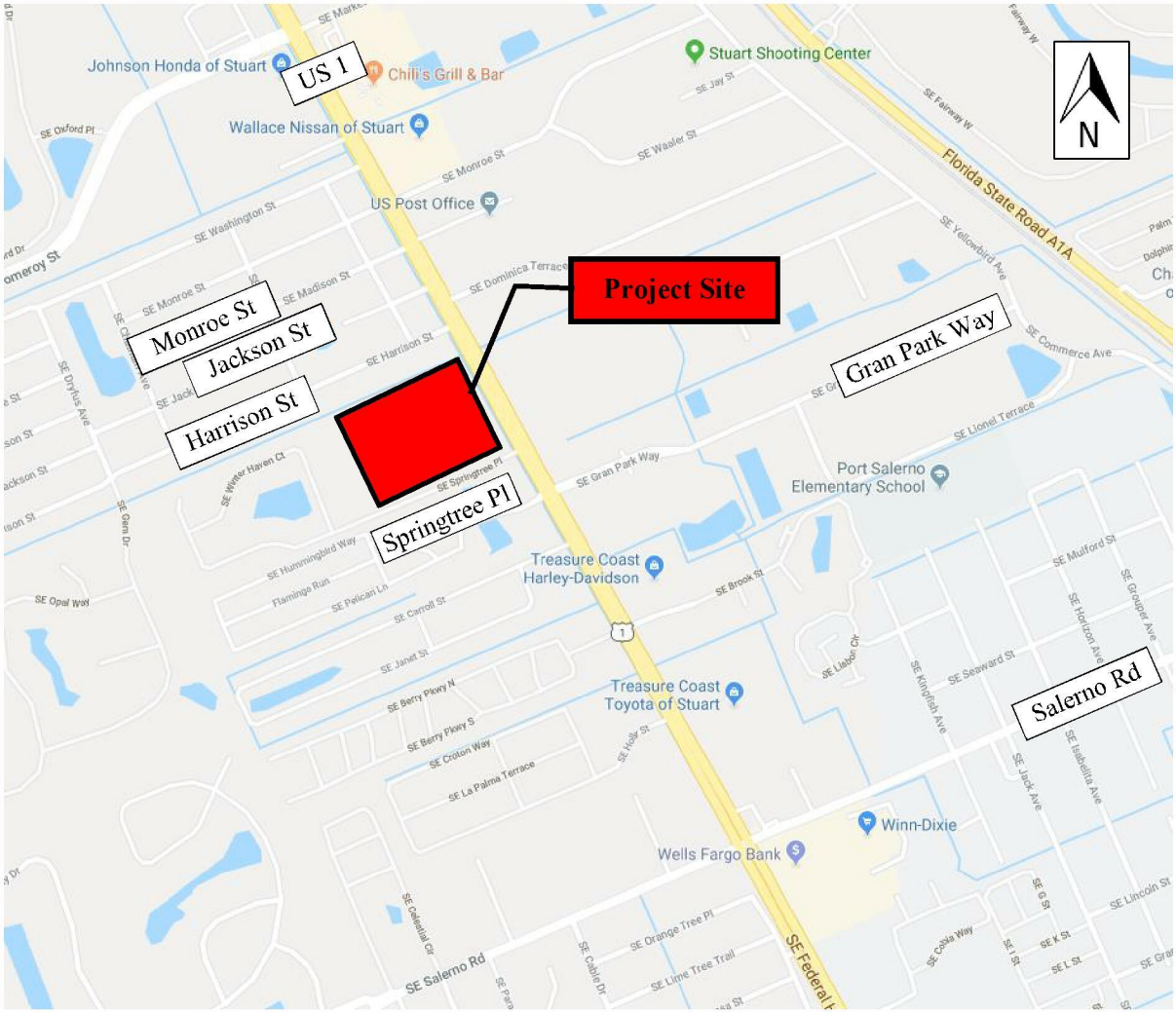
Exhibit 1. Trip Generation

INTRODUCTION

MacKenzie Engineering & Planning, Inc. was retained to prepare an analysis of the traffic impacts from Springtree. The site is located at the northwest corner of Springtree Place and Federal Highway, Stuart, Florida, Parcel ID 52-38-41-000-000-01101-0 and 52-38-41-000-000-01102-0.

The applicant proposes 280 mid-rise multi-family dwelling units. The development is planned for completion by the end of 2024. The analysis was performed for the 2024 roadway conditions. A site location map is shown below in Figure 1.

Figure 1. Site Location Map



INVENTORY AND PLANNING DATA

The traffic data used in this analysis were obtained from Martin County, MacKenzie Engineering and Planning, Inc. (MEP), and FDOT. The data included:

- FDOT's Q/LOS Manual
- *Trip Generation, 10th Edition* (ITE report)
- Martin County's 2018 Roadway Level of Service Inventory Report
- Martin County Impact Fee Study Technical Report, 12/2012, Walter H. Keller, Inc.

Bowman Consulting Group, Ltd., Inc. provided project development information.

PROJECT TRAFFIC

Traffic Generation

The daily and peak hour traffic generation for the development used the trip generation rates published by the Institute of Transportation Engineers (ITE)'s report, *Traffic Generation (10th Edition)* for Land Use 221, Multi-Family Housing (Mid-Rise). The proposed development plan consists of the following:

Proposed Uses

- 280 Mid-Rise Multi-Family Dwelling Units (ITE Land Use 221)

The proposed project is expected to generate the following net external and driveway trips:

- 1,524 daily, 94 AM peak hour (24 in/70 out), and 119 PM peak hour (73 in/46 out)

Internal Capture

In order to provide a conservative analysis, internal capture is not utilized.

Pass-by Capture

The site contains no pass-by capture.

Table 1. Trip Generation

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								
Multifamily Housing(Mid-Rise)	280 DU	1,524	94	24	70	119	73	46
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)		**1,524**	**94**	**24**	**70**	**119**	**73**	**46**
NET CHANGE IN DRIVEWAY VOLUMES		**1,524**	**94**	**24**	**70**	**119**	**73**	**46**

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63

s:\jobs - share drive\027 - bowman\011 - springtree\traffic analysis\1-22-2020 280 units\[trip generation springtree.xlsx]tgen-prop

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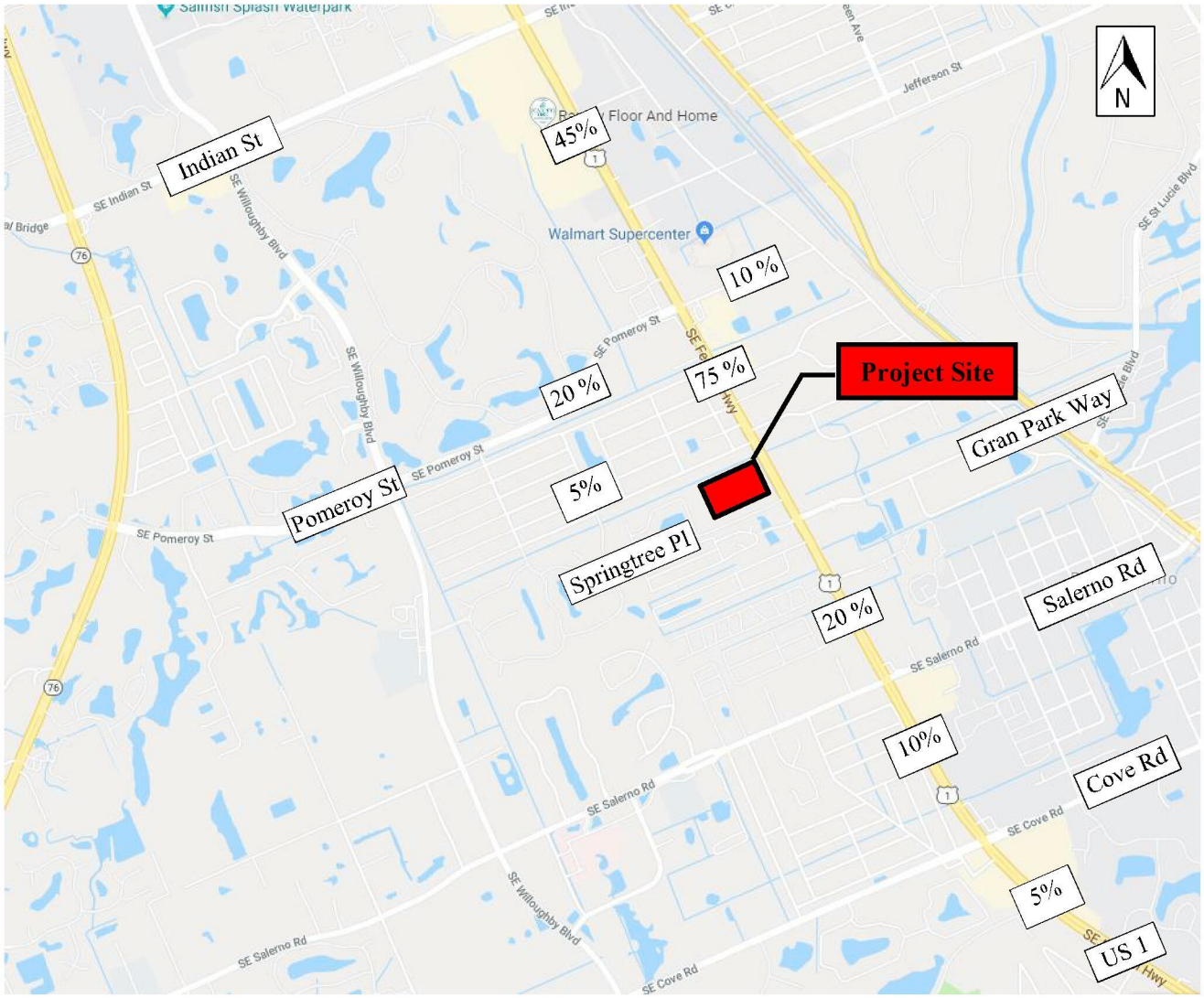
TRAFFIC ASSIGNMENT

The traffic assignment was developed based upon existing and proposed developments, generators, destinations, and knowledge of the local area. These factors were applied using traffic engineering rationale similar to the gravity model.

- North – 75%
- South – 20%
- West – 5%

Figure 2. Traffic Assignment



SIGNIFICANCE

Significant Impact

A project significantly impacts a facility if its peak hour trips use more than five percent (5%) of a roadway's capacity (City of Stuart Code, 4.05.02 Traffic Impact Analysis). The project's traffic assignment and net external trips were utilized to determine the number of project trips on each road segment. Road capacities from Martin County's Roadway Inventory report were utilized in the study. In order to determine the project significance, the project's trips were divided by the roadway segment capacity. Based on the City's significance methodology, the proposed project does not significantly impact US 1. However, the study area will include the intersection at US 1 & Jackson Street and US 1 & SE Gran Park Way. The roadway capacities and the project significance are shown in Table 2.

Study Area

Based on Section 4.05.02 of the Code, the study area for transportation concurrency is all links and aggregated segments or parts thereof, on the major road network on which the project traffic has an impact of at least 5 percent and the first directly accessed roadway link (segment).

Table 2. Project Impacts 1-Way Peak Hour (Significance)

Roadway	From	To	Lanes	Generalized Service Capacity	Assign	Project Traffic	Significance	Significant Impact (Y/N)
SR-5 (US-1)	Cove Rd	Salerno Rd	6	3,020	15%	11	0.36%	no
	Salerno Rd	Pomeroy St	6	3,020	75%	55	1.82%	no
	Pomeroy St	Indian St	6	3,020	45%	33	1.09%	no
Pomeroy St	Willoughby Blvd	SR-5	2	790	20%	15	1.90%	no

As shown in Table 2, there are no roadways that are significantly impacted by the project.

Intersection Analysis

The study analyzed the following intersections, because this is the peak period of impact for each intersection:

- US Highway No. 1 & Monroe Street – AM / PM
- US Highway No. 1 & Jackson Street – PM
- US Highway No. 1 & Harrison Street – AM
- US Highway No. 1 & Springtree Place - AM
- US Highway No. 1 & SE Gran Park Way - AM

The intersection traffic volumes were grown to the buildout year of 2024. MacKenzie Engineering and Planning, Inc. collected AM and PM peak hour turning movements. The counts were adjusted to peak season conditions using FDOT's peak season adjustment factors. Signal timings were obtained from Martin County. Based on this analysis, the intersection is projected to operate acceptably.

US 1 & Monroe Street – AM / PM

Intersection analysis at US 1 & Monroe Street was performed during the AM and PM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, the intersection is projected to operate acceptably with all movements operating under capacity (v/c ratio less than 1.0) during the PM peak hour. All of the turn-lanes used by vehicles destined to or from Springtree are projected to be adequate.

Table 3. US 1 & Monroe Street AM and PM 2024 Storage Analysis

Direction	Turn-Lane	AM Peak 95th % Queue (ft)	PM Peak 95th % Queue (ft)	Existing Storage (ft)	Adequate
Eastbound	Left	132	119	115	*
Northbound	Left	7	10	300	Yes
Southbound	Right	5	15	600	Yes

*Adequate pavement (200 feet) is available for storage, striping is 115 feet

US 1 & Jackson Street - PM

Intersection analysis at US 1 & Jackson Street was performed during the PM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, the intersection is projected to be under capacity with all movements operating under capacity (v/c ratio less than 1.0) during the PM peak hour. All of the turn-lanes used by vehicles destined to or from Springtree are projected to be adequate.

Table 4. US 1 & Jackson Street PM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	1	-	Yes
Northbound	Left	5	10	Yes

US 1 & Harrison Street - AM

Intersection analysis at US 1 & Harrison Street was performed during the AM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, the intersection is projected to be under capacity with all movements operating under capacity (v/c ratio less than 1.0) during the AM peak hour. Harrison Street 95th percentile queue is 25 feet at US 1 during the busiest time of the day (AM Peak Hour) on eastbound Harrison Street. Queues from US 1 intersection will not affect project driveway.

Table 5. US 1 & Harrison Street AM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	1	-	Yes

US 1 & Springtree Place - AM

Intersection analysis at US 1 & Springtree Place was performed during the AM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, the intersection is projected to be under capacity with all movements operating under capacity (v/c ratio less than 1.0) during the AM peak hour. Springtree Place 95th percentile queue is 50 feet at US 1 during the busiest time of the day (AM Peak Hour) on eastbound Springtree Place. Queues from US 1 intersection will not affect project driveway.

Table 6. US 1 & Springtree Place AM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	1	-	Yes

US 1 & SE Gran Park Way - AM

Intersection analysis at US 1 & SE Gran Park Way was performed during the AM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, all movements operate under capacity (v/c ratio less than 1.0) during the AM peak hour. All of the turn-lanes used by vehicles destined to or from Springtree are projected to be adequate.

Table 7. US 1 & SE Gran Park Way AM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	0	-	Yes
Westbound	Right	2	-	Yes
Northbound	Left	1	10	Yes
Southbound	Left	7	11	Yes

Roadway Analysis

A PM peak hour peak direction roadway analysis was undertaken for SR-5 (US-1) from Salerno Road to Pomeroy Street, considering its total one-way peak hour traffic volume and the roadway laneage to be in place at 2024. Traffic volumes were obtained from the Martin County 2018 Roadway Level of Service Inventory Report. As shown in Table 8, all roadways are projected to operate acceptably with the project.

Table 8. Roadway Analysis Peak Hour Direction

Roadway	From	To	Lanes	Service Capacity	Peak Hour Existing Traffic	Count Year	Growth Rate	2024 Traffic Growth	2024 Background Traffic	Project Traffic	2024 Total Traffic	Meets Service Volume
SR-5 (US-1)	Salerno Rd	Project Site	6	3,020	1,775	2018	0.9%	98	1,873	55	1,928	YES
	Project Site	Pomeroy St	6	3,020	1,775	2018	0.9%	98	1,873	55	1,928	YES

ACCESS

The project proposes two points of access as follows:

- Harrison Street – Full Access
- Springtree Place – Full Access

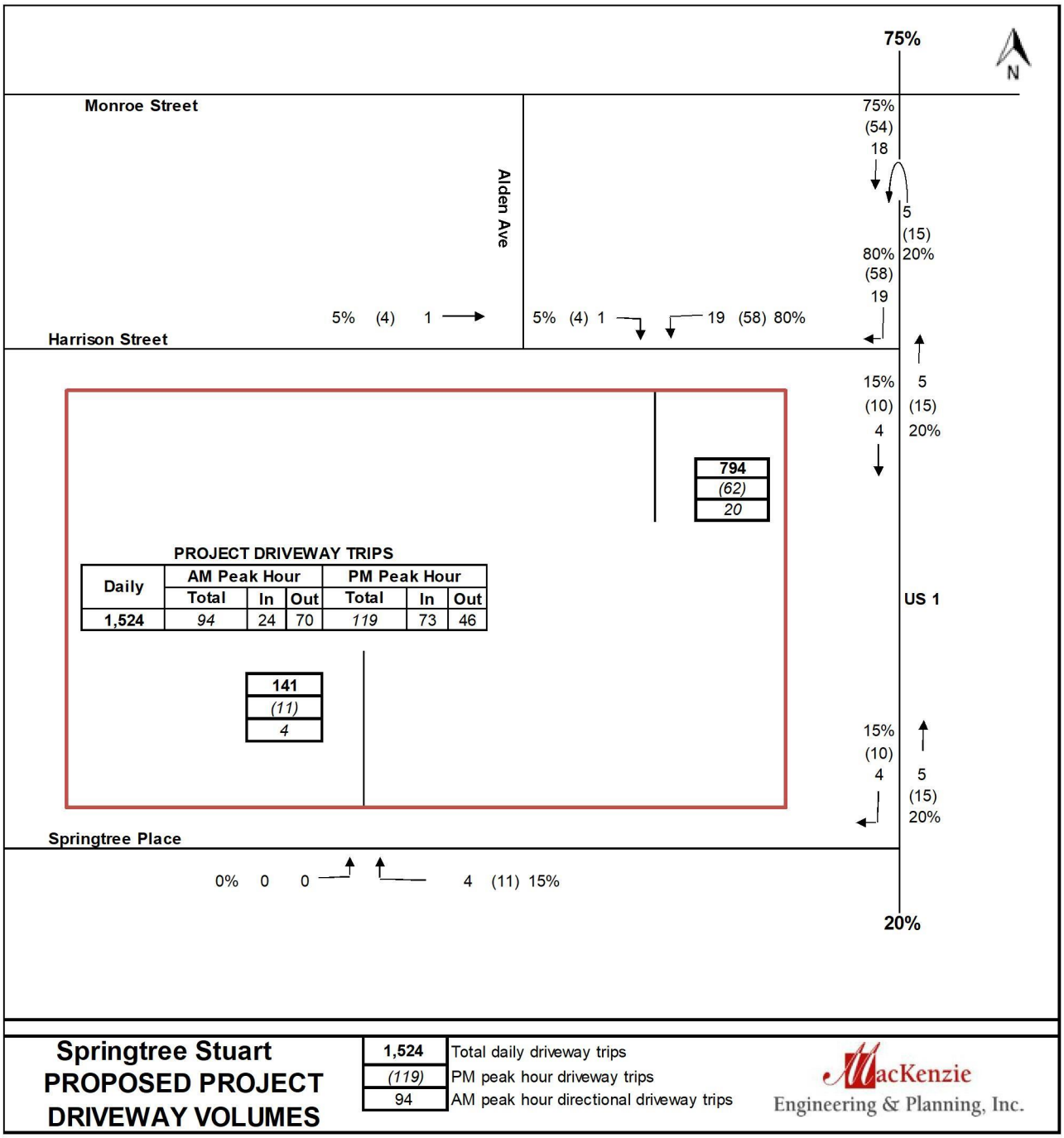
Alden Avenue

Alden Avenue northbound peak hour traffic is 22 and 30 for the AM and PM peak hour, respectively. The existing AM and PM peak hour traffic volumes along Alden Avenue are shown in Table 9. The existing trips are relatively low. The development is projected to add 42 and 28 northbound AM and PM peak hour trips, respectively. Therefore, the total AM and PM peak hour northbound traffic volume is projected to be 64 and 58, respectively. Peak hour peak direction traffic is projected to be about 1 vehicle per minute and Alden Avenue ADT is projected to be less than 1,000 vehicles per day [(64+14) x 10 = 780 vpd]. Therefore Alden is projected to function acceptably as a local road with the proposed project.

Table 9. Alden Avenue Existing Peak Hour AM and PM Traffic Volumes

AM Peak Hour		PM Peak Hour	
South of Alden		South of Alden	
NB	SB	NB	SB
22	14	30	10

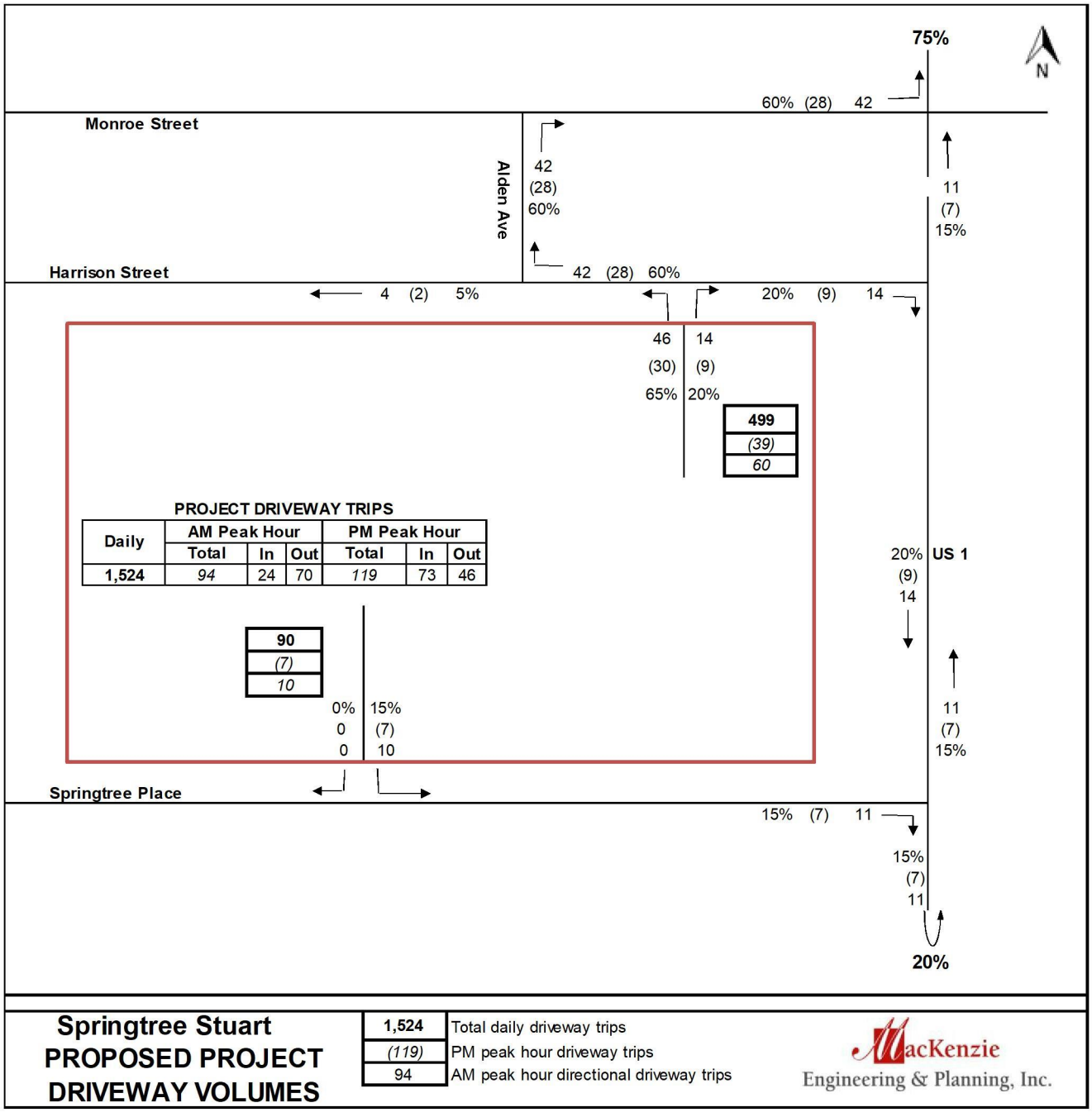
Figure 3a. Driveway In-Trips



Springtree Stuart PROPOSED PROJECT DRIVEWAY VOLUMES		
	1,524	Total daily driveway trips
	(119)	PM peak hour driveway trips
	94	AM peak hour directional driveway trips

MacKenzie
Engineering & Planning, Inc.

Figure 3b. Driveway Out-Trips



Driveways

Harrison Street & Project Entrance - PM

Intersection analysis at Harrison Street & Project Entrance was performed during the PM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, all movements operate under capacity (v/c ratio less than 1.0) during PM peak hour. Operation is acceptable during busiest inbound time period (PM Peak hour). Therefore, AM peak hour analysis is not needed. No turn lanes needed.

Table 10. Harrison St & Project Entrance PM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Westbound	Left	1	-	Yes

Springtree Place & Project Entrance - PM

Intersection analysis at Springtree Place & Project Entrance was performed during the PM Peak Hour using HCS 7. The queueing analysis can be found in the Appendix. With project traffic, all movements operate under capacity (v/c ratio less than 1.0) during the PM peak hour. Operation is acceptable during busiest inbound time period (PM Peak hour). Therefore, AM peak hour analysis is not needed. No turn lanes needed.

Table 11. Springtree Place & Project Entrance PM Post 2024 Storage Analysis

Direction	Turn-Lane	PM Peak 95th % Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Left	0	-	Yes

CONCLUSION

MacKenzie Engineering & Planning, Inc. was retained to prepare an analysis of the traffic impacts from Springtree. The site is located at the northwest corner of Springtree Place and Federal Highway, Stuart, Florida, Parcel ID 52-38-41-000-000-01101-0 and 52-38-41-000-000-01102-0.

The applicant proposes 280 mid-rise multi-family dwelling units. The development is planned for completion by the end of 2024. The analysis was performed for the 2024 roadway conditions.

The traffic analysis was performed in accordance with the City of Stuart Code, Section 4.00.00 Traffic Impact Analysis. The project meets the thresholds of Section 4.00.00. The results of the analysis show that the roadways are projected to operate acceptably with the addition of the proposed development and the project meets Stuart's concurrency requirements.

The proposed project is expected to generate the following net external and driveway trips:

- 1,524 daily, 94 AM peak hour (24 in/70 out), and 119 PM peak hour (73 in/46 out)

All roadway segments are projected to operate acceptably in 2024 with the proposed development.

Based on project traffic volumes, the driveways are projected to operate acceptably. Turn lanes are not recommended.

EXHIBITS

Exhibit 1. Trip Generation

APPENDICES

Intersection Volume Development

Post-Development Intersection Analysis

Institute of Traffic Engineers' (ITE) Report, Trip Generation (10th Edition)

Site Plan

EXHIBIT 1
Springtree Stuart
Trip Generation

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
		Trips	Total	In	Out	Total	In	Out
Proposed Site Traffic								
Multifamily Housing(Mid-Rise)	280 DU	1,524	94	24	70	119	73	46
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)		**1,524**	**94**	**24**	**70**	**119**	**73**	**46**
NET CHANGE IN DRIVEWAY VOLUMES		**1,524**	**94**	**24**	**70**	**119**	**73**	**46**

Note: Trip generation was calculated using the following data:

				Pass-by	AM Peak Hour		PM Peak Hour	
Land Use	ITE Code	Unit	Daily Rate	Rate	in/out	Rate	in/out	Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63

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Springtree

AM PEAK HOUR TURNING MOVEMENTS

US 1 & Monroe Street

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	4	2	5	0	5	0	5	0	7	268	8	0	19	276	3	602
7:15 AM	7:30 AM	0	5	2	5	0	4	1	6	0	3	293	10	0	23	271	3	626
7:30 AM	7:45 AM	0	6	7	1	0	7	4	6	0	6	330	12	0	40	292	1	712
7:45 AM	8:00 AM	0	5	4	5	0	3	0	3	0	3	283	19	0	44	236	2	607
8:00 AM	8:15 AM	0	2	1	3	0	9	1	8	0	4	274	8	0	33	273	3	619
8:15 AM	8:30 AM	0	7	5	4	0	3	0	9	0	6	305	11	0	29	264	5	648
8:30 AM	8:45 AM	0	8	2	5	0	4	2	6	0	5	290	9	0	20	262	2	615
8:45 AM	9:00 AM	0	2	2	5	0	10	2	4	0	1	286	6	0	28	280	0	626
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	20	17	13	0	22	5	26	0	19	1192	50	0	146	1065	11	2586

Count Taken:	1/23/2018	2/27/2020	PHF	0.91
Buildout year:	2024			
Growth Rate:	0.9%			
Seasonal Factor:	1.02	1		

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	20	17	13	0	22	5	26	0	19	1192	50	0	146	1065	11
PSCF	0	0	0	0	0	0	0	0	0	0	24	0	0	0	21	0
Adjusted Volumes		20	17	13		22	5	26		19	1216	50		146	1086	11
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%
Growth		1	1	1		1	0	1		1	67	3		8	60	0
2024 Volumes		21	18	14		23	5	27		20	1283	53		154	1146	11
Pre-Development		21	18	14		23	5	27		20	1283	53		154	1146	11
Project	0	42	0	0	0	0	0	0	0	0	11	0	0	0	18	0
Post	0	63	18	14	0	23	5	27	0	20	1294	53	0	154	1164	11

Project Traffic Assignment		Out									Out				In	
	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	75%	0%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

PM PEAK HOUR TURNING MOVEMENTS

US 1 & Monroe Street

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	4	3	4	0	7	2	12	0	6	362	7	0	6	368	5	786
4:15 PM	4:30 PM	0	8	2	4	0	13	2	17	0	3	353	4	0	15	384	9	814
4:30 PM	4:45 PM	0	3	0	5	0	16	3	24	0	8	380	9	0	22	357	7	834
4:45 PM	5:00 PM	0	6	0	7	0	6	3	16	0	4	420	8	0	19	435	5	929
5:00 PM	5:15 PM	0	10	0	2	0	22	5	37	0	5	329	5	0	11	401	7	834
5:15 PM	5:30 PM	0	11	2	2	0	8	1	11	0	7	307	5	0	14	360	11	739
5:30 PM	5:45 PM	0	12	4	2	0	9	2	11	0	7	307	5	0	11	322	4	696
5:45 PM	6:00 PM	0	8	1	2	0	5	0	13	0	5	265	6	0	11	274	3	593
Peak Hour Traffic Volume																		
4:15 PM	5:15 PM	0	27	2	18	0	57	13	94	0	20	1482	26	0	67	1577	28	3411

Count Taken:	1/23/2018	2/26/2020	PHF	0.92
Buildout year:	2024			
Growth Rate:	0.9%			
Seasonal Factor:	1.02	1		

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	27	2	18	0	57	13	94	0	20	1482	26	0	67	1577	28
PSCF	0	0	0	0	0	0	0	0	0	0	30	0	0	0	32	0
Adjusted Volumes		27	2	18		57	13	94		20	1512	26		67	1609	28
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%
Growth		1	0	1		3	1	5		1	84	1		4	89	1
2024 Volumes		28	2	19		60	14	99		21	1596	27		71	1698	29
Pre-Development		28	2	19		60	14	99		21	1596	27		71	1698	29
Project	0	28	0	0	0	0	0	0	0	0	7	0	0	0	55	0
Post	0	56	2	19	0	60	14	99	0	21	1603	27	0	71	1753	29

Project Traffic		Out									Out				In	
Assignment	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	75%	0%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

PM PEAK HOUR TURNING MOVEMENTS

US 1 & Jackson Street

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	0	2	0	0	0	0	8	4	362	0	0	0	368	7	751
4:15 PM	4:30 PM	0	0	0	1	0	0	0	0	15	7	353	0	0	0	384	4	764
4:30 PM	4:45 PM	0	0	0	1	0	0	0	0	25	9	380	0	0	0	357	3	775
4:45 PM	5:00 PM	0	0	0	2	0	0	0	0	8	6	420	0	0	0	435	7	878
5:00 PM	5:15 PM	0	0	0	1	0	0	0	0	20	8	329	0	0	0	401	4	763
5:15 PM	5:30 PM	0	0	0	2	0	0	0	0	16	6	307	0	0	0	360	4	695
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	10	11	307	0	0	0	322	1	651
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	9	1	265	0	0	0	274	0	549
Peak Hour Traffic Volume																		
4:15 PM	5:15 PM	0	0	0	5	0	0	0	0	68	30	1482	0	0	0	1577	18	3180

Count Taken:	1/23/2018	9/17/2019	PHF	0.91	
Buildout year:	2024				
Growth Rate:	0.9%				
Seasonal Factor:	1.02	1.09			

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	0	0	5	0	0	0	0	68	30	1482	0	0	0	1577	18
PSCF	0	0	0	0	0	0	0	0	6	3	30	0	0	0	32	2
Adjusted Volumes		0	0	5		0	0	0	74	33	1512	0		0	1609	20
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%		0.9%	0.9%	0.9%
Growth		0	0	0		0	0	0	3	2	84	0		0	89	1
2024 Volumes		0	0	5		0	0	0	77	35	1596	0		0	1698	21
Pre-Development		0	0	5		0	0	0	77	35	1596	0		0	1698	21
Project	0	0	0	0	0	0	0	0	15	0	7	0	0	0	55	0
Post	0	0	0	5	0	0	0	0	92	35	1603	0	0	0	1753	21

Project Traffic									In		Out				In	
Assignment	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	15%	0%	0%	0%	75%	0%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

AM PEAK HOUR TURNING MOVEMENTS

US 1 & Harrison

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM											268				276		544
7:15 AM	7:30 AM											293				271		564
7:30 AM	7:45 AM											330				292		622
7:45 AM	8:00 AM											283				236		519
8:00 AM	8:15 AM											274				273		547
8:15 AM	8:30 AM											305				264		569
8:30 AM	8:45 AM											290				262		552
8:45 AM	9:00 AM											286				280		566
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	1192	0	0	0	1065	0	2257

Count Taken:	1/23/2018	9/24/2019		PHF	0.91
Buildout year:	2024				
Growth Rate:	0.9%				
Seasonal Factor:	1.02	1.08			

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	0	0	47	0	0	0	0	0	0	1192	0	0	0	1065	47
PSCF	0	0	0	4	0	0	0	0	0	0	24	0	0	0	21	4
Adjusted Volumes		0	0	51		0	0	0	0	0	1216	0	0	0	1086	51
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Growth		0	0	3		0	0	0	0	0	67	0	0	0	60	2
2024 Volumes		0	0	54		0	0	0	0	0	1283	0	0	0	1146	53
Pre-Development		0	0	54		0	0	0	0	0	1283	0	0	0	1146	53
Project	0	0	0	14	0	0	0	0	0	0	16	0	0	0	4	18
Post	0	0	0	68	0	0	0	0	0	0	1299	0	0	0	1150	71

					Out							In				In	In
Project Traffic Assignment	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	15%	75%
											Out					
											15%					

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

AM PEAK HOUR TURNING MOVEMENTS

US 1 & Springtree Place

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM											268				276		544
7:15 AM	7:30 AM											293				271		564
7:30 AM	7:45 AM											330				292		622
7:45 AM	8:00 AM											283				236		519
8:00 AM	8:15 AM											274				273		547
8:15 AM	8:30 AM											305				264		569
8:30 AM	8:45 AM											290				262		552
8:45 AM	9:00 AM											286				280		566
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	1192	0	0	0	1065	0	2257

Count Taken:	1/23/2018	9/24/2019	PHF	0.91	
Buildout year:	2024				
Growth Rate:	0.9%				
Seasonal Factor:	1.02	1.08			

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	0	0	47	0	0	0	0	0	0	1192	0	0	0	1065	47
PSCF	0	0	0	4	0	0	0	0	0	0	24	0	0	0	21	4
Adjusted Volumes		0	0	51		0	0	0	0	0	1216	0	0	0	1086	51
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Growth		0	0	3		0	0	0	0	0	67	0	0	0	60	2
2024 Volumes		0	0	54		0	0	0	0	0	1283	0	0	0	1146	53
Pre-Development		0	0	54		0	0	0	0	0	1283	0	0	0	1146	53
Project	0	0	0	11	0	0	0	0	0	0	16	0	0	0	14	4
Post	0	0	0	65	0	0	0	0	0	0	1299	0	0	0	1160	57

					Out							In				Out	In
Project Traffic Assignment	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	20%	15%
											Out					
											15%					

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

AM PEAK HOUR TURNING MOVEMENTS

US 1 & Gran Park Way

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	NB Total	sbu	sbl	sbt	sbr	SB Total	totals
7:00 AM	7:15 AM	0	0	0	0	0	0	0	22	8	0	252	8	268	0	46	230	0	276	566
7:15 AM	7:30 AM	0	0	0	1	0	0	0	38	8	**3**	221	61	293	2	52	210	7	271	603
7:30 AM	7:45 AM	0	0	0	0	0	0	0	16	10	**1**	285	34	330	4	42	246	0	292	638
7:45 AM	8:00 AM	0	0	0	2	0	0	0	10	5	**1**	260	17	283	2	26	207	1	236	531
8:00 AM	8:15 AM	0	0	0	0	0	0	0	9	4	**1**	251	18	274	1	27	244	1	273	556
8:15 AM	8:30 AM	0	0	0	0	0	0	0	16	3	1	288	13	305	11	28	223	2	264	585
8:30 AM	8:45 AM	0	0	0	1	0	0	0	6	4	3	268	15	290	2	6	253	1	262	559
8:45 AM	9:00 AM	0	0	0	2	0	0	0	11	9	3	268	6	286	0	14	266	0	280	579
Peak Hour Traffic Volume																				
7:00 AM	8:00 AM	0	0	0	3	0	0	0	86	31	5	1018	120		8	166	893	8		2338

Count Taken:	1/23/2018	9/24/2019		PHF	0.92
Buildout year:	2024				
Growth Rate:	0.9%				
Seasonal Factor:	1.02	1.08			

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt *	nbr	sbu	sbl	sbt *	sbr
1/23/2018	0	0	0	3	0	0	0	86	31	5	1018	120	8	166	893	8
PSCF	0	0	0	0	0	0	0	7	2	0	20	10	1	13	18	1
Adjusted Volumes		0	0	3		0	0	93	33	5	1038	130	9	179	911	9
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Growth		0	0	0		0	0	4	2	0	57	6	0	8	50	0
2022 Volumes		0	0	3		0	0	97	35	5	1095	136	9	187	961	9
Pre-Development		0	0	3		0	0	97	35	5	1095	136	9	187	961	9
Project	0	0	0	0	0	0	0	0	0	0	5	0	11	0	14	0
Post	0	0	0	3	0	0	0	97	35	5	1100	136	20	187	975	9

Project Traffic Assignment											In		Out		Out	
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	15%	0%	20%	0%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 5038, 1/23/2018

Springtree

PM PEAK HOUR TURNING MOVEMENTS

Harrison & Project Entrance

Count Taken: 9/17/2019
Buildout year: 2024
Growth Rate: 0.9%
Seasonal Factor: 1.09

Use PHF of 0.90 to be conservative

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
9/17/2019			47				47									
PSCF	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	51	0		0	51	0	0	0	0	0		0	0	0
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%		0.9%	0.9%	0.9%
Growth		0	2	0		0	2	0	0	0	0	0		0	0	0
2024 Volumes		0	53	0		0	53	0	0	0	0	0		0	0	0
Pre-Development		0	53	0		0	53	0	0	0	0	0		0	0	0
Project	0	0	0	4	0	58	0	0	0	30	0	9	0	0	0	0
Post	0	0	53	4	0	58	53	0	0	30	0	9	0	0	0	0
Project Traffic				In		In				Out		Out				
Assignment	0%	0%	0%	5%	0%	80%	0%	0%	0%	65%	0%	20%	0%	0%	0%	0%

*** Traffic volumes based on highest inbound or outbound volume from US 1 & Jackson Street intersection turning movement count in order to provide conservative analysis of driveway**

Springtree

PM PEAK HOUR TURNING MOVEMENTS

Springtree & Project Entrance

Count Taken: 9/17/2019
Buildout year: 2024
Growth Rate: 0.9%
Seasonal Factor: 1.09

Use PHF of 0.90 to be conservative

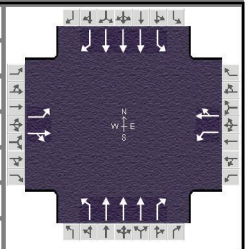
	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
9/17/2019			47				47									
PSCF	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	51	0		0	51	0	0	0	0	0		0	0	0
Growth Rate		0.9%	0.9%	0.9%		0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%		0.9%	0.9%	0.9%
Growth		0	2	0		0	2	0	0	0	0	0		0	0	0
2024 Volumes		0	53	0		0	53	0	0	0	0	0		0	0	0
Pre-Development		0	53	0		0	53	0	0	0	0	0		0	0	0
Project	0	0	0	0	0	0	0	11	0	0	0	0	0	7	0	0
Post	0	0	53	0	0	0	53	11	0	0	0	0	0	7	0	0

Project Traffic								In						Out		
Assignment	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%	15%	0%	0%

*** Traffic volumes based on highest inbound or outbound volume from US 1 & Jackson Street intersection turning movement count in order to provide conservative analysis of driveway**

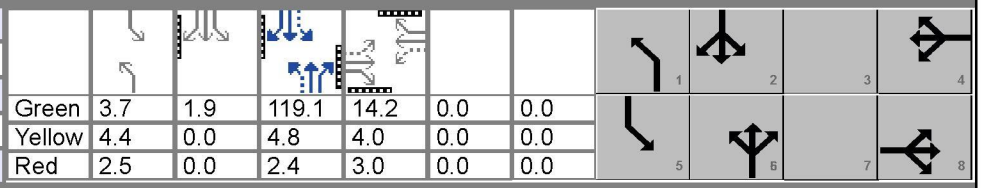
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street		Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 AM.xus		
Project Description	2024 AM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	63	18	14	23	5	27	20	1294	53	154	1164	11

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.7	1.9	119.1	14.2	0.0	0.0						
Yellow	4.4	0.0	4.8	4.0	0.0	0.0						
Red	2.5	0.0	2.4	3.0	0.0	0.0						

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	63	18	14	23	5	27	20	1294	53	154	1164	11
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2		2	2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	115	0		90	0		300	0	435	330	0	600
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	45	45	45	45	45	45

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		30.0		30.0	20.0	110.0	20.0	110.0
Yellow Change Interval (*Y*), s		3.4		4.0	4.4	4.8	4.4	4.8
Red Clearance Interval (R_c), s		4.4		3.0	2.5	2.4	2.1	2.1
Minimum Green (G_{min}), s	7	7	7	7	6	7	6	7
Start-Up Lost Time (*l1*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	5.0	0.0	5.0	0.0	7.0	0.0	7.0
Pedestrian Clearance Time (*PC*), s	0.0	30.0	0.0	31.0	0.0	20.0	0.0	13.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

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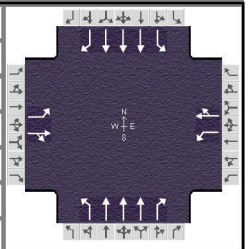
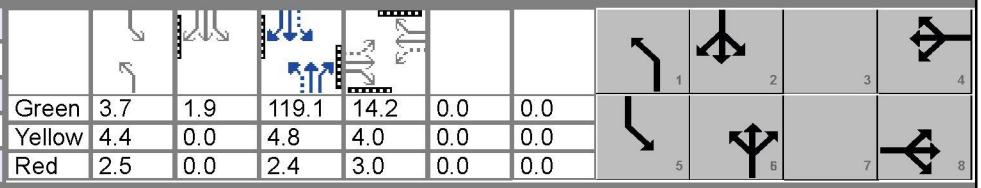
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street		Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 AM.xus		
Project Description	2024 AM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	63	18	14	23	5	27	20	1294	53	154	1164	11

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.7	1.9	119.1	14.2	0.0	0.0						
Yellow	4.4	0.0	4.8	4.0	0.0	0.0						
Red	2.5	0.0	2.4	3.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	1	6	5	2
Case Number		6.0		6.0	1.1	3.0	1.1	3.0
Phase Duration, s		21.2		21.2	10.6	126.3	12.5	128.2
Change Period, (*Y+R c*), s		7.8		7.8	6.9	7.2	6.5	7.2
Max Allow Headway (*MAH*), s		3.3		3.3	3.0	0.0	3.0	0.0
Queue Clearance Time (*g s*), s		13.2		7.8	2.5		5.7	
Green Extension Time (*g e*), s		0.2		0.3	0.0	0.0	0.2	0.0
Phase Call Probability		1.00		1.00	0.62		1.00	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	69	35		25	35		22	1422	58	169	1279	12
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1373	1734		1373	1624		1781	1698	1585	1781	1698	1585
Queue Service Time (*g s*), s	8.0	3.0		2.8	3.2		0.5	15.8	1.6	3.7	13.1	0.3
Cycle Queue Clearance Time (*g c*), s	11.2	3.0		5.8	3.2		0.5	15.8	1.6	3.7	13.1	0.3
Green Ratio (*g/C*)	0.08	0.08		0.08	0.08		0.77	0.74	0.74	0.78	0.76	0.76
Capacity (*c*), veh/h	133	145		134	136		372	3792	1180	355	3851	1198
Volume-to-Capacity Ratio (*X*)	0.522	0.242		0.188	0.258		0.059	0.375	0.049	0.477	0.332	0.010
Back of Queue (*Q*), ft/ln (95 th percentile)	131.8	63		46.2	63.2		7	228.7	22.7	54.1	193.5	4.3
Back of Queue (*Q*), veh/ln (95 th percentile)	5.2	2.5		1.8	2.5		0.3	9.0	0.9	2.1	7.6	0.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.15	0.00		0.51	0.00		0.02	0.00	0.05	0.16	0.00	0.01
Uniform Delay (*d 1*), s/veh	73.8	68.5		71.2	68.6		5.0	7.3	5.4	5.6	6.4	4.8
Incremental Delay (*d 2*), s/veh	1.2	0.3		0.2	0.4		0.0	0.3	0.1	0.4	0.2	0.0
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	75.0	68.9		71.5	69.0		5.0	7.5	5.5	6.0	6.6	4.8
Level of Service (LOS)	E	E		E	E		A	A	A	A	A	A
Approach Delay, s/veh / LOS	72.9	E		70.0	E		7.4	A		6.5	A	
Intersection Delay, s/veh / LOS	10.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.4	C	3.4	C	2.2	B	2.2	B
Bicycle LOS Score / LOS	0.7	A	0.6	A	1.3	A	1.3	A

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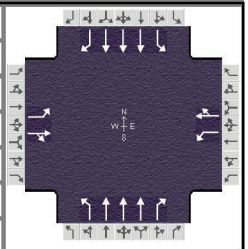
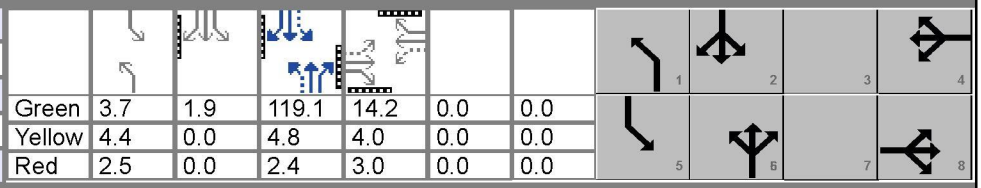
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.91
Urban Street		Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 AM.xus		
Project Description	2024 AM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	63	18	14	23	5	27	20	1294	53	154	1164	11

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.7	1.9		119.1	14.2	0.0	0.0					
Yellow	4.4	0.0		4.8	4.0	0.0	0.0					
Red	2.5	0.0		2.4	3.0	0.0	0.0					

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	0.984	0.984	0.984	0.984
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})	0.723	0.000		0.723	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.927	0.927		0.868	0.868		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1373	975	759	1373	254	1370	1781	5095	1585	1781	5095	1585
Proportion of Vehicles Arriving on Green (P)	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.74	0.74	0.04	0.76	0.76
Incremental Delay Factor (k)	0.04	0.04		0.04	0.04		0.04	0.50	0.50	0.04	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)		7.8		7.8	6.9	7.2	6.5	7.2
Green Ratio (g/C)		0.08		0.08	0.77	0.74	0.78	0.76
Permitted Saturation Flow Rate (s_p), veh/h/ln		1373		1373	432	0	377	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s		13.4		13.4	119.1	0.0	119.1	0.0
Permitted Service Time (g_u), s		10.2		10.4	105.8	0.0	103.2	0.0
Permitted Queue Service Time (g_{ps}), s		8.0		2.8	0.7		13.0	
Time to First Blockage (g_f), s		0.0		0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln						0		0
Protected Right Effective Green Time (g_R), s						0.0		0.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	2.644	0.00	2.644	0.00	1.557	0.00	1.557	0.00
Pedestrian F_s / F_{delay}	0.000	0.169	0.000	0.168	0.000	0.066	0.000	0.062
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	167.28	67.18	177.28	66.45	1489.01	5.22	1515.96	4.69
Bicycle F_w / F_v	-3.64	0.17	-3.64	0.10	-3.64	0.83	-3.64	0.80

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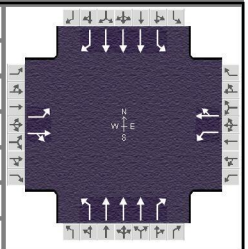
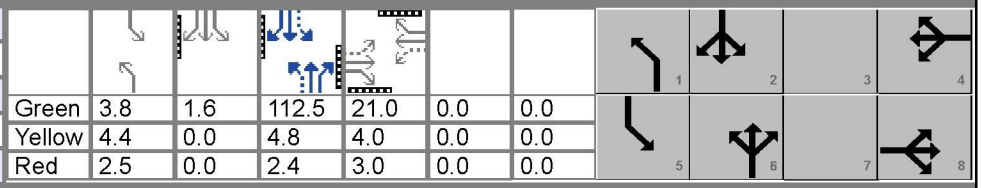
HCS7 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.92
Urban Street		Analysis Year	2024	Analysis Period	1> 16:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 PM.xus		
Project Description	2024 PM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	2	19	60	14	99	21	1603	27	71	1753	29

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.8	1.6	112.5	21.0	0.0	0.0						
Yellow	4.4	0.0	4.8	4.0	0.0	0.0						
Red	2.5	0.0	2.4	3.0	0.0	0.0						

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	2	19	60	14	99	21	1603	27	71	1753	29
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2		2	2		2	2	2	2	2	2
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
Turn Bay Length, ft	115	0		90	0		300	0	435	330	0	600
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	45	45	45	45	45	45

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s		28.0		28.0	15.0	117.0	15.0	117.0
Yellow Change Interval (*Y*), s		3.4		4.0	4.4	4.8	4.4	4.8
Red Clearance Interval (R_c), s		4.4		3.0	2.5	2.4	2.1	2.1
Minimum Green (G_{min}), s	7	7	7	7	6	7	6	7
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	5.0	0.0	5.0	0.0	7.0	0.0	7.0
Pedestrian Clearance Time (*PC*), s	0.0	30.0	0.0	31.0	0.0	20.0	0.0	13.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

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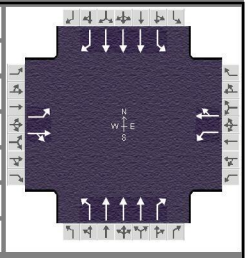
HCS7 Signalized Intersection Results Summary

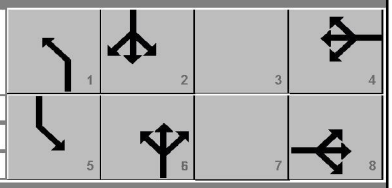
General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.92
Urban Street		Analysis Year	2024	Analysis Period	1> 16:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 PM.xus		
Project Description	2024 PM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	2	19	60	14	99	21	1603	27	71	1753	29

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	1.6	112.5	21.0	0.0	0.0	
Yellow	4.4	0.0	4.8	4.0	0.0	0.0	
Red	2.5	0.0	2.4	3.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	1	6	5	2
Case Number		6.0		6.0	1.1	3.0	1.1	3.0
Phase Duration, s		28.0		28.0	10.7	119.7	12.3	121.3
Change Period, ($Y+R_c$), s		7.8		7.8	6.9	7.2	6.5	7.2
Max Allow Headway (*MAH*), s		3.4		3.4	3.0	0.0	3.0	0.0
Queue Clearance Time (g_s), s		21.1		13.5	2.6		3.9	
Green Extension Time (g_e), s		0.0		0.3	0.0	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.64		0.97	
Max Out Probability		1.00		0.08	0.00		0.09	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (*v*), veh/h	61	23		65	123		23	1742	29	77	1905	32
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1268	1608		1389	1616		1781	1698	1585	1781	1698	1585
Queue Service Time (g_s), s	7.6	2.0		7.0	11.5		0.6	24.7	0.9	1.9	27.4	0.9
Cycle Queue Clearance Time (g_c), s	19.1	2.0		9.0	11.5		0.6	24.7	0.9	1.9	27.4	0.9
Green Ratio (*g/C*)	0.13	0.13		0.13	0.13		0.73	0.70	0.70	0.74	0.71	0.71
Capacity (*c*), veh/h	114	203		203	204		213	3582	1114	262	3632	1130
Volume-to-Capacity Ratio (*X*)	0.534	0.112		0.322	0.602		0.107	0.486	0.026	0.295	0.525	0.028
Back of Queue (*Q*), ft/ln (95 th percentile)	118.8	38.5		115.8	220.4		9.3	343.1	13.8	30.3	370.2	14.2
Back of Queue (*Q*), veh/ln (95 th percentile)	4.7	1.5		4.6	8.7		0.4	13.5	0.5	1.2	14.6	0.6
Queue Storage Ratio (*RQ*) (95 th percentile)	1.03	0.00		1.29	0.00		0.03	0.00	0.03	0.09	0.00	0.02
Uniform Delay (d_1), s/veh	75.1	62.0		65.9	66.1		8.7	10.7	7.2	8.3	10.5	6.7
Incremental Delay (d_2), s/veh	2.6	0.1		0.3	3.5		0.1	0.5	0.0	0.2	0.5	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	77.7	62.0		66.3	69.6		8.8	11.2	7.2	8.6	11.1	6.8
Level of Service (LOS)	E	E		E	E		A	B	A	A	B	A
Approach Delay, s/veh / LOS	73.4	E		68.5	E		11.1	B		10.9	B	
Intersection Delay, s/veh / LOS	14.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	3.4	C	3.4	C	2.2	B	2.2	B
Bicycle LOS Score / LOS	0.6	A	0.8	A	1.5	A	1.6	B

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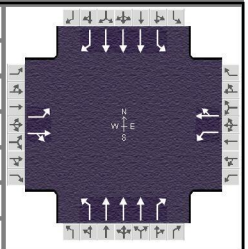
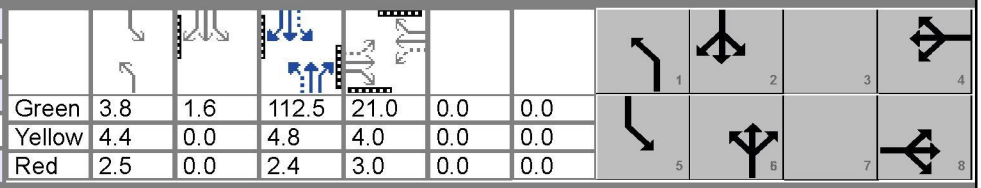
HCS7 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	MEP			Duration, h	0.25
Analyst	MEP	Analysis Date	2/27/2020	Area Type	Other
Jurisdiction		Time Period		PHF	0.92
Urban Street		Analysis Year	2024	Analysis Period	1> 16:00
Intersection	Monroe St & US 1	File Name	Monroe & US 1 PM.xus		
Project Description	2024 PM Post-Development				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	56	2	19	60	14	99	21	1603	27	71	1753	29

Signal Information			
Cycle, s	160.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.8	1.6		112.5	21.0	0.0	0.0					
Yellow	4.4	0.0		4.8	4.0	0.0	0.0					
Red	2.5	0.0		2.4	3.0	0.0	0.0					

Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	0.984	0.984	1.000	0.984	0.984	1.000	0.984	0.984	0.984	0.984	0.984	0.984
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.908	1.000	1.000	0.908	1.000
Left-Turn Adjustment Factor (f_{LT})	0.668	0.000		0.731	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.860	0.860		0.864	0.864		0.000	0.847		0.000	0.847
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Movement Saturation Flow Rate (s), veh/h	1268	153	1455	1389	200	1415	1781	5095	1585	1781	5095	1585
Proportion of Vehicles Arriving on Green (P)	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.70	0.70	0.04	0.71	0.71
Incremental Delay Factor (k)	0.07	0.04		0.04	0.13		0.04	0.50	0.50	0.04	0.50	0.50

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)		7.8		7.8	6.9	7.2	6.5	7.2
Green Ratio (g/C)		0.13		0.13	0.73	0.70	0.74	0.71
Permitted Saturation Flow Rate (s_p), veh/h/ln		1268		1389	236	0	277	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s		20.2		20.2	112.5	0.0	112.5	0.0
Permitted Service Time (g_u), s		8.7		18.2	84.6	0.0	87.8	0.0
Permitted Queue Service Time (g_{ps}), s		7.6		7.0	3.0		9.5	
Time to First Blockage (g_f), s		0.0		0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln						0		0
Protected Right Effective Green Time (g_R), s						0.0		0.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	2.644	0.00	2.644	0.00	1.557	0.00	1.557	0.00
Pedestrian F_s / F_{delay}	0.000	0.165	0.000	0.164	0.000	0.078	0.000	0.075
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	252.50	61.08	262.50	60.38	1406.18	7.05	1429.69	6.51
Bicycle F_w / F_v	-3.64	0.14	-3.64	0.31	-3.64	0.99	-3.64	1.11

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HCS7 Two-Way Stop-Control Report

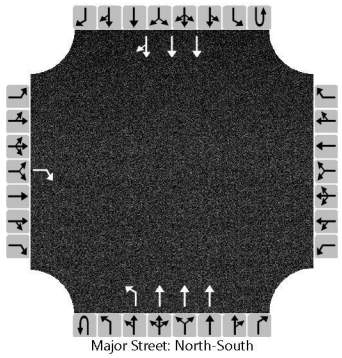
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/2020
Analysis Year	2024
Time Analyzed	
Intersection Orientation	North-South
Project Description	Springtree 2024 Post PM

Site Information

Intersection	US 1 & Jackson Street
Jurisdiction	
East/West Street	Jackson St
North/South Street	US 1
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	3	0	0	0	3	0
Configuration				R						L	T				T	TR
Volume (veh/h)				5					92	35	1603				1753	21
Percent Heavy Vehicles (%)				2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1					5.6	5.3						
Critical Headway (sec)				7.14					5.64	5.34						
Base Follow-Up Headway (sec)				3.9					2.3	3.1						
Follow-Up Headway (sec)				3.92					2.32	3.12						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				6						141						
Capacity, c (veh/h)				212						196						
v/c Ratio				0.03						0.72						
95% Queue Length, Q_{95} (veh)				0.1						4.6						
Control Delay (s/veh)				22.4						60.1						
Level of Service (LOS)				C						F						
Approach Delay (s/veh)	22.4								4.4							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

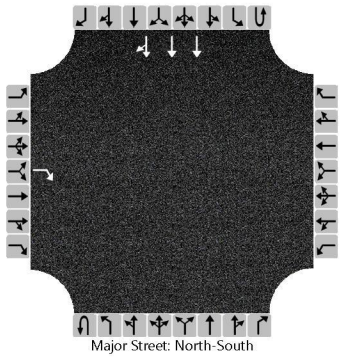
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/2020
Analysis Year	2024
Time Analyzed	
Intersection Orientation	North-South
Project Description	Springtree Post-Development AM

Site Information

Intersection	US 1 & Harrison St
Jurisdiction	
East/West Street	Harrison St
North/South Street	US 1
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	0	0	0	0	3	0
Configuration				R											T	TR
Volume (veh/h)				68											1150	71
Percent Heavy Vehicles (%)				2												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.14												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.92												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				75												
Capacity, c (veh/h)				342												
v/c Ratio				0.22												
95% Queue Length, Q_{95} (veh)				0.8												
Control Delay (s/veh)				18.4												
Level of Service (LOS)				C												
Approach Delay (s/veh)		18.4														
Approach LOS		C														

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HCS7 Two-Way Stop-Control Report

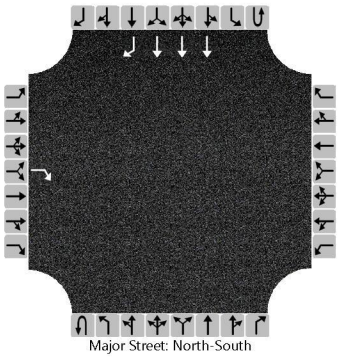
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/2020
Analysis Year	2024
Time Analyzed	
Intersection Orientation	North-South
Project Description	Springtree Post-Development AM

Site Information

Intersection	US1 & Springtree Place
Jurisdiction	
East/West Street	US 1
North/South Street	Springtree Place
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	0	0	0	0	3	1
Configuration				R											T	R
Volume (veh/h)				65											1160	57
Percent Heavy Vehicles (%)				2												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No												No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.14												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.92												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				71												
Capacity, c (veh/h)				360												
v/c Ratio				0.20												
95% Queue Length, Q_{95} (veh)				0.7												
Control Delay (s/veh)				17.5												
Level of Service (LOS)				C												
Approach Delay (s/veh)		17.5														
Approach LOS		C														

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HCS7 Two-Way Stop-Control Report

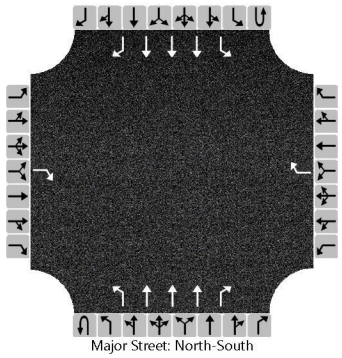
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/20
Analysis Year	2024
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Springtree 2024 Post AM

Site Information

Intersection	US 1 & Gran Park Way
Jurisdiction	
East/West Street	Gran Park Way
North/South Street	US 1
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	1	0	1	3	1	0	1	3	1
Configuration				R				R		L	T	R		L	T	R
Volume (veh/h)				3				97	35	5	1100	136	20	187	975	9
Percent Heavy Vehicles (%)				2				2	2	2			2	2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No				No				No				No			
Median Type | Storage	Left Only								2							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1				7.1	5.6	5.3			5.6	5.3		
Critical Headway (sec)				7.14				7.14	5.64	5.34			5.64	5.34		
Base Follow-Up Headway (sec)				3.9				3.9	2.3	3.1			2.3	3.1		
Follow-Up Headway (sec)				3.92				3.92	2.32	3.12			2.32	3.12		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				3				105		43				225		
Capacity, c (veh/h)				423				382		541				274		
v/c Ratio				0.01				0.28		0.08				0.82		
95% Queue Length, Q_{95} (veh)				0.0				1.1		0.3				6.6		
Control Delay (s/veh)				13.6				18.0		12.2				58.5		
Level of Service (LOS)				B				C		B				F		
Approach Delay (s/veh)	13.6				18.0				0.4				10.2			
Approach LOS	B				C											

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HCS7 Two-Way Stop-Control Report

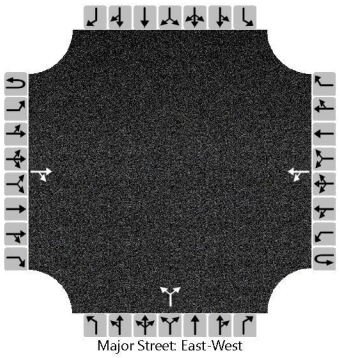
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/2020
Analysis Year	2024
Time Analyzed	
Intersection Orientation	East-West
Project Description	Springtree Post-Development PM

Site Information

Intersection	Harrison St & Entrance
Jurisdiction	
East/West Street	Harrison St
North/South Street	Entrance
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			53	4		58	53			30		9				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						64					43					
Capacity, c (veh/h)						1539					759					
v/c Ratio						0.04					0.06					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					10.0					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					4.0				10.0							
Approach LOS									B							

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HCS7 Two-Way Stop-Control Report

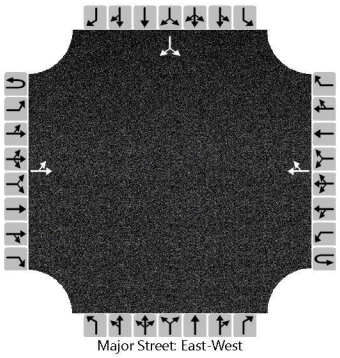
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/27/2020
Analysis Year	2024
Time Analyzed	
Intersection Orientation	East-West
Project Description	Springtree Post-Development PM

Site Information

Intersection	Springtree & Entrance
Jurisdiction	
East/West Street	Springtree
North/South Street	Project Entrance
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		0	53				53	11						7		0
Percent Heavy Vehicles (%)		2												2		2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.42		6.22
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.52		3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0													8	
Capacity, c (veh/h)		1529													871	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.4													9.2	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.0												9.2			
Approach LOS													A			

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COUNTY: 89
STATION: 5038
DESCRIPTION: SR 5/US 1 - N OF SALERNO RD (COUNTY LINK: 110)
START DATE: 01/23/2018
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	11	7	8	12	38	16	13	15	14	58	96
0100	10	9	7	21	47	16	5	10	10	41	88
0200	7	11	10	5	33	8	4	5	7	24	57
0300	7	13	8	5	33	10	13	9	10	42	75
0400	11	20	23	34	88	15	24	37	36	112	200
0500	43	55	68	75	241	45	68	73	99	285	526
0600	107	145	157	221	630	139	178	183	213	713	1343
0700	268	293	330	283	1174	276	271	292	236	1075	2249
0800	274	305	290	286	1155	273	264	262	280	1079	2234
0900	301	301	298	285	1185	263	267	262	238	1030	2215
1000	300	297	352	350	1299	282	272	288	314	1156	2455
1100	270	335	317	326	1248	288	303	325	326	1242	2490
1200	365	318	410	335	1428	307	293	374	324	1298	2726
1300	334	365	343	364	1406	357	392	323	370	1442	2848
1400	378	348	375	342	1443	376	359	357	351	1443	2886
1500	344	357	373	339	1413	336	350	366	361	1413	2826
1600	362	353	380	420	1515	368	384	357	435	1544	3059
1700	329	307	307	265	1208	401	360	322	274	1357	2565
1800	294	261	255	202	1012	273	243	243	205	964	1976
1900	190	146	120	100	556	183	174	169	179	705	1261
2000	89	96	89	96	370	142	123	124	119	508	878
2100	68	73	83	71	295	120	93	77	61	351	646
2200	55	40	30	25	150	71	53	34	36	194	344
2300	27	27	17	16	87	36	24	22	13	95	182
24-HOUR TOTALS:					18054					18171	36225

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	1192	800	1079	845	2258
P.M.	1600	1515	1615	1577	1600	3059
DAILY	1600	1515	1615	1577	1600	3059

GENERATED BY SPS 5.0.53P

LOCATION: 85 SR-5 (US1) @ MONROE ST

Day Plan

Day 2 = Weekdays Day 1 = Weekends

DAY	START	COBALT plan			
1	9:00	1			
1	21:00	99	Free		
2	6:00	3			
2	9:30	5			
2	15:00	7			
2	18:30	9			
2	20:30	99	Free		

Plan		1		3	5	7	9	
OFFSET		85		40	87	39	4	
CYCLE LENGTH		160		160	160	160	140	
Cobalt Sequence		1		1	1	1	1	
PHASE		SPLITS (SECONDS)						
1	NBLT	16		20	18	15	22	
2	SB	115		110	101	117	87	
3		0		0	0	0	0	
4	WB	29		30	41	28	31	
5	SBLT	25		20	22	15	21	
6	NB	106		110	97	117	88	
7		0		0	0	0	0	
8	EB	29		30	41	28	31	

Lagging phase when **BOLD** type & gray box

Printed 02/26/20

MARTIN COUNTY TRAFFIC

Intersection: 85 SR-5 (US1) @ MONROE ST

	NBLT	SB		WB	SBLT	NB		EB
PHASE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Min green	6	15	0	7	6	15	0	7
Vehicle Ext	4	4	0	4	4	4	0	4
Max 1	20	60	0	30	20	60	0	30
Max 2								
Yellow	4.4	4.8	3	4	4.4	4.8	3	3.4
Red Clear	2.5	2.1	0	3	2.1	2.4	0	4.4
Walk	0	7	0	5	0	7	0	5
Ped Clear	0	13	0	31	0	20	0	30
Start Up		Green				Green		
Locking Detector		X				X		
Veh. Recalls		Min				Min		
Assigned ph.	1				5			
Cross Switch Ph	6				2			

February 26, 2020

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (Land Use 225), and mid-rise residential with 1st-floor commercial (Land Use 231) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.46 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 95.7 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 4:45 and 5:45 p.m., respectively.

For the four dense multi-use urban sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:15 and 5:15 p.m., respectively. For the three center city core sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 6:45 and 7:45 a.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.46 residents per occupied dwelling unit.

For the five sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 95.7 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the five center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 1.84 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.94 during Weekday, AM Peak Hour of Generator
- 2.07 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.59 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 32 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.90 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.90 during Weekday, AM Peak Hour of Generator
- 2.00 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.08 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 13 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.56 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.88 during Weekday, AM Peak Hour of Generator
- 1.70 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.07 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Delaware, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Source Numbers

168, 188, 204, 305, 306, 321, 357, 390, 436, 525, 530, 579, 638, 818, 857, 866, 901, 904, 910, 912, 918, 934, 936, 939, 944, 947, 948, 949, 959, 963, 964, 966, 967, 969, 970

Multifamily Housing (Mid-Rise)
(221)

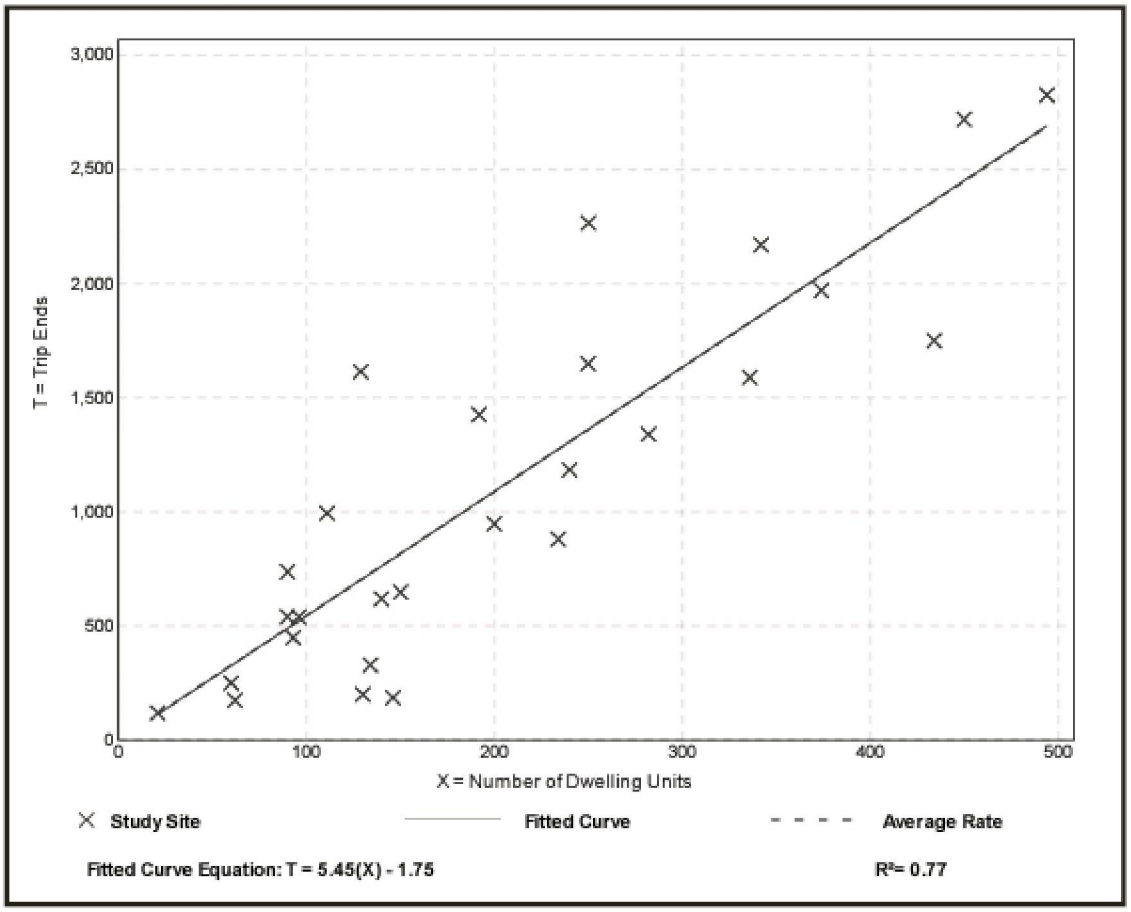
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



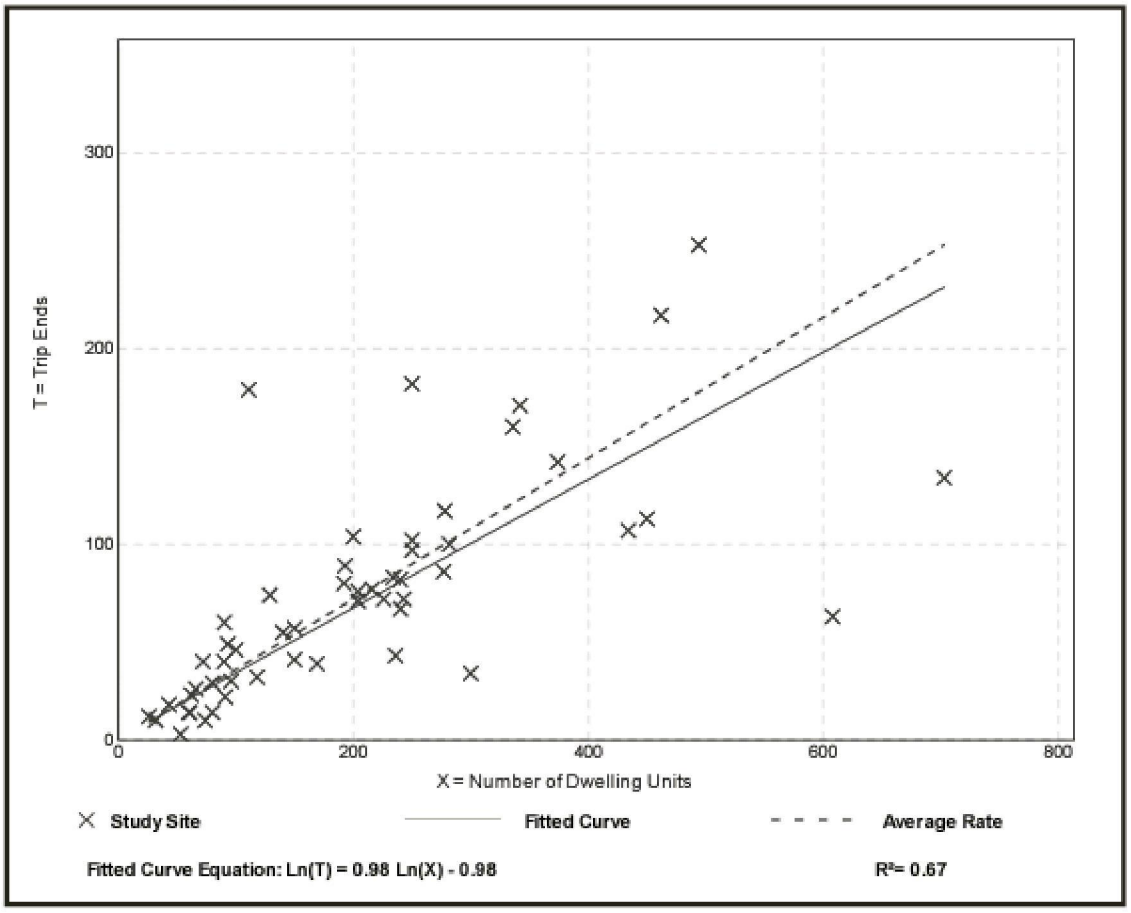
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 53
Avg. Num. of Dwelling Units: 207
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



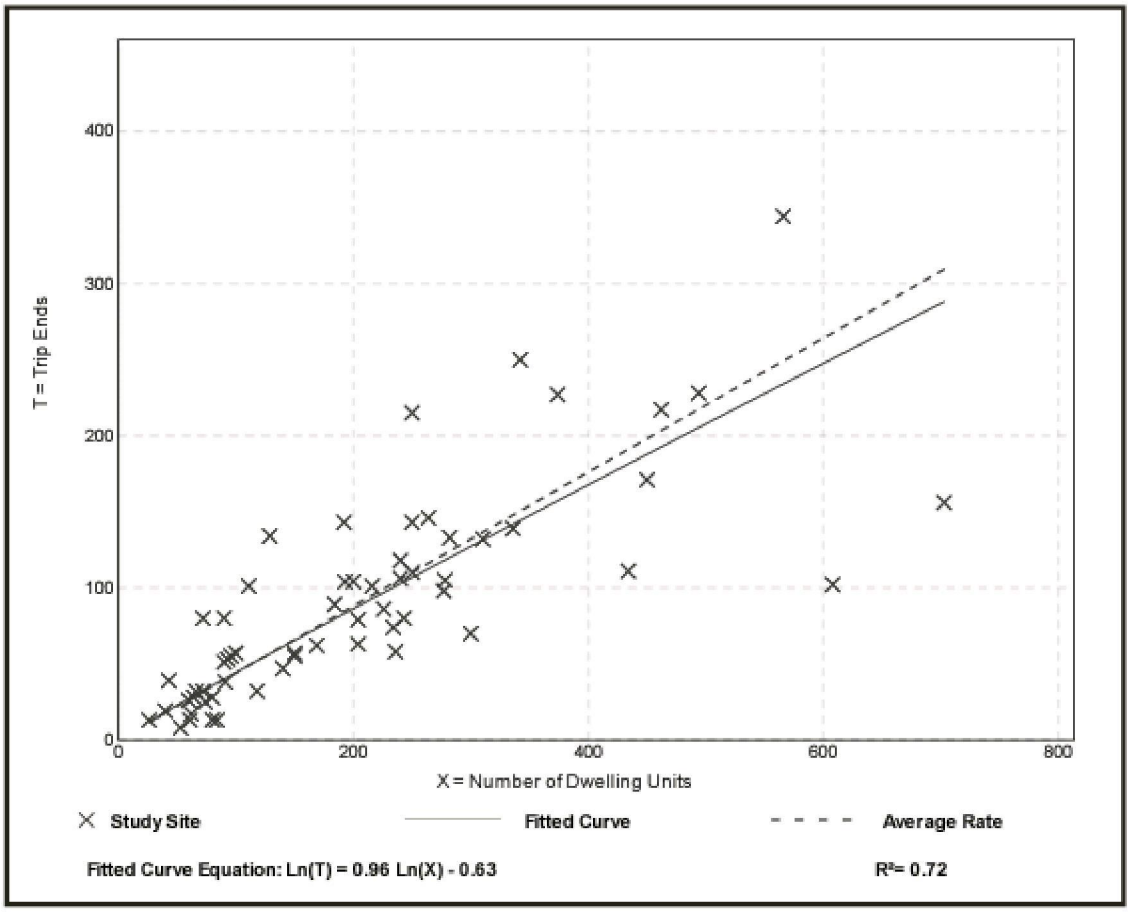
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 60
Avg. Num. of Dwelling Units: 208
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation



Martin County, Florida - Laurel Kelly, C.F.A

generated on 9/17/2019 11:44:58 AM EDT

Summary

Parcel ID	Account #	Unit Address	Market Total Value	Website Updated
52-38-41-000-000-01102-0	1107101	SE FEDERAL HIGHWAY, STUART	$758,680	9/14/2019

Owner Information

Owner(Current)	STUART 13 ACRES LLC
Owner/Mail Address	2055 S KANNER HWY STUART FL 34994
Sale Date	9/10/2010
Document Book/Page	2475 1736
Document No.	2232235
Sale Price	1116700

Location/Description

Account #	1107101
Tax District	3100
Parcel Address	SE FEDERAL HIGHWAY, STUART
Acres	7.2570
Map Page No.	HG-47
Legal Description	HANSON GRANT S/D OF LOTS 18 19 20 S 1/3 OF N 9/15 W OF US 1 HWY DESC AS THE S 434.35' OF THE FOLLOWING: BEG W R/W US 1 & S/LN N 9/15THS, NLY ALG HWY 781.49 TO N/LN OF S 3/15 OF S 9/15, W 727.88', SLY PARALLEL US 1 782.47' & E 727.78' TO POB

NOTE: Legal description as shown is not to be used on legal documents. The legal description is intended for general information only. The Property Appraiser assumes no responsibility for the consequences of inappropriate uses or interpretations of the legal description.

Parcel Type

Use Code	1000 Vacant Commercial
Neighborhood	50700 Federal_Indian to Cove

Assessment Information

Market Land Value	$758,680
Market Improvement Value	
Market Total Value	$758,680

Martin County, Florida - Laurel Kelly, C.F.A

generated on 9/17/2019 11:45:44 AM EDT

Summary

Parcel ID	Account #	Unit Address	Market Total Value	Website Updated
52-38-41-000-000-01101-0	128526	SE FEDERAL HIGHWAY, STUART	$800,530	9/14/2019

Owner Information

Owner(Current)	TIERRA DEL LAGO INC
Owner/Mail Address	PO BOX 3306 PALM BEACH FL 33480
Sale Date	8/4/1986
Document Book/Page	0995 1479
Document No.	
Sale Price	0

Location/Description

Account #	128526
Tax District	3100
Parcel Address	SE FEDERAL HIGHWAY, STUART
Acres	5.7430
Map Page No.	HG-47
Legal Description	HANSON GRANT S/D OF LOTS 18 19 20 S 1/3 OF N 9/15 W OF US 1 HWY DESC AS: BEG W R/W US 1 & S/LN N 9/15THS, NLY ALG HWY 781.49 TO N/LN OF S 3/15 OF S 9/15, W 727.88', SLY PARALLEL US 1 782.47' & E 727.78' TO POB (LESS THE S 434.35' AS DESC IN OR 2475/1736)

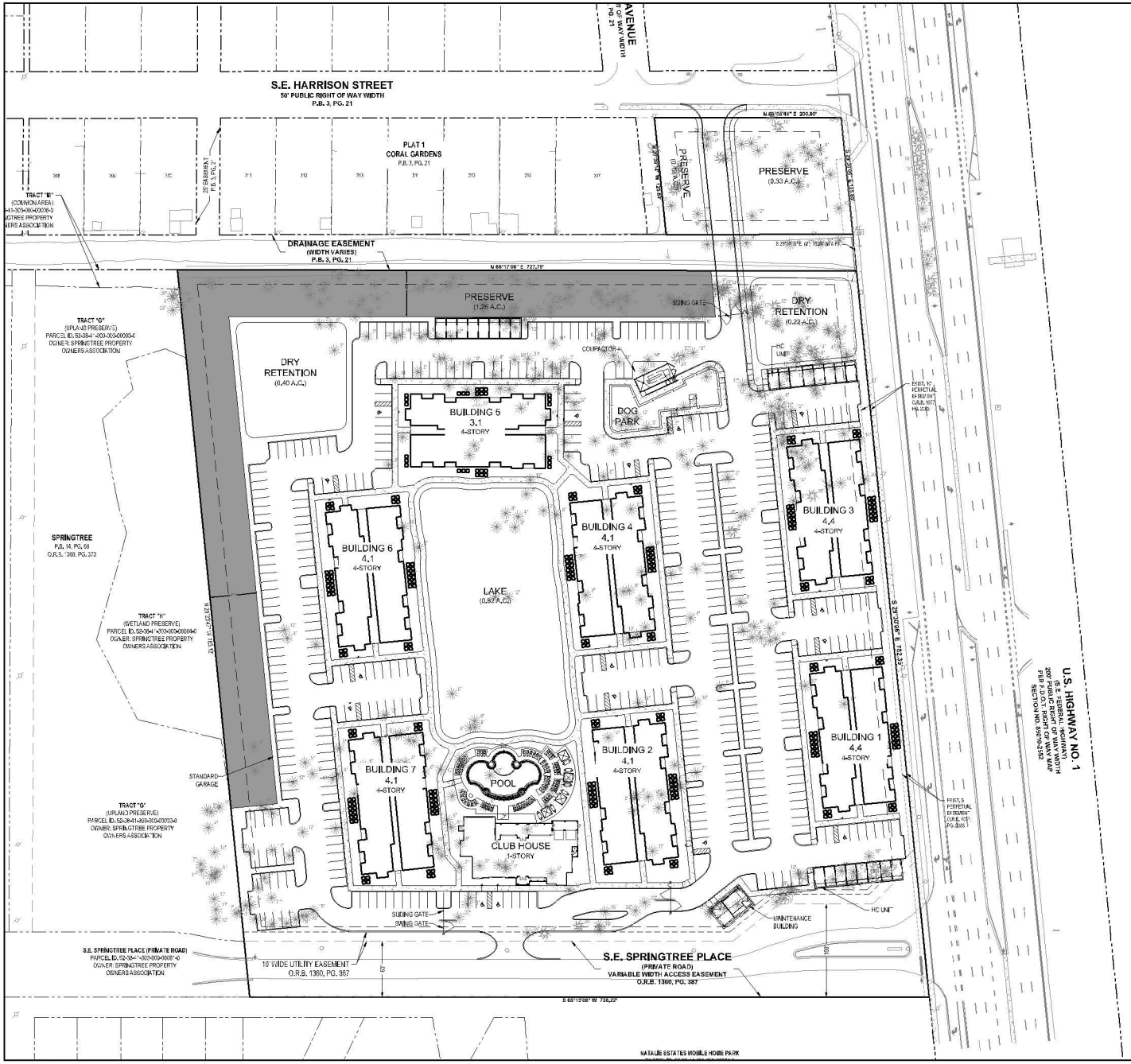
NOTE: Legal description as shown is not to be used on legal documents. The legal description is intended for general information only. The Property Appraiser assumes no responsibility for the consequences of inappropriate uses or interpretations of the legal description.

Parcel Type

Use Code	1000 Vacant Commercial
Neighborhood	50700 Federal_Indian to Cove

Assessment Information

Market Land Value	$800,530
Market Improvement Value	
Market Total Value	$800,530



Site Data

Total Site Area	592,416 Sf / 13.6 Ac.	
Density	270 Units	19.85 UNITS / Ac.

Upland Preserve / Nature Area

Proposed Upland Preservation:	76,665 sf	1.76 Ac.	25%

Open Space

Open Space Provided:	161,608 sf	3.71 Ac.	28%

Impervious Area

Building Coverage	87,556 sf	2.01 Ac.
Vehicular / Sidewalks / Pads	196,456 sf	4.51 Ac.
Lake	31,363 sf	0.72 Ac.

Pervious Area

Dry Detention Area	20,909 sf	0.48 Ac.
Upland Preserve Area	76,665 sf	1.76 Ac.
Open Space	161,608 sf	3.71 Ac.
Total:		6.01 Ac.

Parking (9' x 18')

Stalls/Spaces	467 each	1.73 space/ Unit

Bowman CONSULTING

Bowman Consulting Group, Ltd.
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STUART - SPRINGTREE

FLORIDA

CITY OF STUART

PROJECT NO.
30210-01-002

REVISIONS	
DATE	DESCRIPTION

DRAWN	JMB
CHKD	HE
SCALE:	1" = 50'
JOB No.	30210-01-002
DATE:	7/19/2019
FILE:	
SHEET	1 OF 1

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500 • Palm City • Florida • 34990
(772) 286-8030 • www.mackenzieengineeringinc.com

February 28, 2020

Mr. Tom Reetz
Senior Planner
City of Stuart Development Department

Re: **Springtree – City of Stuart, Florida**
Review of Traffic Impact Analysis

Dear Mr. Reetz:

We offer the following responses to comments regarding the IRC review of the Traffic Impact Study (TIS)

Response to Comments (2/18/2020)

1. How will project traffic impact operations along Alden Avenue? What are the existing volumes along Alden Avenue during AM and PM peak hours?
   Response: The development is projected to add 42 and 28 northbound AM and PM peak hour trips, respectively, the existing Alden Avenue traffic. Peak hour peak direction traffic is projected to be about 1 vehicle per minute and Alden Avenue ADT is projected to be less than 1,000 vehicles per day. Therefore Alden is projected to function acceptably as a local road with the proposed project. See Page 9 of the revised study.

2. Please count the intersection of US-1 & Monroe Street during the AM and PM peak hours and evaluate its operations with project traffic. Also, please evaluate the queuing on the eastbound approach.
   Response: **Acknowledged. See Page 6 of the revised study.**

If you have any questions, please do not hesitate to contact Shaun Mackenzie at (772) 834-8909.

Sincerely,

Shaun MacKenzie

Shaun G. MacKenzie, P.E.
Transportation Engineer
Florida Registration Number 61751
Engineering Business Number 29013

SPRINGTREE RPUD. COMPREHENSIVE PLAN REVIEW

Objective A5. - Residential development.

Ensure land use compatibility by grouping complementary land use activities, including mixed-use land use developments in appropriate areas of the City. Work with the developers to integrate vehicular and pedestrian circulation systems, bike paths, parking, building location, and architectural design into a cohesive development.

Policy A5.1. The Future Land Use Element of the City's adopted Comprehensive Plan shall provide land for future residential use to promote a more compact development pattern. This shall include sufficient land suitable for the public utility facilities needed to support the projected level and pattern of development.

The proposed project is compact in form and counteracts the existing urban sprawl development within the locality by proposing a medium density development of approximately 22 dwelling units per acre.

Policy A5.2. Development on all vacant, un-platted areas designated as residential should be compatible with any surrounding existing homes.

In order to consider the compatibility of a proposal we need to assess whether the existing residential and commercial development adjacent to the proposed development are able to exist together without problems or conflict. The proposed development proposes an entirely residential development as opposed to the previous Martin County Land use designations of Commercial and Multi-Family Residential, this factor providing a greater compatibility in relation to the existing homes. The proposal is separated from existing commercial uses to the north-east by a proposed preserve area. The existing buffers and preserve areas surrounding the site together with the proposed buffers and preserve areas within the site, provide sufficient distance and visual shielding to project the surrounding existing residential development. The 4-storey height of the proposed development is adequately shielded from view. In respect of traffic impacts and safety the applicants' traffic study and additional work to the Springtree Place access road and sidewalk provision address volume and safety impacts in that respect. Overall, this proposal is considered to be compatible with the adjacent uses.

Policy A5.3. Wherever possible, medium density residential and recreation/open space areas should serve as buffers between higher and lower intensity residential uses to achieve an orderly land use transition.

The proposed project is of higher density than adjacent residential uses. The existing and proposed open space and preserve areas provide substantial area to provide transition zones.

Policy A5.5. The City shall market itself as a community for families.

The development forms part of an inventory that widens housing options for existing and new residents of the City.

Policy A5.6. The City shall maintain a height limitation of the greater of 45 feet or four stories of occupiable space for all buildings. The City shall require landscaping of all new development and redevelopment to promote an aesthetic streetscape. The City shall require landscape buffers between single family residential and non-residential uses.

The proposal complies with the height limitation and incorporates substantial landscaping fronting the streetscape. The proposed development (although not single-family) incorporates landscape buffers to the adjacent commercial uses to the north.

Objective B1. - Compact urban form. Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

The proposal is considered to be a good example of a compact urban form of residential infill.

Objective B3. - Desirable pattern of land uses.

Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

The proposal is considered to be a good use of vacant land and within the community characteristics of the City

Policy B3.2. All development shall be compatible with and complementary to surrounding land uses and shall not unduly affect existing approved activities

The proposed development, by reason of proposed use, density and buffers is considered to be compatible and complementary to surrounding activities (both commercial and residential) and would act as a buffer from US-1 Federal Highway to the existing residential development to the west.

Policy B3.6. The City shall protect traditional single-family residential areas by limiting commercial encroachment through zoning, comprehensive planning, traffic calming, and other land use techniques.

The existing residential areas are protected from commercial activity which would otherwise have been permissible under Martin County land development regulations.

HJA DESIGN STUDIO
LANDSCAPE ARCHITECTURE

HAND DELIEVERED

February 12, 2020

Kevin Freeman, Director
City of Stuart
Development Department
121 SW Flagler Avenue
Stuart, Florida 34994

RE: Springtree – Stuart Residential Planned Unit Development
Response to LPA Comments & Draft PUD

On January 30, 2020 the City's Local Planning Agency voted unanimously to recommend approval for the project with the following conditions. Bowman Consulting is providing our written response to the comments:

1. **Comment:** Address the need for a bus stop and analyze the effect on Harrison or roads to south.

   Response: The applicant is in discussions with Martin County Public Transit service about the project and bus stop criteria as well as the role of the City of Stuart.

2. **Comment:** Extend ornamental fence to the west and north entrance.

   Response: Refer to revised site plan that extends ornamental fence west from the gate to end of island.

3. **Comment:** Adjust parking calculation to include garages and correct number of units.

   Response: Refer to the revised site plan and site data that includes parking provided and parking standards as determined by ITE national standards. This data is broken down by unit types with studio, 1-bed, 2-bed and 3-bed totals shown.

4. **Comment:** Show on site plan exterior trash cans, lights, grills, signs.

   Response: A note has been added to include listed items on the site plan including pet waste station.

5. **Comment:** Provide a car washing area.

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Response: A car wash is not proposed for the project.

6. **Comment:** Mail delivery – Determine if inside or outside and designated parking associated with.

Response: Mail delivery of all types will be provided inside the clubhouse. A note has been added to the revised site plan. 10-15 parking spaces are provided in front of the clubhouse to allow for convenient mail pick- up.

7. **Comment:** Work to get permission for continuous sidewalk across entire South property line including preserve area. (6' wide)?

Response: A sidewalk has been added to the revised site plan and is shown on the north side of Springtree Place to the project's west boundary line.

8. **Comment:** Indicate correct unit count and include floor plans.

Response: Unit table with quantity by unit type has been updated on the revised site plan. Floor plans are attached which reflect the following chart.

Studio	28	707 SF
1 br, 1 ba	96	756 SF
1 br, 1 ba	28	816 SF
2 br, 2 ba	16	1,164 SF
2 br, 2 ba	92	1,176 SF
3 br, 2 ba	20	1,248 SF
Total/Avg	**280**	**954 SF**

9. **Comment:** Adding or addressing charging stations.

Response: The following note has been added to the revised site plan. "Pull box and conduit to be provided for future vehicular electric charging station(s) to be located at clubhouse".

10. **Comment:** Disclose or include rules and regulations/deed restrictions. Include dog rules.

Response:

a. **At move- in the management team gets a picture, description of breed and detailed veterinary records.**
b. **Fee: $400 for one (1) pet; $500 total for two (2) plus $10/month in rent.**
c. **Support animals: both fees and rent are waived.**
d. **Maximum Weight Limit at Maturity is 80lbs. The maximum combined number of pets permitted in any apartment is two (2). Breed restrictions include but are not limited to: Rottweiler, Pit Bull Terrier, Doberman Pinscher, Akita, Chow and German Shepherd. If, in the Landlords' sole discretion, it is determined that the pet is one of these breeds or a mix thereof, Landlord may insist on the immediate removal and/or may request veterinarian identification. Additional prohibited pets are as**

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follows: reptiles (all forms, insects, spiders and Ferrets. Residents and/or guests are required to pick up after pet(s).

11. **Comment:** Construction activity plan (Submittal from applicant of construction schedule, activity, and access)

Response: Based on conversation with FDOT, the project will have a temporary access off U.S.1. with construction hours, per city requirements, the only exception being concrete pours for the seven (7) building foundations which may need to take place during cooler night time hours.

The project's main entrance off of Springtree Place will not include construction activity and is proposed to include improved lighting, signage, landscape, a 6' sidewalk to provide with an overall safer and enhanced entry that provides for a better sense of arrival into the existing and proposed neighborhoods.

STATEMENTS & ORDINANCE COMMENTS:

12. Ordinance page 12: fix "Six (7)" to "Seven (7)" in 2nd paragraph under Summary Explanation.

13. Ordinance Work Force Housing to be removed.

14. Ordinance revision: Proposed Open Space is now 38% with 25% shown as native vegetation area as depicted on the revised Site Plan by HJA Design Studio.

15. Ordinance revision: Change Item 18 under Development and Construction on page 29 of 185 to: "Project phasing shall be shown on the site and construction plans are subject to staff approval during plan review process. The first phase shall include work along Springtree Place, stormwater infrastructure and the clubhouse".

16. Ordinance revision: Add "at Springtree Place entrance" to the last sentence of paragraph 19 under Development and Construction on page 29 of 185: The entry gates *at Springtree Place entrance* shall be made operational prior to final CO.

17. Ordinance revision: Add "that can coexist together with power in a public utility easement" at the end of the first sentence of paragraph 20 under Development and Construction on page 29 of 185: Revised sentence: "The property owner shall provide easements for licensed television services *that can coexist together with power in a public utility easement*".

18. Ordinance revision: Change Item 28 under Development and Construction on page 29 of 185 to: "Stuart - Springtree will provide one (1) singular on-site trash compactor".

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19. Ordinance revision: Remove entire section on Work Force Housing.

20. Page 55- Architectural Details. Not all units will have balconies so please revise; Remove 3 story reference since all buildings will be 4 stories.

21. Ordinance revision item 3: Please remove 59% reference to impervious coverage. See revised Site Plan and site data. Maximum building height is 42'-6" to the roof evave and 59' to the highest point of the roof.

Please do not hesitate to contact me or Todd regarding these responses or any other matters pertaining to this application.

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Sincerely,

Michael Houston
HJA Design Studio

C.C. Jim Lott, Waypoint
Terry McCarthy, McCarthy Summers
Howard Ehrsam, Bowman consulting
Todd Troxell

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February 12, 2020

Springtree Project Narrative &
Landuse Amendment & Residential PUD Justification

The Request: On behalf of Waypoint Residential, as the Contract Purchaser, this is a request to amend the future land use map to include the subject property as a Multi-family residential land use and rezone the property to Residential Planned Unit Development (RPUD) to allow for the construction of a 280 unit apartment complex. The subject property is located off SE Federal Highway and SE Springtree Place in Stuart, Florida.

The Subject Property: The vacant subject property is approximately 13.59 acres and consists of three parcels, located west of SE Federal Highway in an urban area on the south eastern edge of jurisdictional limits of the City of Stuart. The property is included in the Hanson Grant subdivision dating back to part of an original 1901 plat later refiled in 1910 that consists of three legal parcels. The property owners are Tierra Del Lago, Inc. on the 5.743-acre parcel 52-38-41-000-000-01101-0; Stuart 13 Acres, LLC on 7.257-acre parcel 52-38-41-000-000-01102-0; and Stuart Harbor Marina & Yacht Club on 0.5739 -acre parcel 52-38-41-005-000-00510-3.

The City Commission unanimously approved the annexing of the three parcels into the City of Stuart on May 8, 2017 in accordance with Ordinance 2352/2017 recorded in Book 2930 Page 845. At the time the subject property received approval for annexation into the City of Stuart the City Commission determined that development of said lands shall be in accordance with the regulatory requirements of Martin County until such a time as amendments to the City's Comprehensive Land Use Plan and Official Zoning Map become effective.

Martin County future land use designation on the subject property had been Commercial Limited with R-3A, Liberal Multiple Family and R-2, Residential zoning designations on the two larger parcels and Commercial General future land use and R-3A, Liberal Multiple Family and R-2, Residential on the smallest parcel. Had the property remained within Martin County jurisdictional limits, a mandatory rezoning to Limited Commercial (LC) or Commercial Planned Unit Development (CPUD), would have been required on the two larger parcels and General Commercial (GC) on the smaller parcel ahead of the approval of any final site plan proposal on the subject property. Residential uses would have been limited to Apartment Hotels as a permitted use on property with a Commercial Limited and Commercial General FLU designation. Permitted uses for a property zoned LC and GC typically included commercial offices, banks, residential storage, limited retail sales and service, shooting ranges and medical facilities, including pain management clinics. The GC zoning district designation also includes more intensive uses as restaurants with drive -throughs and gas stations.

The applicant is requesting the proposed Future Land Use Map (FLUM) designation for the subject property is amended to Multifamily (MF) with a compatible zoning district designation of Residential Planned Unit Development (RPUD). This will achieve the

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necessary land use and zoning change and achieve consistency with the recent approval of the annexation of the property within the City of Stuart jurisdictional limits.

Surrounding Properties Land Use & Zoning: The subject property consists of three vacant parcels located west of SE Federal Highway with an established principle access off SE Springtree Place, an open road with a private residential street classification extending approximately 724.8 feet in length of the subject property. SE Springtree Place currently serves as access to the established Springtree residential subdivision.

Property immediately abutting to the north of the subject property is within Martin County jurisdiction and consists of Coral Gardens, an established residential single-family community with single family residences. The north eastern portion of the subject property abuts established commercial retail properties that front US1 and Harrison Street. Future land use designations on abutting properties to the north include Low Density Residential and Commercial General, with SE Harrison Street providing some separation between the subject property and the existing single-family residences abutting most of the northern property line. Properties to the north have an R-2B – Residential and R-3A, Liberal Multiple Family zoning district designation.

To the east of the subject property is SE Federal Highway (US1) with vacant lands included within the City of Stuart's jurisdiction further east of US1. Those vacant lands have a Commercial Future Land Use Designation and a B-1 Business Limited zoning district designation. Further south east of the subject property is the existing Gran Park at Port Salerno, an industrial development with Limited Industrial future land use and zoning district designations.

Property to the south of the proposal site is within Martin County jurisdiction and consists of the Natalie Estates Mobile Home/HOA "Co-op" with a Mobile Home Future land use and Trailer Park (TP) zoning district designation.

To the west is a preserve associated with the single family portion of the previously developed Springtree community and managed by that association. This property has a Medium Density Residential Future Land Use and an R-2, Residential zoning district designation and is within Martin County jurisdiction.

Proposed Development: The applicant is proposing to construct 280 multi-family garden-style (under 5 stories) residential units consisting of seven 4 story garden- style apartment buildings all with elevators. The location was chosen based on close proximity to retail/ shopping/ entertainment opportunities and the roadway network for commuting choices. On- site amenities include a expansive clubhouse which will include an oversized fitness facility along with a cyber café, game room, TV viewing and other entertainment opportunities. The contemporary clubhouse pool and pool deck have been carefully designed to allow a wide range of uses and users to enjoy this lake-side setting. A 5' wide recreation walk has been planned around the community lake and will connect to all of the apartment buildings.

Throughout the applicant's nationwide portfolio, the company estimates 60%+ of residents have pets. To accommodate this need the project will offer a fully amenitized dog wash room in its clubhouse along with a dedicated dog park onsite. The applicant has also found that there are always residents who want to park their car in a garage, so the project is proposing 24 garage units. The project will include a trash compactor

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onsite along with recycling receptacles. The project will offer valet trash to its residents to help control disposition of trash in order to keep a clean and orderly site.

The main access to the community will be from the existing SE Springtree Place on the south and a northern access point at SE Harrison Street connecting to US1. The scale and proposed use as a multi-family development is considered to be of a density and scale reflective of the property facing US1, and introduces a suitable transition from the established commercial areas further north with the existing single family and to the south with the Natalie Estates and Sunshine mobile home parks to the south.

The proposed floor plans consist of 27 studio, 125 one bed, 108 two bed and 20 three bed apartments. The four-story apartment buildings will measure 42 ft. 6 inches to the roof level or evave and 59ft to the highest element of the roof level.

The vegetative characteristics of the site are described generally in the submitted environmental report and are described as remnants of pine flatwoods that have been negatively impacted and by both human impact (off road trails, camping, etc.) and extensive invasive exotic vegetation. The northern portion of the site does include quality pine flatwoods with much less human and exotic impact. The project is proposing the preservation and creation of 3.11 acres of pineland upland habitat or just over 25% of the site with much of that being in that northern area. The north and west boundaries include upland preserves varying in width but generally 50' wide. These preserve areas as well as the area along Springtree Place will be supplemented with extensive native tree and shrub plantings where the existing habitat allows which will create high quality habitat connecting existing upland habitats on the north and south as well as a dry retention areas. The area off of Harrison Street will be preserved entirely with the exception of the area needed for the access road.

A rezone to RPUD is required to accommodate Section 2.03.09 Table 3.b. land development code provision that allows a density of up to 30 units per acre on properties with a zoning designation of RPUD. The project has been designed to meet all other provisions of the City land development code and comprehensive plan.

The public benefits offered as part of the development application and RPUD zoning agreement include the following:

- The preservation and creation of 3.11 acres of high- quality preserve areas along three sides of the parcel or 25% of the property.
- Removal of invasive exotic vegetation throughout the site prior to allow re-planting and re- vegetation of pine flatwood habitat.
- A much needed multi- family community with a variety of on-site amenities.
- The creation of recreational lake walk that provide connectivity for pedestrians throughout the proposed project.
- Significant building setbacks from the north, south and western edges of the subject property to achieve a greater separation distance and accommodate buffers from existing single family and RV/ trailer park residences.
- Provision of 38 % open space or 5.62 acres where a minimum of 30% is required as a minimum for properties zoned RPUD.

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The proposal is consistent with Comprehensive Plan Objective B1 – Compact Urban Form, in that the project discourages urban sprawl by facilitating urban redevelopment and infill development of properties. A multi-family apartment development in this part of the City of Stuart plans well for urban infill and redevelopment of lands and achieves a compact urban form of development. The project is also consistent with Comprehensive Plan Objective B3. Desirable pattern of land uses. Introducing a residential project on the vacant property creates stronger compatibility with a Multi-family land use and RPUD zoning district than the County's General and Limited Commercial land use designations. The proposal will enhance the pattern of development in a way that is compatible and convenient to City residents, businesses and visitors and avoids inappropriate or wasteful use of land.

Traffic Study: A traffic Statement has been prepared by Mackenzie engineering and Planning to assess trip distribution and assignment has incorporated the characteristics of the proposed development as well as the surrounding network configuration. The traffic analysis was performed in accordance with the City of Stuart Code, Section 4.00.00 Traffic Impact Analysis. The project meets the thresholds of Section 4.00.00. The results of the analysis show that the roadways are projected to operate acceptably with the addition of the proposed development and the project meets Stuart's concurrency requirements.

Parking Provisions: City of Stuart Land Development Code, Sec. 6.01.13. - Off-street parking schedule, requires 2 parking spaces per unit when 2 or more bedrooms are proposed and 1.5 spaces per unit when 1 bedroom is proposed. Parking within the subject property is proposed to include 462 spaces where 484 spaces are required. The reduction in provision of parking spaces will achieve adequate parking provision within the community and includes 10 accessible parking spaces and 24 detached garages. The subject property site plan has been designed to achieve an unobstructed access through the parking areas to ensure emergency service vehicles may navigate through the property safely and effectively.

Architectural Details: Architectural details are included on each of the four sides of the proposed apartment units with the entry to the development via US1 and SE Springfield Place offering a high standard of design and scale. Many apartments will include private balconies. Materials proposed for the apartment buildings include lap siding exposure divided into multiple color blocks; asphalt shingle roofs; composite shutters and full lower single hung vinyl windows.

Comprehensive Plan policy A5.6. requires the City of Stuart to maintain a height limitation of the greater of 45 feet (to roof evave) or four stories of occupiable space with a 15 foot maximum slope to highest point / top of roof (60 foot maximum overall height) for all buildings. Proposed heights of the Springtree apartment buildings are four-story which extend to 42 ft. 6 inches to the roof evave and 59 ft. to the highest element of the roof. The heights proposed are therefore consistent with the Comprehensive Plan four story height limit requirement included in Policy A5.6.

Landscaping & Buffers: The landscape as proposed meets the requirements of the City's approved plant list and exceeds the 50% native requirements and 25% preservation of native vegetation on the property.

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Landscape buffers have been provided on the northern and western sides of the subject property with 50' landscape buffers in the form of preserve areas. Along the property fronting US1 a 10' minimum wide landscape buffer has been provided. The southern boundary includes S.E. Springtree Place as an existing access easement with no scope to provide any extensive buffer along this edge of the south property. But a 10 minimum landscape buffer has been provided between the north side of S.E. Springtree Place and internal drive / parking areas. Throughout the subject property a series of dry retention areas are also intended to accommodate native plantings, adding an extensive visual and environmental amenity to the project. The landscape plan provides details of the proposed shade trees and other species included in the buffer areas.

Internal to the property the applicant has provided the necessary / required plantings around the perimeter of the buildings which will accent the height of the respective buildings. Also, a minimum of one tree per parking lot island has been provided with 87% being shade trees. Additional landscaping will be provided within the littoral areas of lake, around the dry detention areas and internal sidewalks, within buffers as well as within the other public open space areas. The site has been designed to preserve as much upland vegetation as possible. In addition, all utility boxes are intended to be landscaped to be fully screened.

Preservation Areas & Open Space: The proposed final site plan and landscape plan makes provision for the preservation of 3.11 acres or 25% on the subject property. Open space provision measures at 5.62 acres or 41% where a minimum of 30% is required on properties with an RPUD zoning district designation.

Signage: A signage program will be proposed as part of the site plan application. The signage will include a proposed monument sign intended to identify the Springtree Apartments development to the public. The sign will be located at the main vehicular entrance off of US1 and S.E. Springtree Place approximately10 feet from the right of way. The sign will be less than ten feet tall by a fifteen feet wide base. The sign will include the project address and name of the residential community.

RPUD Major Site Plan Approval:

Demonstrate that the proposed 280-unit apartment development is 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.

The proposed future land use on the subject property is requested to be Multifamily (MF). Per Section 2.01.03 Table 1, the zoning of the subject property is a compatible Residential Planned Unit Development (RPUD). Multi-family apartment use is a permitted use in the RPUD zoning district per code Section 2.02.02 Table 2.

The proposed Multi-family future land use designation and proposed RPUD zoning district designation affords the property the opportunity to accommodate the 280 residential units on the subject property and a maximum density of 30 dwelling units per acre. Based on the 13.59-acre site, and a maximum density of 30 dwelling units per acre, code provisions would allow for 407 maximum units. The applicant proposes to construct a 280-unit apartment development and achieve a proposed density of 20.60 dwelling units per acre. The proposal is consistent with density requirements of Section

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2.03.03 regarding density provisions and intensity is of the will not to exceed LDC Sec. 2.03.10. - Table 4 requirements.

The use is compatible with both existing uses, zoning and FLU. The proposed use is compatible with the surrounding established communities.

LOS Transportation - The proposed development is located on US1 and access is via SE Springtree Place. It is anticipated that the proposed development will have no adverse impact on the level of service applicable to US1 or SE Springtree Place and this part of the community. The Traffic Impact Study provides details to support this statement.

The following Level of Service standards are adopted in the Comprehensive Plan Infrastructure element to be used as the basis for determining the availability of facility capacity.

- **Sanitary sewer facilities**
- **Solid waste facilities**
- **Drainage facilities**
- **Finished Potable water**

The site is within the service area whereby such levels of service are available and adequate to accommodate a 280-unit apartment development.

With the exception of those applicable code provisions detailed above as applicable for review against the merits of the request to rezone the property to RPUD, the project complies with the relevant development standards of the City of Stuart Land Development Code.

Large Scale Comprehensive Plan Amendment & Rezoning Applications:

Amendments to the Future Land Use – The proposal to introduce a City of Stuart Future Land Use designation on the property is consistent with Policy A7.1. Land Use Categories with the provisions of Subsection A7.1.B Multi-Family Residential having been met with regards to the proposed apartment use.

Policy A5.1. The Future Land Use Element of the City's adopted Comprehensive Plan shall provide land for future residential use to promote a more compact development pattern.

The proposed project will provide a much needed compact multi- family housing option for current and future residents in the south part of the City where little land is available.

Policy A5.2. Development on all vacant, unplatted areas designated as residential should be compatible with any surrounding existing homes.

The three parcels that make up the proposed project and land use application had a previous land use designation and zoning in Martin County of Limited Commercial and General Commercial respectively which would have allowed a wide range of uses. To the west of the site is an expansive preserve area and FPL Easement approved as part of the Springtree single family residential project that acts as a natural buffer to the

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subject site. The proposed RPUD project also provides a native vegetative preserve area along the north boundary of the site creating a dense buffer.

Policy A5.5. The City shall market itself as a community for families.

This proposed multi- family project will provide a much needed alternative to single family housing for families as well as young professionals, empty- nesters and others who would prefer or cannot addord single family housing choices.

Policy A7.5 includes a Comp Plan provision that properties that are annexed into the City shall be given a City land use designation as soon as possible after the annexation is finalized. The property annexation was approved May 8, 2017 with the land use and zoning remaining that of County designations until a subsequent land use and zoning change application are submitted to the City of Stuart for review and approval. This request is therefore consistent with Policy A7.5.

Objective B1. - Compact urban form.
Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

The placement of additional residential units in the form of apartment buildings in this most south eastern edge of the City limits on these vacant urban lot meets Objective B1 in achieving a compact urban form of development.

Objective B3. - Desirable pattern of land uses.
Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

A land use amendment to Multi-family residential will accommodate much needed housing stock in the City limits while not negatively impacting the established residential communities. Location on US1 provides the opportunity for easy access to commercial, educational, workplace and community provisions in this part of the City.

Policy B2.2. No approval for new development or redevelopment shall cause facilities or services to fall below adopted local level-of-service standards as contained in the Capital Improvements Element of this Comprehensive Plan except for temporary reductions allowed by capital improvements policies. Public facilities and services necessary to serve the proposed development or redevelopment must be available, at the adopted local levels-of-service, concurrent with the impacts of development or must meet the requirements specified in Capital Improvements Element policies.

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Submittal materials include information applicable to demonstrating that the proposed multi-family development may be accommodated utilizing the City's adopted level of service standards.

Objective B3. - Desirable pattern of land uses.

Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities.

The proposed land use amendment to accommodate a Multi-Family Residential category is considered compatible and complimentary to the existing established residential communities to the north, south and western adjacent properties. Development of the long-term vacant property will also reduce the blighted areas within the City through the development of the site.

Policy B3.1. Existing land uses which are inconsistent with the Future Land Use Plan of the City shall be eliminated upon redevelopment and Policy B3.2. All development shall be compatible with and complementary to surrounding land uses and shall not unduly affect existing approved activities.

The existing land use and zoning designation on the subject property is that of Martin County Comprehensive Plan and Land Development Regulations. Such designations are not applicable or consistent with those options included within the City of Stuart Comp Plan and Land Development Codes. An amendment of the land use and zoning on the subject property is required as the next step following the approval of the annexation of the property into the City limits May 8, 2017. The requested land use category is considered consistent with the patterns of development and offers a transition in scale and use from the established residential communities to the more intense and extensively developed commercial and industrial developments along US1 to the east and north of the subject property.

Rezoning and Land Development Code Consistency Review: Section 11.01.02.7 (Zoning Map Changes) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission.

Comprehensive Plan Policy A7.1. includes apartments as a permitted use for properties with Multi-Family Residential land use designation. As the property has a Multi-Family Land Use designation, an apartment use is therefore permitted.

The existing land use pattern: The land use pattern will not be adversely impacted by the inclusion on apartment buildings with a Multi-family Residential Land Use in this south eastern edge of the City of Stuart's jurisdictional area. Patterns of development are predominantly residential to the northern and western edges of the subject property with Springtree single family subdivision to the west and Coral Gardens single family subdivision to the north. A small portion of property further north is commercial and has a Commercial General future land use and is an existing commercial plaza. Further to the north are numerous commercial shopping centers and strip commercial centers. To the south is the Natalie Estates Mobile Home Park property with a Mobile Home Future

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Land Use. To the east is US1 and then vacant commercial property with a commercial future land use designation. The proposed multi-family future land use would provide an appropriate transition from the existing established residential single family and mobile home uses to the north, west and south of the subject property rather than introducing a potentially more intense commercial development as would have been permitted under the Commercial Limited and Commercial General Martin County land use designations. The multi-family residential land use proposed is consistent with the future land use provisions and consistent with the City Land Development Code provisions regarding use as per Section 2.01.03.

The possible creation of an isolated district unrelated to adjacent and nearby districts: Rezoning the property to the RPUD will not detract from the overriding Multi-family future land use designation policy protection measures associated with the property. The majority of the properties surrounding the site Low Density single family zoning district designations or trailer park designations with separation from the subject property being in the form of existing right of ways, preserve areas and wetland area buffers and drainage area easements. The site plan includes additional buffers, preserve areas and extensive building setbacks to further reduce impact of the proposed apartment buildings on the surrounding established communities. The RPUD zoning agreement affords the project the opportunity to attached conditions specific to expectations for development on the site, will ensure standards are in place to compliment existing patterns of development.

The population density pattern of the area and possible increase or overtaxing of the land on public facilities such as schools, utilities and streets: The proposal site is located on the edge of the urban fringe of the City of Stuart's jurisdiction where infrastructure is readily available and access to stores and businesses lie close to the property. As an urban infill site, the property is located within a well-established residential community with schools, utilities and existing streets to be utilized to accommodate the project all readily available. Utilizing the subject property offers an opportunity to add multi- family housing to the existing City population, strengthening support of the existing schools, commercial and community infrastructure within the city limits and achieves a sustainable and complimentary form of development.

***The possible overloading of the City's utility system*:** As per the Engineer's report and analysis provided in support of the project, existing water and sewer provisions are readily available and impact fees will be paid to contribute towards the introduction and maintenance of the project. Adding residential provisions to this part of the City will also provide a growth in tax revenues to add to the overall maintenance and provision of public service provisions within the City of Stuart and Martin County.

The existing district boundaries in relation to existing conditions on the subject property: Addressed above.

***The existence of changed or changing conditions which make the passage of the proposed rezoning necessary or appropriate*:** Rezoning the property to RPUD is an acceptable zoning district designation for properties with a Multi-family land use designation. A zoning change is required on the property to RPUD to accommodate the opportunity for an increased density on the subject property. The higher density of development in this part of Stuart will introduce much needed housing provision within the city limits to support existing and future commercial viability of the city.

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The impact of the proposed rezoning upon living conditions in the adjacent neighborhood: The development of a vacant infill lot in an urban area of the City of Stuart will provide additional residential units in this area of the City. The adjacent neighborhood will benefit from seeing residential use on the subject property rather than higher intensity of uses associated with the Commercial Limited and Commercial General Martin County Land Use designations. The proposed buffer provisions, landscape improvements and the introduction of an apartment development is of a scale, use and layout complimentary to the long-established residential communities to the north, west and south of the property.

The impact of the rezoning upon the flow of light and air to adjacent areas: The proposed 4-story heights will not detract from established residential units given the extensive building setbacks, extensive preserve areas and overall site layout in relation to the existing adjacent development patterns.

The impact of the proposed rezoning upon property values in the adjacent area: Developing the property with the assurances and development parameters clearly established in the PUD will increase property values and add to the tax bases in both the City and County.

The impact of the proposed rezoning upon improvement or development of adjacent property in accordance with existing regulations: The proposed rezone to RPUD provides additional assurances in the form of a PUD zoning agreement in addition to the parameters of development afforded to a property with Multi-family land use designation.

***The existence of other adequate sites in the City for the proposed use in districts already permitting such use*:** An objective of the City of Stuart is to plan for a city with diverse and sustainable supply of a mixed housing provision. This project will increase those provisions available within the City of Stuart.

Application to amend the Future Land Use and Rezone Real Property Components (as per application form requirements).

Item#	Typical Plan Components	Response
1	Schedule a pre-application	Pre-application meeting completed in 2019
2	Plans 24" x 36" – 2 sets	Attached are 2 sets of the final site plan in State Plan Coordinates
3	Folded drawings	All documents are folded as per requirements
4	Graphic scale displayed	Completed
5	Title Block	Completed with north arrow, street address, date prepared and the company who produced the document
6	Site data summary	Provided a final site plan with site data to offer assurances on the scale, layout and intensity of development of the subject property. The site plan indicates density, the number of proposed apartment units, open space provision and upland preserve areas.

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		Parameters for development of the site in accordance with the proposed Multi-Family Residential Future Land Use.
7	Legal Description and parcel boundary survey	Boundary survey prepared by a licensed surveyor in the State of Florida
8	Vicinity Map	Attached
9	Zoning Map, Future Land Use Map and Aerial Map	Attached & labelled
10	CD in pdf downloadable file	Completed and file combined to provide bookmarks of each document submitted downloadable file on disc.
11	Signed and sealed pdf downloadable file on disc	Scanned versions of the documents requiring signature have been attached to be read in conjunction with the original paper sets
12	Revised plans to be clouded and accompanied by a cover letter	Not applicable
13	Access and traffic flow plans	A Traffic Impact Study is attached.
14	Any traffic lights installed will require traffic pre-emption device	N/A
15	Fire Department Access, Water Supply, etc.	The utilization of an existing access road is detailed on the site plan. Adequate access has been provided to accommodate Emergency Service Vehicles and maintain effective links with the existing roadway layouts connected with the established residential communities.
16	Existing buildings and structures on the project and within 50 feet of the project's property lines	The site plan depicts links with existing infrastructure and proximity to existing structures and buildings within 50 feet of the subject property. An aerial map has also been provided showing the surrounding properties.
17	Existing uses and zoning on all adjacent property	The site plan, a series of map exhibits and the justification letter/narrative depict the existing uses, zoning and land use on adjacent properties.
18	Locations of the nearest available public water supply and wastewater disposal system and the proposed tie-in points	Such details will be included on the site plan and civil plans and demonstrate water and wastewater systems are in place to accommodate the subject property proposal.
19	Proposed development to show location, size, allowable use, height, total gross floor area, and distance to property lines and between buildings.	Details as applicable are included on the site plan and architectural elevations with more specific parameters for development included within the draft RPUD.

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	Number of buildings, density per gross acre, height and type of fences, walls, etc. Architectural elevations, off street parking, etc.	
20	Building setback distances from property lines, abutting right of way centerlines, and all adjacent buildings and structures.	Details are included on the site plan and the Draft RPUD zoning agreement.
21	Minimum floor elevations of buildings and finished floor elevations of subject property and adjacent property.	Provided on the site plan details in accordance with Florida Statutes and Building Code provisions.
22	Pedestrian Circulation System and Points of Ingress and egress	Provided on the final site plan with efforts to maintain and improve pedestrian and vehicular access within the subject property and with the established adjacent communities.
23	Concurrency review. Traffic Study or Statement. School Concurrency.	A Traffic Impact Study has been provided demonstrating compliance. A school concurrency form has been completed and attached to the application packet demonstrating compliance with school concurrency requirements.
24	Phasing plan/details.	The project will be completed in a single phase as per the site plan details.
25	Dumpsters.	Not applicable.
26	Various plans included. Site lighting plan. Signage plan, landscape plan	Provided in accordance with LDR requirements.
27	Location, names and widths of proposed streets. etc.	Location of streets provided, private access drives within the property. Naming of access drives will need to be completed as the project progresses.
28	Utility lines and structures such as water, sewer, gas, electric, telephone, hydrants, main size, etc.	Utility lines and structures are depicted in the civil drawings/documentation as provided by the Engineer of Record.
29	Cross sections and specifications of all proposed pavements	Provided as part of the civil drawings/documentation provided by the Engineer of Record.
30	Location of proposed retention/detention areas	Provided on the site plan details and supporting civil documents
31	Typical and special roadway and drainage sections	Provided by the Engineer of Record
32	Locations of all land to be abandoned, dedicated or reserved for all public and private uses including rights-of way, easements, special	Not applicable.

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	reservations	
33	Location of onsite well and any wells within 1500 feet.	An irrigation well will be requested.
34	Pre-application meetings – potential environmental impacts to be discussed.	A pre-application meeting was completed ahead of the submittal of the development application. Discussions included ensuring environmental elements of the existing site and established residential communities are respected.
34A	Avoidance or minimization of wetland or other environmental impacts.	No wetlands that meet minimum preservation requirements exist on the property and those adjacent to the subject property to the west have been factored into the building placement and provision of upland preserve and additional buffers. Environmental impacts have been minimized while achieving the effective utilization of an infill property within an urban part of the City.
34B	On site minimization.	As per the site plan details.
34C	All waterbodies, watercourses, wetlands and associated buffers on site and immediately adjacent to the site	The existing wetlands to the west have been respected when the site plan layout, building setbacks, buffers and upland preserves have been designed.
34D	Existing vegetation on site	Existing vegetation on the property has been depicted on the survey/tree survey and environmental report.
34E	Wetlands – wetland delineation map and opinion from professional regarding wetland environmental value	Not applicable as no wetlands that meet minimum preservation requirements exist on the subject property.
34F	Wildlife observed	As per the environmental report.
34G	Preserve area and upland buffer evaluation	Achieved preserve area requirements on the subject property and provided buffers to minimize impacts on the surrounding established residential communities as applicable.
34H	Native vegetation Preserve Area Onsite/Offsite	Achieved on site as per the details depicted on the site plan and landscape plan.
34I	Use of drought-tolerant native vegetation in landscaping	Refer to landscape plan for details.
34J	Exotic and invasive vegetation to be removed	Refer to environmental study.
35	Frontage type(s).	Three and four story apartment structures have been located with principle elevations of Buildings A and C fronting US1. Refer to architectural elevations for details regarding architectural styles, scale and massing of the building(s).
36	Minimum percentage of	Not applicable.

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	façade	
37	Location of transition line if applicable.	Not applicable.
38	Minimum percentage of glass	Not applicable.
39	Slope of pitched roof.	As per architectural elevations and details.
40	Height of parapet wall, if any	Not applicable.
41	List of exterior materials, colors and finishes.	As per architectural elevations and details.
42	Architectural details.	As per architectural elevations and details.
43	Curb cut, if any	Utilizing existing access arrangements in place off of US1 onto SE Springtree Place.
44	Outbuildings, if any	Not applicable.
45	Height, length, depth, projection of balcony rails.	As per architectural elevations and details.
46	Traffic Drive aisle width.	As per site plan details and civil plans
47	Material of roofs and gutters	As per architectural elevations and details.
48	Specification of arcades and porches if any	Not applicable.
49	Materials, configuration, and operations of windows and doors	As per architectural elevations and details.
50	Garden wall, if any	Not applicable

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February 12, 2020

Tom Reetz
Senior Planner
City of Stuart Development Department
121 SW Flagler Ave.
Stuart, FL 34994

Re: Springtree Multifamily Parking Generation Analysis

Bowman Consulting Group prepared a parking capacity analysis utilizing the ITE's Parking Generation Manual, 5th Edition. We are providing the information below for you use and information.

The Springtree Multifamily Development is expected to consist of 280 units. The Land Use Code of 221 from ITE fits the description for the proposed Development.

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with between three and 10 levels (floors) of residence. Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), and affordable housing (Land Use 223) are related land uses.

Based on the trip parking generation for dwelling units (See page 91 from Manual), the development is expected to generate approximately 367 parked vehicles (P=1.34*(280) -8.73).

As a conservative approach and as indicated in the Manual, it is expected that the number of bedrooms and number of residents are likely correlated to the parking demand generated by a residential site. As such, we evaluated the anticipated parking generation based on the number of Bedrooms.

The parking supply information from Section Land Use: 221 Multifamily Housing (Mid Rise) (page 89 of the Manual) is depicted below:

		Parking Supply Ratio	
Setting	**Proximity to Rail Transit**	**Per Dwelling Unit**	**Per Bedroom**
Center City Core	Within ½ mile of rail transit	1.1 (15 sites)	1.0 (12 sites)
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2 (39 sites)	0.9 (34 sites)
	Not within ½ mile of rail transit	1.2 (65 sites)	0.8 (56 sites)
General Urban/ Suburban	Within ½ mile of rail transit	1.5 (25 sites)	0.8 (12 sites)
	Not within ½ mile of rail transit	1.7 (62 sites)	1.0 (39 sites)

The subject property has a unique mix of the number of bedrooms per unit. Therefore, the appropriate rate to utilize to properly develop the number of vehicles generated would be the Ratio per bedroom.

Therefore, the parking generated from the subject project is expected to be 1 vehicle per bedroom. The table below summarizes the unit mix and provides for the calculation for the total number of recommended parking spaces:

Parking Generation Calculation Table				
Unit Desc	Quantity	ITE Ratio	Spaces	Reference
Studio	28	1	28	ITE 5th Ed. Mid-rise General Urban/Suburban
1 br, 1 ba	124	1	124	ITE 5th Ed. Mid-rise General Urban/Suburban
2 br, 2 ba	108	2	216	ITE 5th Ed. Mid-rise General Urban/Suburban
3 br, 2 ba	20	3	60	ITE 5th Ed. Mid-rise General Urban/Suburban
Total/Avg	280	1.53	428	

Conclusion

The results of this Parking Generation analysis indicate that the total number of parking spaces required for the multifamily unit is 428 not including employee parking at the Clubhouse. The total number of employees expected is 3. By adding an additional 3 spaces for customers and visitors to the clubhouse, the total number of recommended spaces for the subject property is 434.

Sincerely,
Bowman Consulting Group, Ltd.



Howard Ehrsam, P.E., CGC, LEED AP
Sr. Project Manager
hehrsam@bowmanconsulting.com

VIA HAND DELIVERED

January 7, 2020

Tom Reetz
Senior Planner
City of Stuart Planning Department
49 Flagler Avenue
Stuart, Florida

Re: Stuart Springtree -RPUD Rezoning 2nd Resubmittal - Response Letter

Our Ref #: 19029

Dear Tom,

Below, please see responses to all comments received from staff / Kimley Horn on 1-2-20. Please let me know if you have any questions or would like to discuss in more detail. Thank you.

Overall Landscape:

1. Provide proposed sod species and callouts.
   Response: As per discussion with staff, this shall be provided at the time of Site Permit. See General Note #18 added to sheet LP-5. Note states "Sod species, quantities and callouts shall be provided on final landscape construction plans at the time of site permit."

LP-2 Landscape Plan:

1. Required tree credit calculation is incorrect. As per section 6.004.02.A.2, "palm trees may be substituted for any number of the remaining trees provided that two palm trees shall be counted as one tree." Only for mitigation of removed trees can select palm species be used at a 1:1 ratio. Please revise calculations and provide additional trees to meet the requirements.
   Response: Agree. There was a total of 4 single palms (3 Bismarck's and 1 royal) I was counting as 1:1 which totaled 4 tree credits. These 4 palms have been revised to count as 2:1 (as per comment above) for a total of 2 tree credits. Two additional double trunk specimen palms which count as 1:1 have been added to the landscape plan to make up for the tree credit deficient.

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LP-5 Landscape Specifications:

1. Per code 5.05.02.A.e, for every one foot of clear trunk of palm tree exceeding minimum palm tree size per section 6.04.02.A.2, credit will be given for 1" of replacement. Per code 5.05.02.A.1.g, credits towards tree replacements shall be provided only if all required trees are planted at a minimum DBH of 4.5" and all required palms are planted at minimum 14' clear trunk. Palm calculations are incorrect, please revise.
    - For each palm that does not count towards a required site tree, 4.5" plus an additional 1" for every one foot of clear trunk above the 14' clear trunk minimum may be counted towards mitigation.
        - For example, a Royal Palm specified at 18' clear trunk shall count as 4.5" each as they are being planted in addition to the minimum site tree requirements, plus an additional 4" each, totaling 8.5" per palm. The total credit shall be revised to 68 inches.

Response: Agree. Total credit received per additional palm provided for mitigation has been revised based our the formula above for inch credit. Please see updated landscape / Mitigation data on sheet LP-2.

Project Narrative (Engineering Comments):

1. The City will need to comment on the parking providing being less than required.

   Applicant Response: this was discussed and approved with City Staff

   New Comment: Per discussion with Tom Reetz, Staff is aware of the request for less parking than code required, however the Applicant needs to provide justification.

   Response: Agree. Please see separate submitted document " Unit increase and Parking analysis"

Stormwater Report (Engineering Comments):

1. ICPR post development input data. The stage volume input data for the Dry Retention node does not match the back up data provided.

   New Comment: ICPR data still does not match the stage storage table in the report for Dry detention. Spot checking storage at elevation 18 and 19.5, the combined vertical and linear storage from the report table is 1.16 and 2.21 respectively. The storage in ICPR is 0.76 and 3.32 respectively.

   Response: The ICPR report has been updated to match the stage storage tables. Refer to attached report.

2. ICPR post development input data. The stage volume input data for the Site node at elevation 19.5 does not match the back up data provided.

   New Comment: ICPR data still does not match the stage storage table in the report for Site node. Spot checking storage at elevation 19 and 19.5, the combined pavement and Open Space storage from the report table is 7.318 and 10.953 respectively. The storage in ICPR is 7.26 and 10.76 respectively.

   Response: The ICPR report has been updated to match the stage storage tables. Refer to attached report.

Traffic Comments

1. Please revise the HCS analysis for the intersection of US 1 & Gran Park Way as the volumes appear to be incorrect.
   Response: The Gran Park Way intersection analysis is revised. The northbound and southbound traffic includes the left-turn and right-turn movements. Therefore, the left-turn and right-turn movements at the intersection were subtracted from the through movements. There are no significant changes as a result of the revision.

Environmental Comments:

Section 5.02.00 **Environmental Assessment Report** – Complete.
The Applicant has provided documentation that requests for information were submitted to the Florida Fish and Wildlife Conservation Commission (FWC) and the US Fish and Wildlife Service (USFWS) Note: It is understood that the agencies may not respond to such request depending upon work load.

Section 5.03.00 **Wetlands** – Completed previously.

Section 5.04.00 **Environmentally Sensitive Lands** – Completed previously.

Section 5.05.00 **Tree location map and tree survey** - Completed previously.

Section 5.06.00 **Mangrove and Shoreline Protection** – Not applicable. Completed previously.

Section 5.07.00 **Floodplains and Flood Damage Prevention** – Completed previously.

Section 5.08.01 **Martin County Wellfield Protection Ordinance** – Complete.
Specific information regarding compliance with Martin County Wellfield Protection was not provided, but the applicant has stated, on Page 11, Item 7 of their November 27, 2019 response

letter that wellfield protection compliance "will be analyzed and provided at the time of site permit."

Section 5.09.00 **Historic Preservation** – Completed previously.

Response: Acknowledged. Items Completed with no additional comments.

Sincerely,

Michael Houston ASLA
President, HJA Design Studio, LLC



c.c. Jim Lott
Howard Ehrsam
Todd Troxell

Waypoint - Springtree Stormwater Report

Date: January 6, 2020

Prepared by:

Octavio 'Oats' Reis, P.E.
Florida License # 65661

Bowman Consulting Group

301 SE Ocean Blvd.
Suite 301
Stuart, FL 34994
772-283-1413

Introduction

Waypoint Residential has a contract to purchase a 13.59 acre parcel on the NW corner of US 1 and Springtree Place, in the City of Stuart, FL. The developer is proposing to build multi-family apartments consisting of 7 buildings with 270 units, associated parking and a clubhouse. This due diligence report covers preliminary calculations regarding the proposed stormwater management system for the site.

Two areas of the site have been excluded from the stormwater calculations of this report: A 1.19-acre portion of the site has been previously developed as a roadway access (Springtree Place) to an adjacent residential community to the west. Drainage for the roadway is directed to the stormwater system of the adjacent community, with an outfall to the West to the South Fork of the St. Lucie River. Furthermore, 1.60 acres will be preserved in its natural state, and will not contribute additional stormwater runoff to the site. The total development site covered under this report is 10.8 acres.

The mainly wooded, undeveloped site is relatively flat, with only about 2-3 feet variation throughout. The elevations vary from elevation 15' NAVD to 18' NAVD. The NRCS Soil Survey of the site indicates that most of the site to constitute of a Waveland-Immokalee soil, common in the area. This soil profile consists mainly of sandy soils, however the soils drain poorly due to a horizontal hardpan layer located only a few feet below the soil surface. The wet season water table is normally encountered within a couple of feet of the natural surface. Preliminary 6' deep hand augers by a geotechnical engineering firm encountered the hardpan at all locations. Three exfiltration conductivity tests confirmed the low infiltration of these soils. The hardpan must be excavated and removed from beneath the lake and retention areas. Subsequent deeper borings (30') indicated the presence of fine sands below the hardpan.

The site abuts a canal maintained by Martin County, which through a series of ditches and culverts discharges through two separate outfalls to the Manatee Pocket towards the East, with ultimate connection to the St. Lucie River near the inlet. The St. Lucie River is an impaired water body, triggering additional water quality treatment criteria. This conveyance system is known as the East Hanson Grant Drainage Basin and has been improved over the years as the area has been developed. It is the subject of a County drainage study done in 1986 and subsequent additional ERP permits for sites abutting the conveyance system. The conveyance system runs through FDOT right of way and FEC Railway property.

The undeveloped site currently drains into this canal via a 15" culvert connection. It is beyond the scope of this preliminary report, however a meeting with County engineers and further review of this conveyance system will be required to understand the operation and capacity of this system to accept drainage from our site. A pre-development TR-55 analysis indicates a high runoff rate of around 2 cfs per acre, however our experience is that the permitted discharge from the site would be limited to 1.0 cfs per acre due to conveyance issues.

The adjacent property to the west has a lake and a SFWMD permit for the site. Information from the permit and the construction plans indicate that the wet season water table for that site was established at elevation 14.9' NAVD. Due to the proximity of this site, and corroborated with the initial geotech explorations, we have assumed a conservative wet season water table on our site to be at elevation 15.0' NAVD. During a recent site visit, the adjacent canal to the north had water at an elevation of 12.0' NAVD,

but the site will experience higher water table elevations due to the hardpan and low percolating soils found on site.

The proposed stormwater system will consist of two dry retention areas totaling 0.70 acres and a 0.82-acre lake. The weir for the lake will be a 4' wide concrete sharp-crested weir set within a manhole. The weir will be set 12" above the water table, at elevation 16.0' NAVD, providing wet retention for better nutrient treatment. Runoff from the building rooftops, pavement and landscape areas will be directed via the underground drainage pipe network to the two retention areas for pre-treatment. The retention areas will then overflow into the lake, which will be connected to the canal to the north via a control structure and 15" culvert. Due to the low exfiltration conductivity and high water table, this site is not conducive to the use of exfiltration trenches or underground vaults.

Design Criteria

Water Quality

The City of Stuart and South Florida Water Management District Criteria for Water Quality is given as:

The larger of

- 2.5" x Imperviousness (Imperviousness as defined by the SFWMD)
- 1" over the entire site

In addition, since we are discharging to an impaired water body, the following also apply:

- 50% Additional Treatment for Discharges to St Lucie River (Impaired Water Body)
- Nutrient analysis to be performed to indicate no net increase in Phosphorus and Nitrogen discharges from the site. In practice, SFWMD interprets this policy to require that the stormwater system must remove sufficient nutrients to match the pre-development rate up to a removal level of 90% of the phosphorus and nitrogen load generated by the developed site.

Stormwater Runoff Attenuation

The site has a positive outfall and therefore the allowable peak discharge rate will be determined by the existing discharge rate from the site in its undeveloped state. Though the soils are poorly draining and a large runoff rate from the site could be expected, a berm between the site and the canal restricts the discharge to 5-10 cfs (0.5-1.0 cfs per acre) through the existing 15" culvert.

The following accumulated rainfall is from the South Florida Water Management District's Data for estimation of runoff from rainfall information.

10 year 1 day Rainfall	7.0 inches	Minimum Pavement EL
25 year 3 day Rainfall	12.0 inches	Minimum Berm EL
100 year 3 day Rainfall	14.5 inches	Minimum Finished Floor

Basin Hydrology

Site	Areas (acres)	TC (mins)	CN
Southern Road Basin	1.19		
Preserve	1.60		
Project Site	10.80		
Total Property	**13.59**		
Proposed Project Site Breakdown:			
Buildings and Pool	2.01	10	98
Pavement / sidewalk	4.91	10	98
Lake (Edge of Water)	0.62	10	98
Total Impervious (70%)	**7.54**		
Dry Retention Areas	0.70	10	77
Lake Bank Above Edge of Water	0.21		
Open / Landscape	2.35	30	77
Total Pervious (30%)	**3.26**		
Project Site Total (100%)	**10.80**		

Wet Season Ground Water Elevation: estimated to be 15.0 feet NAVD.

Results

Water Quality

Water Quality Required per SFWMD and City of Stuart criteria (See appendix for detailed calculations):

1" /12 x 10.8 acres = 0.9 acre-ft x 150% = 1.35 acre-ft

2.5" x Imperviousness = 1.28 acre-ft x 150% = 1.91 acre-ft – Controlling

Water Quality Provided:

Dry Retention at El 17.5' NAVD =	0.83 ac-ft / 50% =	1.65 ac-ft
Wet Retention at El 16.0' NAVD =	0.65 ac-ft / 100% =	0.65 ac-ft
Total Provided	1.48 ac-ft	2.30 ac-ft

Note: For Nutrient Calculations, the retention volume = 1.48 ac-ft, or 1.80"

Nutrient Analysis

According to the BMP-Trains model, the following table describes the pre (existing) and post (developed) nutrient loads. Please note that nutrient reductions assume that a littoral zone is created within the lake.

Condition	Annual Runoff (ac-ft)	Nitrogen (N) Kg/yr	Phosphorus (P) Kg/yr
Existing load generated / discharged	6.9	9.8	0.23
Developed load generated	28.7	82.3	18.43
Developed load discharged		9.8	1.08
% Removal by Stormwater System		88%	94%
Taget Removal		88%	90%

The nutrient removal requirement is met.

ICPR Model Results (Peak Discharge / Maximum Stage):

Maximum Outfall Discharge Flow Rate (cfs):

	25-yr	100-yr
Name	3-day	3-day 0 discharge
Outfall	5.3	0

Maximum discharge rate during the 25 yr-3day event is approximately 0.5 cfs / acre

Basin Maximum Stage (NAVD):

	10-yr	25-yr	100-yr
Name	1-day	3-day	3-day 0 discharge
Lake	17.6	18.2	19.0

Minimum Elevations	Road	Berm	FFE
(NAVD)	17.8	18.5	19.5

Recovery calculations of the lake and retention area indicate that the stormwater system recovers within 12 days as required by SFWMD.

Conclusion

The existing stormwater management system has sufficient capacity to provide water quality treatment and stormwater attenuation for the proposed improvements.

Site Data

Springtree

Area Calculations

Springtree

Post Development

Description	Square Feet	Acres
Impervious		
Building (Total Footprint)	87749	2.01
Pavement/Conc	214043	4.91
Pond 2 EOW	26846	0.62
Total Impervious	328,638	7.54
Pervious		
Retention Areas	30,569	0.70
Lake Bank	8,775	0.20
Open Space	102,716	2.36
Total Pervious	142,060	**3.26**
Total	**470,698**	**10.80**
Percent Impervious		70%
Percent Pervious		30%

Stage storage

Springtree

Stage / Storage Computations

Post-Development

	Pavement Linear	Open Linear	Dry Retention Bottom	Dry Retention Bank	Lake Bottom	Lake Bank	
Area (ac)	4.91	2.36	0.46	0.24	0.62	0.20	
	L	L	V	L	V	L	
Starting Elev (ft)	17.50	18.00	16.00	16.00	15.00	15.00	
Ending Elev (ft)	18.00	19.00	21.00	18.00	21.00	18.00	
Stage NAVD	Linear Storage ac-ft	Linear Storage ac-ft	Vertical Storage ac-ft	Linear Storage ac-ft	Vertical Storage ac-ft	Linear Storage ac-ft	Total Storage ac-ft
13.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.50	0.000	0.000	0.000	0.000	0.310	0.008	0.318
16.00	0.000	0.000	0.000	0.000	0.620	0.033	0.653
16.50	0.000	0.000	0.230	0.015	0.930	0.075	1.250
17.00	0.000	0.000	0.460	0.060	1.240	0.133	1.893
17.50	0.000	0.000	0.690	0.135	1.550	0.208	2.583
18.00	1.228	0.000	0.920	0.240	1.860	0.300	4.548
18.50	3.683	0.295	1.150	0.360	2.170	0.400	8.058
19.00	6.138	1.180	1.380	0.480	2.480	0.500	12.158
19.50	8.593	2.360	1.610	0.600	2.790	0.600	16.553
20.00	11.048	3.540	1.840	0.720	3.100	0.700	20.948
20.50	13.503	4.720	2.070	0.840	3.410	0.800	25.343
21.00	15.958	5.900	2.300	0.960	3.720	0.900	29.738

Curve Number

Springtree

Curve Number and Time of Concentration

Name	Total Area	Pervious Area	Pervious CN	Impervious Area	Impervious Cn	Weighted CN
Site	10.80	3.26	77	7.54	98	91.7
Total	**10.80**					

Name	Total Area	Pervious Area	Pervious CN	Impervious Area	Impervious Cn	Weighted CN
Lake	0.82	0.20	77	0.62	98	92.9
Total	**0.82**					

Name	Total Area	Pervious Area	Pervious CN	Impervious Area	Impervious Cn	Weighted CN
Dry Retention Area	0.70	0.70	77	0.00	98	77.0
Total	**0.70**					

Water quality required

Springtree

Water Quality Requirements

Post Development

a) Per SFWMD and City of Stuart, water quality volume shall provide for the greater of:

Criteria 1: 1 inch of runoff x total drainage area

Calculated Runoff Volume => (1.0/12) * (10.80) = **0.90** ac-ft

Criteria 2: 2.5 inches times imperviousness

Site area, for water quality pervious/impervious calculation only
Total Project - (Roof + Lake) = site area for water quality

= 10.80 - (2.01 + 0.62) = **8.17** ac

Impervious area for water quality pervious/impervious calculations
(Site area for water quality pervious/impervious) - pervious =
= 8.17 - 3.26 = **4.91** ac

Percentage of impervious area for water quality
(Imp. Area for WQ / Site area for WQ) * 100%
= (4.91 / 8.17) * 100% = **60.10%**

For 2.5 in times the percentage impervious
2.5 * 0.6010 = **1.50** in

Calculated Runoff Volume:
Inches to be Treated x (Total Site - Lake - Roof)
= 1.50 * (10.80 - 0.62) * (1/12) **1.27** ac-ft

Controlling SFWMD Required Water Quality Volume	**1.27 ac-ft**
x150% for Discharge into Impaired Water Body	**1.91 ac-ft**

Water Quality Provided

Springtree

Water Quality Treatment Provided

	Dry Ret Bottom	Dry Ret Bank	Lake Bottom	Lake Bank	
Area (ac)	0.46	0.24	0.62	0.20	
	V	L	V	L	
Starting Elev (ft)	16.00	16.00	15.00	15.00	
Ending Elev (ft)	21.00	18.00	21.00	18.00	
Stage NAVD	Vertical Storage ac-ft	Linear Storage ac-ft	Vertical Storage ac-ft	Linear Storage ac-ft	Total Storage ac-ft
15.00	0.000	0.000	0.000	0.000	0.000
15.50	0.000	0.000	0.310	0.008	0.318
16.00	0.000	0.000	0.620	0.033	0.653
16.50	0.230	0.015	0.930	0.075	1.250
17.00	0.460	0.060	1.240	0.133	1.893
17.50	0.690	0.135	1.550	0.208	2.583
18.00	0.920	0.240	1.860	0.300	3.320
18.50	1.150	0.360	2.170	0.400	4.080
19.00	1.380	0.480	2.480	0.500	4.840
19.50	1.610	0.600	2.790	0.600	5.600
20.00	1.840	0.720	3.100	0.700	6.360
20.50	2.070	0.840	3.410	0.800	7.120

Onsite WQ Required 1.91 Ac-ft

	Ac-Ft	Credit	Ac-Ft	
WQ Provided (Dry Retention) / 50%	0.83	50%	1.65	Provided at elev 17.5
WQ Provided Wet Retention (Lake)	0.65	100%	0.65	Provided at elev 16.0
	1.48		2.30	

Finished Floor Elevation

Springtree

Runoff (Zero Discharge) Calculations

Post Development

Soil Storage

Average Depth to Water Table = 2.50 feet
Using Depressional Compacted (SFWMD Permit Manual):

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage - Compacted (in)
1.0	0.6	0.6	0.45
1.5	1.6	1.6	1.02
2.0	2.5	2.5	1.58
2.5	4.6	4.0	2.44
3.0	6.6	5.4	3.30
3.5	8.8	7.2	4.20
4.0	10.9	9.0	5.10

Developed Pervious Area = 3.26 acres — Total Developed Area
Soil Storage = 2.44 inches = 10.80 acres
Soil Moisture Storage (S) = 0.74 inches = (3.26/10.80)*2.44

For the 100 year - 3 day storm event, with zero discharge:

P = = 14.50 inches

$$Vol = \frac{(14.5 - (0.2 \times 0.74))^2}{(14.5 + (0.8 \times 0.74))} \text{ in}^2 \times \frac{10.80 \text{ acres}}{1} \times \frac{1 \text{ foot}}{12 \text{ inches}}$$

= 12.29 ac-ft

From Total Stage - Storage Table, elevation = 19.01 ft, NAVD

Interpolation Table

Storage	Stage
12.16	19.00
12.29	**19.01**
16.55	19.50

Nutrient Analysis

Complete Report (not including cost) Ver 2.1.0

Project: Springtree
Date: 11/25/2019 5:18:55 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Site
Rainfall Zone	Florida Zone 5
Annual Mean Rainfall	57.00

Pre-Condition Landuse Information

Landuse	Undeveloped - Scrubby Flatwoods: TN=1.155 TP=0.027
Area (acres)	10.80
Rational Coefficient (0-1)	0.13
Non DCIA Curve Number	77.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.155
Phosphorus EMC (mg/l)	0.027
Runoff Volume (ac-ft/yr)	6.915
Nitrogen Loading (kg/yr)	9.848
Phosphorus Loading (kg/yr)	0.230

Post-Condition Landuse Information

Landuse	Multi-Family: TN=2.320 TP=0.520
Area (acres)	10.80
Rational Coefficient (0-1)	0.61
Non DCIA Curve Number	77.00
DCIA Percent (0-100)	70.00
Wet Pond Area (ac)	0.82
Nitrogen EMC (mg/l)	2.320
Phosphorus EMC (mg/l)	0.520
Runoff Volume (ac-ft/yr)	28.746
Nitrogen Loading (kg/yr)	82.231
Phosphorus Loading (kg/yr)	18.431

Catchment Number: 1 Name: Site

Project: Springtree
Date: 11/25/2019

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	1.800
Retention Volume (ac-ft)	1.497

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	5.500
Permanent Pool Volume (ac-ft) for 31 days residence	2.441
Annual Residence Time (days)	70
Littoral Zone Efficiency Credit	10
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

Watershed Characteristics

Catchment Area (acres)	10.80
Contributing Area (acres)	9.980
Non-DCIA Curve Number	77.00
DCIA Percent	70.00
Rainfall Zone	Florida Zone 5
Rainfall (in)	57.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	88
Provided TN Treatment Efficiency (%)	88
Required TP Treatment Efficiency (%)	99
Provided TP Treatment Efficiency (%)	94

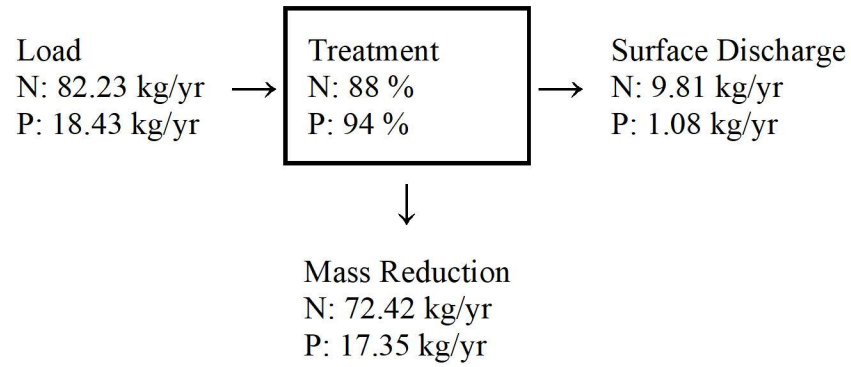
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

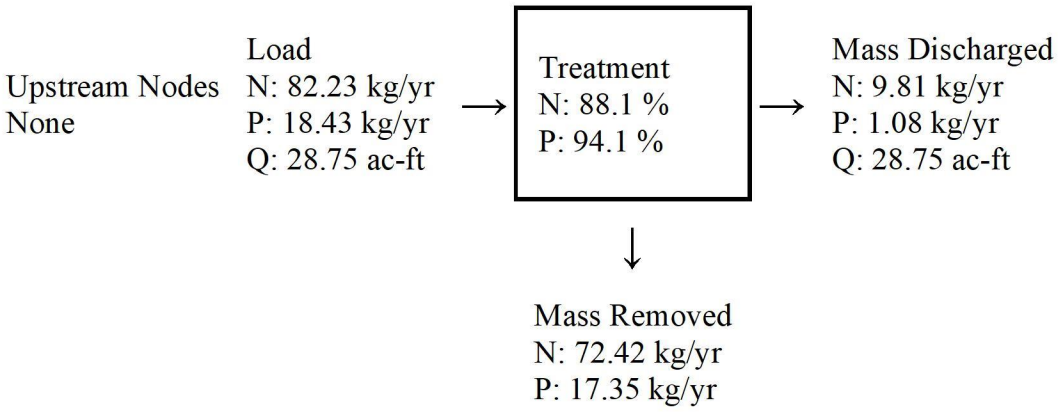
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	69.080
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	15.484
TP Concentration (mg/L)	0.000

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Summary Treatment Report Version: 2.1.0

Project: Springtree

Analysis Type: Net Improvement

Date:11/25/2019

BMP Types:

Catchment 1 - Multiple BMP

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? YES
Total phosphorus target removal met? NO

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	9.85 kg/yr	
Total N post load	82.23 kg/yr	
Target N load reduction	88 %	
Target N discharge load	9.85 kg/yr	
Percent N load reduction	88 %	
Provided N discharge load	9.81 kg/yr	21.63 lb/yr
Provided N load removed	72.42 kg/yr	159.69 lb/yr

Phosphorus

Surface Water Discharge

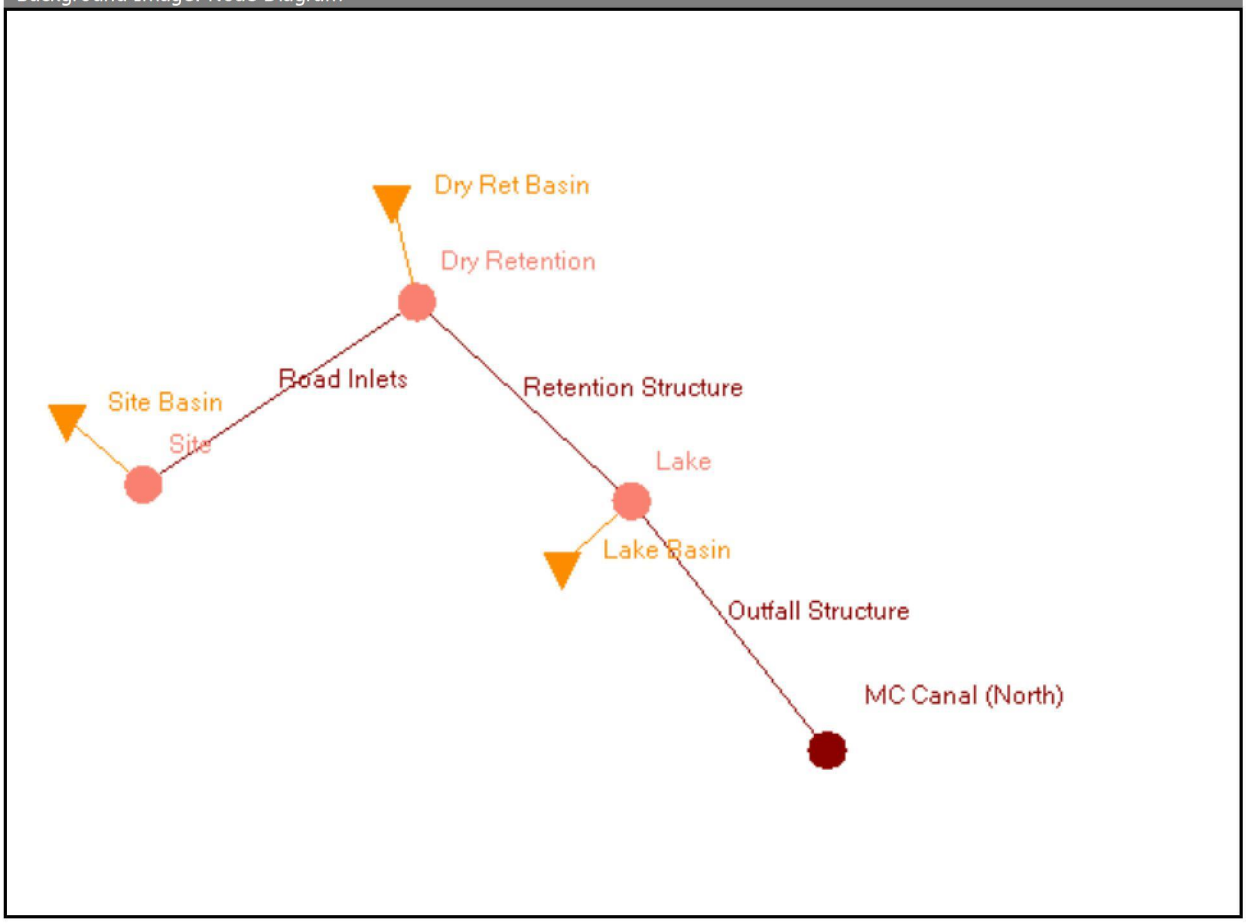
Total P pre load	.23 kg/yr	
Total P post load	18.431 kg/yr	
Target P load reduction	99 %	
Target P discharge load	.23 kg/yr	
Percent P load reduction	94 %	
Provided P discharge load	1.084 kg/yr	2.39 lb/yr
Provided P load removed	17.347 kg/yr	38.25 lb/yr

From Pre-Condition Loads

Existing N Discharge	9.85 (kg/yr)
Existing P Discharge	.23 (kg/yr)

ICPR Model

Background Image: Node Diagram



Scenario	Sim	Node Name	Maximum Stage [ft]
Scenario 2	10Y-1D	Dry Retention	17.82
Scenario 2	10Y-1D	Lake	17.59
Scenario 2	10Y-1D	MC Canal (North)	16.20
Scenario 2	10Y-1D	Site	18.07
Scenario 2	25Y-3D	Dry Retention	18.19
Scenario 2	25Y-3D	Lake	18.17
Scenario 2	25Y-3D	MC Canal (North)	17.00
Scenario 2	25Y-3D	Site	18.25

Sim	Link Name	Maximum Flow Rate [cfs]
25Y-3D	Outfall Structure	5.30
25Y-3D	Retention Structure	11.12
25Y-3D	Road Inlets	11.32

Simple Basin: Dry Ret Basin

Scenario:	Scenario 2
Node:	Dry Retention
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	0.7000 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Lake Basin

Scenario:	Scenario 2
Node:	Lake
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	0.8200 ac
Curve Number:	93.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Site Basin

Scenario:	Scenario 2
Node:	Site
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	9999.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	9.2800 ac
Curve Number:	92.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Dry Retention

Scenario:	Scenario 2
Type:	Stage/Volume
Base Flow:	0.00 cfs
Initial Stage:	16.00 ft
Warning Stage:	18.50 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
16.00	0.00	0
16.50	0.25	10672
17.00	0.52	22651
17.50	0.83	35937
18.00	1.16	50530
18.50	1.51	65776
19.00	1.86	81022
19.50	2.21	96268

Comment:

Node: Lake

Scenario:	Scenario 2
Type:	Stage/Volume
Base Flow:	0.00 cfs
Initial Stage:	15.00 ft
Warning Stage:	18.50 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
15.00	0.00	0
15.50	0.32	13939
16.00	0.65	28314
16.50	1.00	43560
17.00	1.37	59677
17.50	1.76	76666

Stage [ft]	Volume [ac-ft]	Volume [ft3]
18.00	2.16	94090
18.50	2.57	111949
19.00	2.98	129809
19.50	3.39	147668

Comment:

Node: MC Canal (North)

Scenario: Scenario 2
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.50 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	12.00
0	0	0	12.0000	15.00
0	0	0	72.0000	17.00
0	0	0	96.0000	17.00
0	0	0	120.0000	15.00
0	0	0	160.0000	15.00
0	0	0	288.0000	12.00

Comment:

Node: Site

Scenario: Scenario 2
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 17.50 ft
Warning Stage: 19.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
17.50	0.00	0
18.00	1.23	53492
18.50	3.98	173282
19.00	7.32	318772
19.50	10.95	477113

External Hydrograph

Comment:

Drop Structure Link: Outfall Structure		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario 2	Invert:	15.00 ft	Invert:	14.50 ft
From Node:	Lake	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	MC Canal (North)	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.25 ft	Max Depth:	1.25 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	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:	325.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
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:	Rectangular	Op Table:	
Invert:	16.00 ft	Ref Node:	
Control Elevation:	16.00 ft	Discharge Coefficients	
Max Depth:	3.25 ft	Weir Default:	3.200
Max Width:	4.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: Retention Structure		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario 2	Invert:	12.00 ft	Invert:	12.00 ft
From Node:	Dry Retention	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	Lake	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	2	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000

Length:	500.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	2	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	17.50 ft	Ref Node:	
Control Elevation:	17.50 ft	Discharge Coefficients	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.00 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: Road Inlets		Upstream Pipe		Downstream Pipe	
Scenario:	Scenario 2	Invert:	16.00 ft	Invert:	16.00 ft
From Node:	Site	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	Dry Retention	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	4	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	500.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment:

Weir Component

Weir:	1
Weir Count:	4
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	17.50 ft
Control Elevation:	17.50 ft
Max Depth:	2.00 ft
Max Width:	3.00 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Simulation: 10Y-1D

Scenario:	Scenario 2
Run Date/Time:	1/6/2020 4:35:27 PM
Program Version:	ICPR4 4.05.01

General

Run Mode:	Normal			
	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	48.0000

	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	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

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: CN
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious
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: 7.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25Y-3D

Scenario: Scenario 2
Run Date/Time: 1/6/2020 4:36:12 PM

Program Version: ICPR4 4.05.01

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	288.0000

	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	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

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: CN
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	72.0000 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:	12.00 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:

From: **Kristin Campbell** krwcampbell@yahoo.com
Subject: Springtree Homes Property, Martin County
Date: November 22, 2019 at 12:05 PM
To: conservationplanningservices@myfwc.com
Cc: Christine.Raininger@myfwc.com Christine.Raininger@MyFWC.com



Hello,

City of Stuart, Martin County is requesting correspondence with FWS regarding the lack of listed species on this property. I've attached a letter requesting correspondence as well as our Environmental Assessment. Please let me know if you need any additional information.

Thanks,

Kristin Campbell
Phillip R. Jimrusti and Associates, Inc.
4085 S.W. Honey Terrace
Palm City, FL 34990

Phone: (954) 370-8870
Fax: (772) 781-3790
Cell: (561) 801-0838
Email: krwcampbell@yahoo.com



Spring Tree EA report.pdf



As Nature Intended

Phillip R. Jimrusti & Associates, Inc.
Ecological Engineers
Environmental Consultants

4085 S.W. Honey Terrace • Palm City, Florida 34990
Broward: 954-370-8870 • Fax: 772-781-3790

November 22, 2019

Christine Raininger
Land Use Planning Program
Office of Conservation Planning Services
Florida Fish and Wildlife Conservation Commission
8535 Northlake Blvd.
West Palm Beach, FL 33412

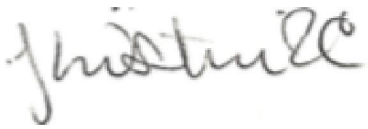
Re: Springtree Homes

We are assisting with the development of this property, which is comprised of three separate parcels with two different owners. The three parcels are 0.5739 acres, 7.257 acres, and 5.743 acres and total 13.5739 acres. The property is located west of US Highway 1, south of SE Harrison Street, Section 23, Township 38 South, Range 41 East, City of Stuart, Martin County, Florida.

We have visited the site several times over the past several years and conducted a formal Environmental Assessment on July 22, 2019 (attached). No rare, threatened, endangered or species of special concern have ever been observed on this property. The City of Stuart Planning Department is requesting correspondence from Florida Fish and Wildlife Conservation Commission and US Fish and Wildlife Services confirming that this property does not contain rare, threatened, endangered or species of special concern.

If necessary, please notify us of the time and date that you will visit the site and we will make arrangements to accompany you. If you have any questions, please do not hesitate to call.

Sincerely,



Kristin Campbell
Associate

APPLICATION FOR INTERVENOR STATUS

RECEIVED
FEB 12 2020
BY: MK

INFORMATION ABOUT THE PETITIONER	For Office Use Only
APPLICATION FEE: $400.00 (LDR) 11.03.06	

FILE NAME: Ordinance Number 2427-2020, Re. Application by Waypoint Residential Services, LLC, for Stuart Springtree RPUD Large Scale FLUM & Re-zoning (Quasi-Judicial)

FIRST NAME: Springtree Property Owners Association, Inc. **LAST NAME:** N/A

MAILING ADDRESS

STREET	CITY	STATE	ZIP
c/o Ross Earle Bonan & Ensor, P.A., 789 SW Federal HWY Suite 101	Stuart	FL	34994

CONTACT INFORMATION

WORK PHONE (772) 287-1745	**EMAIL** dbe@reblawpa.com; jee@reblawpa.com
CELL PHONE N/A	

PETITIONER'S REPRESENTATIVE IF APPLICABLE

FIRM/ORGANIZATION NAME: Ross Earle Bonan & Ensor, P.A.

FIRST NAME: David Earle, Esq., and Jacob Ensor, Esq. **LAST NAME:** N/A

MAILING ADDRESS

STREET	CITY	STATE	ZIP
789 SW Federal HWY, Suite 101	Stuart	FL	34994

CONTACT INFORMATION

WORK PHONE (772)287-1745	**EMAIL** dbe@reblawpa.com; jee@reblawpa.com
CELL PHONE	

LIST OBJECTIONS TO BE INCLUDED IN AGENDA:

Please see attached outline.

Signature: David B. Ensor **Date:** 2-12-20

Attachment/ Outline to Application for Intervenor Status

Springtree Property Owners Association, Inc.

I. General Statement Regarding Proposed Ordinance 2427-2020 for Large Scale FLUM and Rezoning

The Springtree Property Owners Association, Inc., (the "Association") on behalf of its members, does not oppose the rezoning of the parcels in question from commercial to residential. However, the Association requests that the future development of the parcels conforms to the Land Development Code and is compatible with the current residential height and density. The Association's main concerns are the developer's failure to offer any traffic calming solutions, the lack of required parking, the inadequate size of the landscape "buffering" area between the Springtree community and the project, and the proposed project's height (four stories) and density.

II. Accommodation of Traffic Growth

A. Concerns Regarding Traffic Impact

1) Increase in Overall City Traffic by Project Completion Date, 2024

2) Traffic Impact Analysis based on 270 Units, not 280 Units
   - ° Although not analyzed as having a significant impact, an increase in traffic from eighty-five (85) residential homes to an additional two hundred and eighty (280) residential units (of which more than half are one-bedroom units or larger) will be significant.

3) Growth in Northbound Traffic in SE Federal Hwy
   - ° Concern regarding Increased Turning Movements and "U-Turn" Traffic

4) Developer offers no traffic calming solutions to deal with increased traffic, but simply regards them as negligible.

B. Measures to Counteract Growth of Traffic on Springtree Place

1) Turn-In Off of SE Federal Hwy

2) Widening of Access Point #1 - SE Springtree Place
   - ° Traffic Impact Analysis by MacKenzie Engineering & Planning, Inc., pg. 13, does not even allow for turn lanes from this point of access.

3) Widening of Access Point #2 - SE Harrison Street

° Traffic Impact Analysis by MacKenzie Engineering & Planning, Inc., pg. 13, does not even allow for turn lanes from this point of access.

° Impact on Coral Gardens residential neighborhood

° Coordination with Martin County regarding traffic/ impact on Harrison Street

C. Public Transportation and Foot Traffic

1) Need for Sidewalks near Children's Bus Stops

2) Proper Safety Measures

III. Increase in Parking Allotment to Address Maximum Number of Potential Residents and Projected Guests

A. City Code Requirements

B. 462 Parking Spaces, but 280 Units (560 Cars if 2 Vehicles Per Unit)

IV. Height of the Proposed Apartment Buildings

A. Requirements of the City of Stuart's Land Development Code

B. 4-Story Buildings – No comparable buildings in the area…

V. Expansion of Landscape Buffer Surrounding the Proposed Community

A. Current Landscape Buffer Supplied by Springtree Property Owners Association, Inc. is 300 feet, but new project proposes a barrier or only 50 feet.

VI. Housing Units Available to Families

A. The proposed units are as follows –
° Studio
° One Bedroom (more than 50%)
° Two Bedroom
° Three Bedroom

MINUTES

LOCAL PLANNING AGENCY/PLANNING ADVISORY BOARD
TO BE HELD JANUARY 30, 2020 AT 5:30PM
COMMISSION CHAMBERS
121 SW FLAGLER AVE.
STUART, FL 34994

LOCAL PLANNING AGENCY

Chair – Michael Herbach
Vice Chair – Ryan Strom
Board Member – Li Roberts
Board Member – Larry Massing
Board Member – Campbell Rich
Board Member – Bill Mathers
Board Member – Cristina de la Vega
Ex Officio – Garrett Grabowski

ADMINISTRATIVE

Development Director – Kev Freeman
Board Secretary – Jordan Pinkston

CALL TO ORDER

ROLL CALL
Present: Michael Herbach, Li Roberts, Campbell Rich, Ryan Strom, Bill Mathers, Li Roberts, Larry Massing
Absent: Christina de la Vega

ANNUAL BOARD REORGANIZATION
Motion: Appoint Ryan Strom as Chair.
Moved by: Larry Massing
Seconded by: Bill Mathers
Motion passed unanimously.

Motion: Appoint Li Roberts as Vice Chair.

Moved by: Larry Massing
Seconded by: Bill Mathers
Motion passed unanimously.

APPROVAL OF MINUTES:

Li Roberts asked about Mike Mortell's comment on page 6 of 185.

Kev Freeman stated that the zoning would allow you to attempt his statement.

Campbell Rich's name needs to be changed on last month's minutes.

Motion: Action: Approve.
Moved by: Campbell Rich
Seconded by: Bill Mathers
Motion passed unanimously.

COMMENTS FROM THE PUBLIC ON NON-AGENDA ITEMS: None.

COMMENTS FROM THE BOARD MEMBERS: None.

ACTION ITEMS:

1. STUART SPRINGTREE RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL)(RC): 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 ASSIGNING A FUTURE LAND USE DESIGNATION OF "MULTI-FAMILY RESIDENTIAL" FOR THREE PARCELS EQUALING 13.59 ACRES ANNEXED BY ORDINANCE NO. 2352-2017, OWNED BY STUART 13 ACRES, LLC, TIERRA DEL LAGO, INC. AND STUART HARBOR MARINA AND YACHT CLUB, LOCATED W EST OF S.E. FEDERAL HIGHWAY, SOUTH OF S.E. HARRISON STREET, AND NORTH OF THE NATALIE ESTATES MOBILE HOME PARK W ITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE STUART–SPRINGTREE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF TWO HUNDRED EIGHTY (280) MULTI-FAMILY UNITS W ITHIN SEVEN (7) INDIVIDUAL FOUR-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT; DECLARING THE PLAN TO BE CONSISTENT W ITH 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.

PRESENTATION: Tom Reetz, Senior Planner 5:34 PM

Terry McCarthy, Project Attorney
Michael Houston, HJA Design Studio
Jim Lott, Waypoint
Howard Ehrsam, Bowman Consulting

BOARD COMMENT:

Li Roberts asked if specific amenities were included in the project.

Jim Lott confirmed what is included in the plan and said he would provide a floor plan.

Li Roberts asked about garages the changes in the plans regarding the number of units.

Tom Reetz clarified why the numbers have changed over time.

Li Roberts asked if those changes affect parking and asked for clarification on the amount of spaces being allocated for parking.

Jim Lott explained what they initially submitted as a plan and why there are changes after speaking with commission.

Li Roberts asked about mail boxes.

Jim Lott said the mailboxes will be in a kiosk that was not included in this site plan. He said there will be parcel locker systems as well.

Li Roberts asked about bike racks.

Ryan Strom pointed out were the bike racks are on the site plan.

Li Roberts asked about grills.

Jim Lott said that the grills will be around the pool area.

Li Roberts asked about exterior trash cans.

Jim Lott said that they have valet trash and onsite maintenance, so there will not be trash cans on sidewalks but there will be some in the breezeways.

Li Roberts asked about playgrounds.

Jim Lott said that they do not typically put in playgrounds.

Li Roberts asked about continuing a sidewalk through the preserve area.

Jim Lott said potentially that is something they would consider doing, but they do not own that property.

Li Roberts asked about the homeless population living on the property.

Jim Lott said that he has been told there is, but during the permit process we would have an appropriate way to handle that.

Michael Houston said that he does not expect people to stay on site when construction begins.

Li Roberts asked about the ornamental fence on the property.

Jim Lott said that they are going to have a preserve on the east side of their boundary and on the west side of their property line it is all preserve area so there is no reason to have ornamental fence in the preserve.

Li Roberts said she would consider it coming in from the north end. She asked about trash service.

Jim Lott said that they have a service that comes door to door specific days of the week. He said that this third-party service will go to all floors and take it to the compactor.

Li Roberts asked about a bus stop and explained why it is important to have one designated.

Jim Lott described where the current bus stops.

Li Roberts said she does not know what signs will look like and she doesn't think they have enough parking. She asked about where the more expensive units would be located and why the parking garages do not seem to reflect correlating with the most expensive units. She asked how much rent is.

Jim Lott said each unit has a different price point and it would be $1300 - $1900 range based on floorplan and location.

Bill Mathers asked if the main thing they are counting on is traffic flow and if they have had any contact with Martin County about right-of-ways. He encouraged having people go north as an exit.

Michael Herbach asked about school bus parking and suggested to have it in the north east quadrant on Harrison. He asked about car charging stations.

Jim Lott said they are thinking about adding conduit for this in front of their clubhouse.

Campbell Rich asked about the actual cost of the project.

Jim Lott said right now their budget is between $50 and $51 million.

Campbell Rich asked about Jim Platt's company and the types of projects they do.

Jim Lott explained what they typically do for each project and how long they own them.

Campbell Rich asked how tall the building is going to be.

Ryan Strom confirmed that it would be 59 feet on the site plan.

Campbell Rich asked for a concurrency update.

Michael Houston said that US1 capacity is not an issue.

Larry Massing asked about the construction type.

Jim Lott said that it is fiber cement siding, asphalt shingles; it is stick built.

Ryan Strom agreed with Li's concerns about mailbox delivery and school bus stops.

Li Roberts made a motion.

Ryan Strom requested that Li Roberts amend two of her conditions.

Jim Lott explained why they have the parking garages where they do.

Li Roberts removed item eight from her motion.

Ryan Strom said that it goes back to the parking spaces.

Michael Houston said they are undergoing parking changes across the country and this analysis shows that we are over parking requirements.

Li Roberts asked about her parking calculation and why it is not meeting our standards.

Kev Freeman said there are two dimensions to this. He said national and worldwide analysis shows that the ratio per unit is less than what we have in the City of Stuart code. He said our goal is to work with the developer and explain their parking demand demonstrate their analysis. He said to remember that the city code is a blanket number. He explained that our analysis is conservative, with one bedroom units we should have 1.25 and two bedroom would be 1.75.

Campbell Rich asked if the parking garages are calculated in the parking calculation.

Michael Houston said that garages are not calculated in the parking calculation. He discussed the parking study that occurred on January 2nd.

Li Roberts said explained the ways around parking requirements.

Michael Houston explained why they used the calculation they did.

Larry Massing asked why they aren't counting the garages in the calculation.

Kev Freeman said that was the applicant's decision, but they would normally be calculated.

Li Roberts said that she will leave the parking calculation in the motion to meet 484.

Kev Freeman asked that the motion be amended to include a condition about construction activity.

Public comments began.

Ryan Strom asked for clarification of density transition differences in Martin County and the City of Stuart.

Kev Freeman said that density transition is not a component of City analysis, that is more of a County requirement.

PUBLIC COMMENT: 7:11 PM

1. David Earle (South Federal Highway) – Representing Springtree Property Owners Association. He complained that notice has not been sufficient. He explained that they are not for or against the project yet and explained some of his residents' concerns.
2. Maureen Wilt (SE Springtree) – Concerned about cars, traffic, bus stops, preserve buffers, height limit, security and more.
3. Suzanne Bowman (SE Winter Haven Court) – She asked about offsetting reasons for density, road widening, additional sidewalks, variances, zoning, traffic lights and flipping the property.
4. William Bowman (SE Winter Haven Court) – He addressed the issue with parking and expressed concerns with transitions, code violations, family development, buffers, view impacts, dog estimate, children estimate, and school capacities.
5. Melissa Iemmolo (SE Harrison Court) – Concerned about the distance from her home, height of building, traffic, busing, density, and the overflow ditch behind her house.
6. Cyndy Williams (SW Perry Lane) – Asked what size the garages are. She is concerned about traffic, open space, number of stories, parking, public utilities, environmental impacts, and suggested single family homes instead.
7. Tascha Reeves (SE Springtree Place) – She is concerned about traffic, buses, and four-story height.

8. Jonathan Irvin (SE Harrison Street) – He strongly opposes the project and is concerned about the height limit, traffic, drainage, wetlands, garbage and dog park.
9. Alek Loudakis (SE Winter Haven Court) – He explained the reasons why he moved to Martin County and is concerned about activity at all hours of the night, parking, distance from his neighborhood, and the project turning into low income housing.
10. Abbey Jones (SE Harrison Street) – She expressed concerns about the lack of compassion and respect for this area. She is concerned about the trees, animals, homeless, chemical run-off, environmental impacts, infrastructure and four stories.
11. Alek Loudakis (SE Winter Haven Court) – He is concerned traffic.
12. Tascha Reeves (SE Springtree Place) – Brought up her concerns about how many cars are in each household.
13. David Earle (South Federal Highway) – He is concerned about traffic going through Harrison Street

BOARD COMMENT:

Larry Massing asked about the Harrison Street access.

Michael Houston said that the property is commercial general, but it would need to be discussed with Martin County.

Howard Ehrsam with Bowman said that he has spoken with Martin County, but they would need a right-of-way permit still.

Li Roberts said that we have a site plan that indicates a northern entrance, but if they do not get permission what happens.

Tom Reetz the traffic report would have to be recalculated.

Kev Freeman said that the northern entrance is part of the recommended site plan, but if that was not available it would have to come back to LPA.

Li Roberts asked for clarification regarding the drainage ditch. She asked if the project was not approved, what could be on the property.

Kev Freeman said that you would have to maintain the ditch. He said that the county is zoned as R3A and limited commercial, but if it remained in the county it would be mandatory rezoning to a combination of general and limited commercial. He said the property has already been annexed into the city, so county rules do not apply unless they came in and filed for rezoning. He said they could do R3 with fifteen units per acre, three stories, and similar setbacks.

Li Roberts said that without the board being able to put restrictions on a project there are things the property owner would be able to do. She asked if she owned the property outright without a PUD where would the entrance be.

Kev Freeman said that it would be the same qualifications.

Larry Massing asked what benefits the city is getting from this application.

Michael Houston apologized if he offended anyone about homelessness. He explained nearby projects that were approved and are similar to theirs. He said that they are providing needed housing. He understands the debate about the height of the project, but there is a 500-foot separation. He said this is not an affordable housing community, these are nice market rate apartments with garages that are sized for parking cars. He said that this is an important provision for the city, and they hope to keep the construction traffic off of Springtree.

Li Roberts asked about the distances on the north side and requested a bigger buffer.

Michael Houston explained what is currently in the buffer areas.

Li Roberts asked about Harrison Street at the north end of the property and planting additional vegetation for a buffer.

Michael Houston said that he can work that out with the residents.

Howard Ehrsam said that the site line will block the entire building.

Li Roberts asked where the bus stops for the Harrison Street residents. She said that there is still traffic that is coming out and that needs to be handled. She made a motion for construction activity.

Howard Ehrsam said they are working on getting an FDOT permit.

Li Roberts explained why she was adding to her motion.

Kev Freeman described what they are looking for.

Discussion about the preserve sidewalk occurred.

Larry Massing asked for garage size clarifications.

Michael Houston clarified the garage dimensions.

Li Roberts said that the plans go to Martin County for review, but they rarely make comments on them. She said that it puts the City of Stuart in a weird position.

MOTION:
Action: Move approval with the following conditions:

1. Address bus stops to make them safer

2. Extend ornamental fence on the west side of the road
3. Increase parking calculation to 484, but garages can be included in the calculation
4. Include exterior trash cans, grills, signage, exterior lighting in site plan
5. Implement a car wash station
6. Solution to mail delivery and mailboxes
7. Work to get permission to add sidewalk connection through "preserve" area
8. Indicate the correct unit count and submit the floor plans
9. Address charging stations
10. Include rules or deed restrictions regarding dogs
11. Submit a detailed construction activity plan

Moved by: Li Roberts
Second by: Larry Massing
Motion passed unanimously.

ORDINANCES:

1. ORDINANCE NO. 2428-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, REZONING FROM COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) TO SINGLE FAMILY GENERAL (R-1) ON THE CITY'S OFFICIAL ZONING MAP FOR PROPERTY TOTALING 0.42 ACRES, OWNED BY MEDALIST BUILDING GROUP, LLC LOCATED ON THE NORTHEAST CORNER OF SE DOLPHIN DRIVE AND SE 5TH STREET; BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; DECLARING THE PROJECT 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, PROVIDING FOR ACCEPTANCE BY THE APPLICANT AND FOR OTHER PURPOSES.

PRESENTATION: Stephen Mayer, Senior Planner 8:24 PM

BOARD COMMENT: None.

PUBLIC COMMENTS: None.

MOTION:
Action: Approve.
Moved by: Larry Massing
Second by: Michael Herbach
Motion passed unanimously.

BOARD COMMENT:

Michael Herbach made two motions.

MOTION: Send staff a request to develop an electric vehicle ordinance, similar to the City of Atlanta's electric vehicle ordinance, and report back to the LPA board within 60 days.
Action: Approve.
Moved by: Michael Herbach
Second by: Li Roberts
Motion passed unanimously.

MOTION: Request staff to review the LPA by-laws and/or rules or regulations to suggest updates and include an agenda item at the next LPA meeting.
Action: Approve.
Moved by: Michael Herbach
Second by: Bill Mathers
Motion passed unanimously.

STAFF UPDATE:

Kev Freeman said he is going to request that the MPO come in to do a presentation for the status of Marty.

Larry Massing said that there are a lot of buses in the county.

ADJOURNMENT:
Motion: Action: Adjourn.
Moved by: Campbell Rich
Seconded by: Larry Massing

_____ _____

Ryan Strom, Chair Jordan Pinkston, Board Secretary

Residential PUD

Project:	Sprintree RPUD
Date	2.24.2020

Adjacent N	Martin County commercial and Residential
Adjacent S	Martin County - Trailer Park - Natille Estates
Adjacent E	City of Stuart CPUD
Adjacent W	Martin County - Preserve
Total Floor Space (sq.ft)	**87,749 sq. ft. 2.01 acres bldg footprint tot.**

LDR Reference	Land Development Regulations	RPUD REVIEW STATUS
2.07.00 D.1	Land Use Designation	COMPLY
2.07.00 D.2 a	Uses	COMPLY
2.07.00 D.2 b	Compatible Residential Uses	COMPLY
2.07.00 D.2 c	Commercial (<30%)	NOT APPLICABLE
2.07.00.D.2.d	Commercial Uses (<30%) vertical	NOT APPLICABLE
2.07.00.D.3	Density	COMPLY
2.07.03 D.4.b	Open Space (>30%)	COMPLY
2.07.03 D.4.c	FAR	COMPLY
2.07.03.D.4.d	Native Vegetaion (>25%)	COMPLY

AREA, IMPERVIOUS SURFACE, SETBACK AND HEIGHT

2.04.03	Supplemental impervious surface	COMPLY
2.04.04	Supplemental setback requirements	COMPLY
2.04.05	Waterfront setbacks	NOT APPLICABLE
2.04.06	Certain street setbacks	EXCEPTION REQUESTED
2.04.07	Supplemental building height	COMPLY
2.06.00	Supplemental Use standards	NOT APPLICABLE

4.04.01	Traffic Concurrency	COMPLY
4.09.00	School Concurrency	TO BE REVIEWED

RESOURCE PROTECTION

5.02.00	Environmental Assessment	COMPLY
5.03.02	Wetland Protection	COMPLY
5.04.00	Evironmentally sensitive lands	COMPLY
5.04.03	Monitoring & Maintenance	REVIEWED AT SITE PLAN
5.05.01	Tree Survey	COMPLY
5.05.02	Tree removal	COMPLY
5.06.00	Mangrove & Shoreline	NOT APPLICABLE
5.07.00	Floodplain Management	COMPLY
Comp Plan	Comprehensive Plan	COMPLY

TRANSPORTATION

6.01.04	Sidewalks/bikeways	COMPLY
6.01.05	Bike Ped (LCD)	COMPLY
6.01.06	Access	COMPLY
6.01.07	Drive-through	NOT APPLICABLE
6.01.08	Vehicular Access	NOT APPLICABLE
6.01.09	Parking Code	COMPLY
6.01.18	Off-Street Loading	NOT APPLICABLE
6.01.19	PILOP	NOT APPLICABLE

STORMWATER

6.03.01	Generally	COMPLY
6.03.04	Management	EXCEPTION REQUESTED
6.03.08	Erosion	TO BE REVIEWED

LANDSCAPING - PARKING AREAS

6.04.07 A.1	Landscaped strip adjacent to street	COMPLY
6.04.07 A.2	Landscaped strip length linear feet	COMPLY
6.04.07 A.2a	Parking area adjacent to street	COMPLY
6.04.07 A.2b	Hedge/wall/berm on outside of strip	COMPLY
6.04.07 A.2c	Other Landscaping	COMPLY
6.06.07 A.2d	Grass	COMPLY
6.04.07 A.3	Shrubs/ground cover	COMPLY
6.04.07 B	parking screened from private	NOT APPLICABLE
6.04.07 B.1	Landscaped strip adjacent to private	NOT APPLICABLE
6.04.07 B.2a	Parking area adjacent to private property	NOT APPLICABLE
6.04.07 B.2b	Hedge/wall/berm on outside of strip	NOT APPLICABLE
6.04.07 B.2c	Other Landscaping	NOT APPLICABLE
6.04.07 B.2d	Grass	NOT APPLICABLE
6.04.07 B.3	Shrubs/ground cover	NOT APPLICABLE
6.04.07 C.1	Parking Area (Major Dev't only)	COMPLY
6.04.07 C.2	Parking area rear and sides of building	COMPLY
6.04.07 C.3	Interior trees	COMPLY
6.04.07 C.4	Vechicle encroachment	COMPLY
6.04.07 C.5	Interior landscaped islands	COMPLY
6.04.07 C.6	Terminal landscaped islands	COMPLY
6.04.07 C.7	Interior landscaped medians	COMPLY
6.04.07 C.8	Interior shade trees	COMPLY
6.04.07 D	Visability triangles	REVIEWED AT SITE PLAN
6.04.08	Tree Requirements	COMPLY
6.04.10	Loading Storage	NOT APPLICABLE

COMMERCIAL DEVELOPMENT STANDARDS

6.05.02 B	Building Location	NOT APPLICABLE
6.05.02 C	Building Orientation	NOT APPLICABLE
6.05.02 D	Façade Design	NOT APPLICABLE
6.05.02 E	Massing	NOT APPLICABLE
6.05.02 F	Other Features	NOT APPLICABLE
6.05.02 G	Transitional Elevations	NOT APPLICABLE
6.05.03 B	Blank Wall Area	NOT APPLICABLE
6.05.03 C	Repeating Façade	NOT APPLICABLE
6.05.04	Additional Façade	NOT APPLICABLE
6.05.05	Roof Treatments	NOT APPLICABLE
6.05.06	Entryways and customer entrance	NOT APPLICABLE
6.05.07	Materials and Color	NOT APPLICABLE
6.06.00	Green Development	NOT APPLICABLE
6.07.00	Lighting	NOT APPLICABLE
6.08.00	Dumpster & Recycling	NOT APPLICABLE
6.09.05	Fences	NOT APPLICABLE
6.11.00	Signs	TO BE REVIEWED

FIRE REVIEW

BF.1	

POLICE DEPARTMENT REVIEW

P.1	

PUBLIC WORKS REVIEW

PW.1	

COMMENTS

A	
B	

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION

Meeting Date: 3/9/2020 **Prepared by:** Stephen Mayer

Title of Item:

SAFE AND SECURE SELF STORAGE AT STUART CPUD MINOR AMENDMENT (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2430-2020; AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING A MINOR AMENDMENT TO "SAFE AND SECURE SELF-STORAGE AT STUART" COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) AT 700 SW FEDERAL HIGHWAY; THEREBY AMENDING THE CONDITIONAL OF APPROVAL FOR THE ART COMPONENT, ACCEPTANCE OF MINOR AMENDMENTS TO THE SITE PLAN, LANDSCAPE PLAN, ARCHITECTURE AND FLOOR PLAN; AMENDING THE CONDITIONS OF DEVELOPMENT ACCORDINGLY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

On November 13, 2018, the City Commission voted to approve Ordinance 2383-2018, adopting the Safe and Secure Self Storage at Stuart CPUD. The applicant, Robert Doster of Stuart Self Storage, LLC, has applied for a minor PUD amendment, in order to revise the condition of approval for the provision of public art, and provide for an acceptable art component, which includes a proposed location and rendering. The applicant also desires to approve minor revisions to the site plan, landscape plan, and architecture, which are included as new site plan and landscape plan documents, as well as listing all minor changes in an letter from Kenneth Carlson Architects letter, dated December 9, 2019, and attached hereto.

Staff considers the requested changes to be minor in nature, and recommends approval of the text changes required to incorporate the art component and the minor revisions.

Funding Source:

N/A

Recommended Action:

Move approval of Ordinance 2383-2018 on Second Reading.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ordinance 2430-2020	2/27/2020	Ordinance add to Y drive
🗋	List of Changes - Applicant Request	2/14/2020	Exhibit

Revised Site Plan	2/14/2020	Exhibit
Revised Landscape Plan	2/14/2020	Exhibit
Art Component Plan	2/14/2020	Exhibit
Ordinance 2383-2018 - Safe and Secure CPUD	2/14/2020	Attachment

BEFORE THE CITY COMMISSION
CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2430-2020

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA APPROVING A MINOR AMENDMENT TO "SAFE AND SECURE SELF-STORAGE AT STUART" COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) AT 700 SW FEDERAL HIGHWAY; THEREBY AMENDING THE CONDITIONAL OF APPROVAL FOR THE ART COMPONENT, ACCEPTANCE OF MINOR AMENDMENTS TO THE SITE PLAN, LANDSCAPE PLAN, ARCHITECTURE AND FLOOR PLAN; AMENDING THE CONDITIONS OF DEVELOPMENT ACCORDINGLY; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, on November 13, 2018, the City Commission approved the Safe and Secure Self-Storage at Stuart CPUD for a 1.85-acre warehouse for mini storage (per Ordinance No. 2383-2018); and

WHEREAS, Robert Doster, as partner of Stuart Self Storage, LLC (the Owner and Applicant) is now requesting a minor amendment to the CPUD to provide for revised art component condition of approval, revised site plan, landscaping plan, new architectural rendering and floor plans, and modified condition of approval regarding these minor changes; and

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission meeting held on February 24, 2020, to consider the application of

the Owners for the property to approve the minor amendment to the CPUD; and

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

SECTION 1: A 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 revised conditions of development for the property are attached hereto as **Exhibit "C"** and made a part hereof by reference, and each shall constitute one of the development documents.

SECTION 2: The following additional documents 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 an additional part of the development conditions applicable to the Property:

a. Site Plan, Sheet C-05, by Thomas Engineering, dated 1.31.20

b. Boundary Survey, Sheets 1 of 1, HSQ Group, Inc. Professional Surveyors and Mappers, dated 1.30.18

c. Landscape Plan, Sheets LP-1 thru LP-3, by HJA Design Studio, dated 2.05.20

d. Lighting Plan, Sheet L1, by HJA Design Studio, dated 8.2.18

e. Architectural footprints and Elevations, Sheets A1 to A7, by Good and Edward Design Studios, dated 5.31.18, with the list of architectural and footprint changes outlined in the Kenneth Carlson Architects letter, dated December 9, 2019.

f. Art Component, Sheets EX-1 and EX-2, prepared by HJA Design Studio, dated 11.12.19

SECTION 3: In all other respects and except as amended hereby, Ordinance No. 2383-2018 shall remain in full force and effect.

SECTION 4: All ordinances or parts of ordinances in conflict with this Ordinance or

any part thereof are hereby repealed to the extent of such conflict. If any provision of this Ordinance conflicts with any prior contractual provision between the City and the developer of the site, this ordinance shall prevail.

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) and Resolutions 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 or resolution pertaining to the development.
b. Direct the City Development Director to initiate the process to rezone the CPUD property or any portion of the CPUD 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 CPUD 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: 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: This Ordinance shall be effective upon the adoption by the City Commission, and proper execution by the Owner.

SECTION 8: 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.

Passed on first reading the ____ day of _____, 2020.

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
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED on second and final reading this _____day of _____, 2020.

ATTEST:

_____	_____
MARY R. KINDEL	MICHAEL J. MEIER
CITY CLERK	MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL
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 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 INDUSTRIAL 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:

Stuart Self Storage, LLC

_____

By: _____

Print Name: _____

Robert Doster, Partner

_____

Print Name: _____

OWNERS' ACKNOWLEDGMENT

The above Acceptance and Agreement of Ordinance No. 2429-2020 was acknowledged before me this _____day of _____, 2020, by Robert Doster, Stuart Self Storage, LLC.

_____

Notary Public, State of Florida
My Commission Expires:
Notary Seal

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION

Exhibit "A"

Lots 147, 148 and 149, H. W. Bessey's Second Addition, according to Plat thereof, Plat Book 5, Page 52, Public Records of Palm Beach (now Martin) County, Florida.

Lots 150, 151, 152, 155 and 156, H. W. Bessey's Second Addition to the Town of Stuart, Florida, according to the Plat thereof filed May 29, 1914 and recorded in Plat Book 5, Page 52, Palm Beach (now Martin) County, Florida, Public Records. Less 13 feet taken from the East side of Lots 152 and 155 by the State of Florida for highway purposes in 1953 and less the 215 square feet, more or less, taken from the East side of Lots 152 and 155 by the State of Florida for highway purposes in 1962.

Lots 157 and 158, H. W. Bessey's 2nd Addition to the Town of Stuart, as in Plat Book 5, Page 52, Palm Beach (now Martin) County, Florida, Public Records.

INITIAL

EXHIBIT B – LOCATION MAP

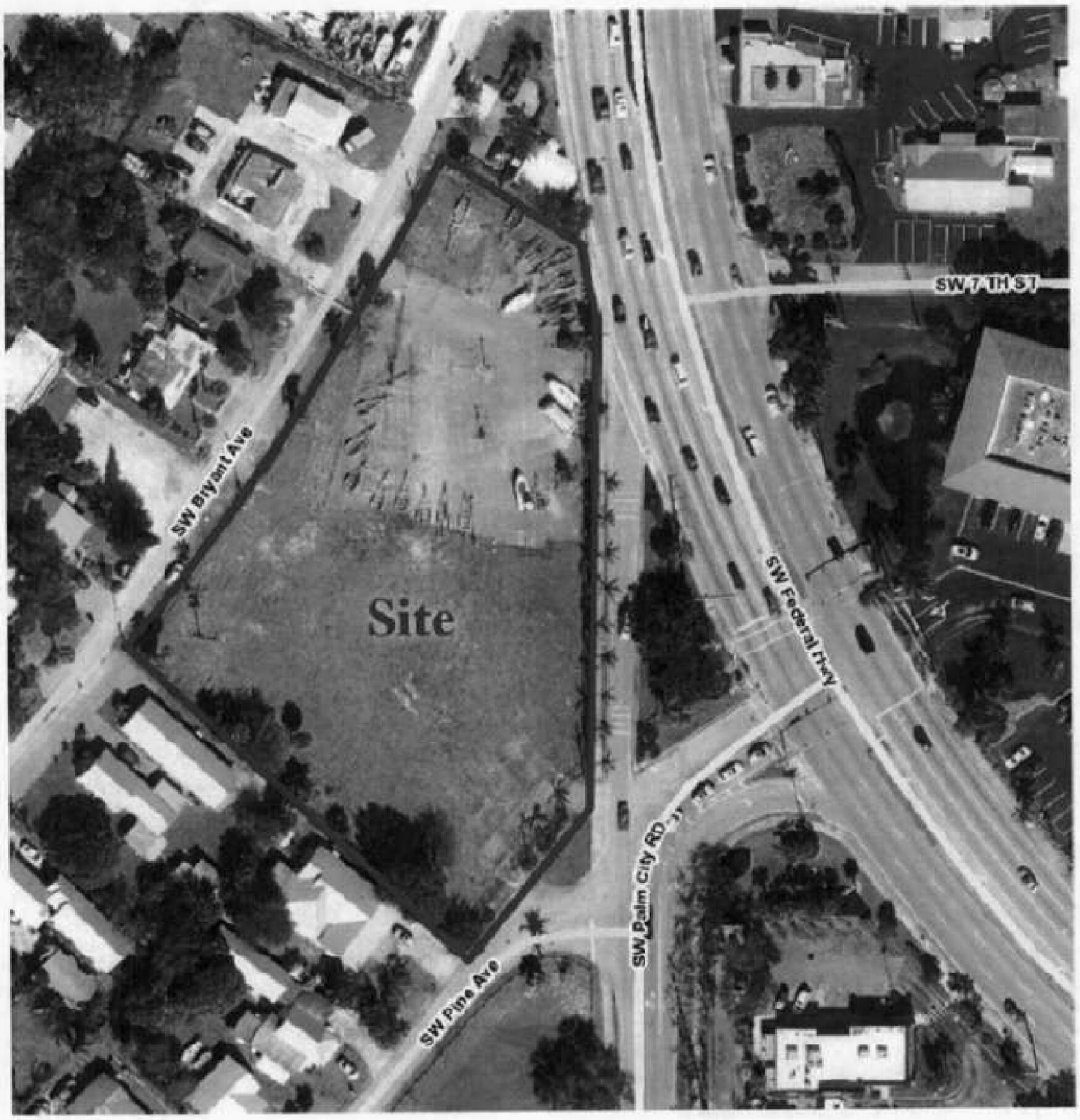


EXHIBIT "C"

Modified conditions of approval.

#1. The Safe and Secure Self-Storage at Stuart CPUD and use thereof shall comply with the following documents and drawings:

g. Site Plan, ~~Sheet 1 of 1, prepared by HJA Design Studio, dated 9.26.18~~ Sheet C-05, by Thomas Engineering, dated 1.31.20

h. Boundary Survey, Sheets 1 of 1, HSQ Group, Inc. Professional Surveyors and Mappers, dated 1.30.18

i. Landscape Plan, ~~Sheet L1, by HJA Design Studio, dated 9.26.18~~ Sheets LP-1 thru LP-3, by HJA Design Studio, dated 2.05.20

j. Lighting Plan, Sheet L1, by HJA Design Studio, dated 8.2.18

k. Architectural footprints and Elevations, Sheets A1 to A7, by Good and Edward Design Studios, dated 5.31.18, with the list of architectural and footprint changes outlined in the Kenneth Carlson Architects letter, dated December 9, 2019.

l. Art Component, Sheets EX-1 and EX-2, prepared by HJA Design Studio, dated 11.12.19

#6. Prior to issuance of a certificate of occupancy ~~building permit~~, the applicant shall ~~either contribute the required art fee of one and one half percent of the vertical construction cost or~~ provide a work of art ~~on the development~~ in the location identified on plan Exhibit EX-1 by HJA Design Studio, dated 11.12.19 and described in Exhibit EX-2 by HJA Design Studio, dated 11.12.19. ~~pursuant to Section 3.01.08.~~

KENNETH CARLSON ARCHITECT - P.A. DESIGN PLANNING INTERIORS

AA C001878

KENNETH R. CARLSON - ARCHITECT, P.A.

December 9, 2019

City of Stuart
Building Processing Department
List of Changes from Original PUD Review

Dear Mr. Freeman,

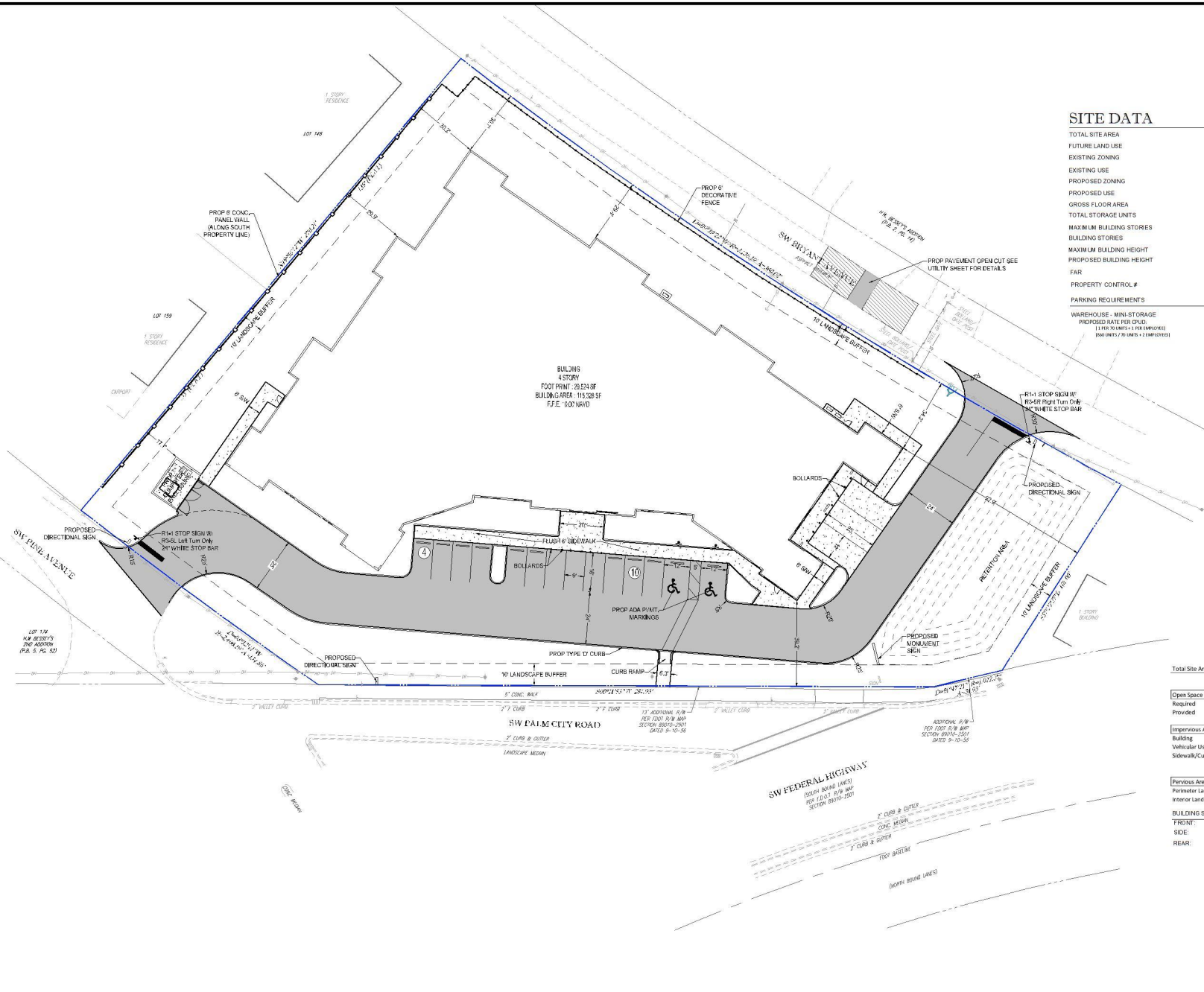
Per our pre-construction meeting at the City of Stuart on September 10, 2019 with Steve Tedder and Robert Doster from Ownership, Ken Carlson Architects, and Thomas Engineering, it was requested to provide a list of changes made per the original approved PUD plans. Please see below the list of changes.

- Projections at SW and NW rear of the building increased (by what dimension?) in depth to provide uniform layouts on the building interior.
- Window elevations coordinated and adjusted to correct finished floor heights.
- For security purposes and functionality, the 3rd entrance, entrance doors and paving at the SW loading area removed. In same location, full sized canopy removed, however, provided new awnings over storefront doors to conform with overall design aspects.
- Dumpster enclosure minimized and coordinated with city officials to reflect the garbage demands of the use.
- Third stairwell removed at NE corner as it is was not required by code.
- Elevator relocated to enhance accessibility and functionality of the building.
- Windows in tower elements enlarged to increase visibility.
- Canvas canopies at ground floor revised to improve high-wind safety and conformity with overall design.
- Additional architectural features provided in the rear of the building at large flat areas to improve the building's aesthetics.
- Access along Pine Avenue was removed as it was considered a safety issue by Martin County Engineering and they would not permit the access point.

Sincerely,

James Gorvetzian

For: Kenneth R. Carlson Architect, P.A.



SITE DATA

TOTAL SITE AREA	1.85 AC.(80,332 SF)
FUTURE LAND USE	COMMERCIAL
EXISTING ZONING	B-2
EXISTING USE	VACANT
PROPOSED ZONING	CPUD
PROPOSED USE	STORAGE FACILITY
GROSS FLOOR AREA	115,328 SF
TOTAL STORAGE UNITS	880 UNITS
MAXIMUM BUILDING STORIES	4 - STORY
BUILDING STORIES	3 - STORY / 4 LEVELS
MAXIMUM BUILDING HEIGHT	45'
PROPOSED BUILDING HEIGHT	44'-5.8"
FAR	1.47
PROPERTY CONTROL #	05-38-41-002-000-01470-0

PARKING REQUIREMENTS	REQUIRED	PROVIDED
WAREHOUSE - MINI-STORAGE PROPOSED RATE PER CPUD [1 PER 70 UNITS + 1 PER EMPLOYEE] [880 UNITS / 70 UNITS + 2 EMPLOYEES]	15 SPACES (INCLUDES 2 HANDICAP SPACES)	17 SPACES (INCLUDES 2 HANDICAP SPACES)

Total Site Area	SF	ACRE	%
	80,332	1.84	100%
Open Space			
Required	16,066	0.37	20%
Provded	29,298	0.67	36%
Impervious Area	47,707	1.10	59%
Building	29,524	0.68	37%
Vehicular Use	14,653	0.34	18%
Sidewalk/Curb	3,530	0.08	4%
Pervious Area	32,625	0.75	41%
Perimeter Landscape Area	29,298	0.67	36%
Interior Landscape Area	3,327	0.08	4%

BUILDING SETBACKS	REQUIRED (MIN.)	PROVIDED
FRONT:	30'	39.2'
SIDE:	5'	30'
REAR:	20'	29.4'

HATCH LEGEND

PROPOSED CONCRETE

PROPOSED ASPHALT PAVEMENT

THOMAS ENGINEERING GROUP
CIVIL · STRUCTURAL · TRAFFIC · TRANSPORTATION · PLANNING · SURVEYING · ENVIRONMENTAL
6300 NW 31ST AVENUE, FT. LAUDERDALE, FL 33309, P: 954-202-7000
4855 W. KENNEDY BLVD., SUITE 610, TAMPA, FL 33609, P: 813-379-4100
125 W. INDIANTOWN RD., SUITE 206, JUPITER, FL 33458, P: 561-203-7503

THE MATERIAL CONTAINED ON THESE PLANS IS THE PROPERTY OF THOMAS ENGINEERING GROUP, LLC AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH IT IS PREPARED WITHOUT THE EXPRESS WRITTEN CONSENT OF THOMAS ENGINEERING GROUP, LLC. ANY UNAUTHORIZED USE OF THESE PLANS WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO THOMAS ENGINEERING GROUP, LLC. ANY USE OF THESE PLANS BY THE OWNER OR ANY OTHER PARTY FOR ANY PURPOSE OTHER THAN THAT SPECIFICALLY INTENDED BY THOMAS ENGINEERING GROUP, LLC IS AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO THOMAS ENGINEERING GROUP, LLC.

REVISIONS:

REV:	DATE:	COMMENT:	BY:

811 KNOW WHAT'S BELOW. ALWAYS CALL 811 BEFORE YOU DIG. It's Easy, It's Free, It's the Law. www.callsunshine.com

PROJECT No.:	FJ1900054
DRAWN BY:	MJG
CHECKED BY:	BMU
DATE:	1/31/20
CAD I.D.:	F:\1900\54\SITE PLAN

PROJECT:

SAFE & SECURE SELF-STORAGE

FOR

STUART SELF STORAGE, LLC

CITY OF STUART
FLORIDA

THOMAS ENGINEERING GROUP
PEBWORTH PROFESSIONAL PLAZA
125 W. INDIANTOWN RD. SUITE 206
JUPITER, FL 33458
PH: (561) 203-7503
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www.ThomasEngineeringGroup.com

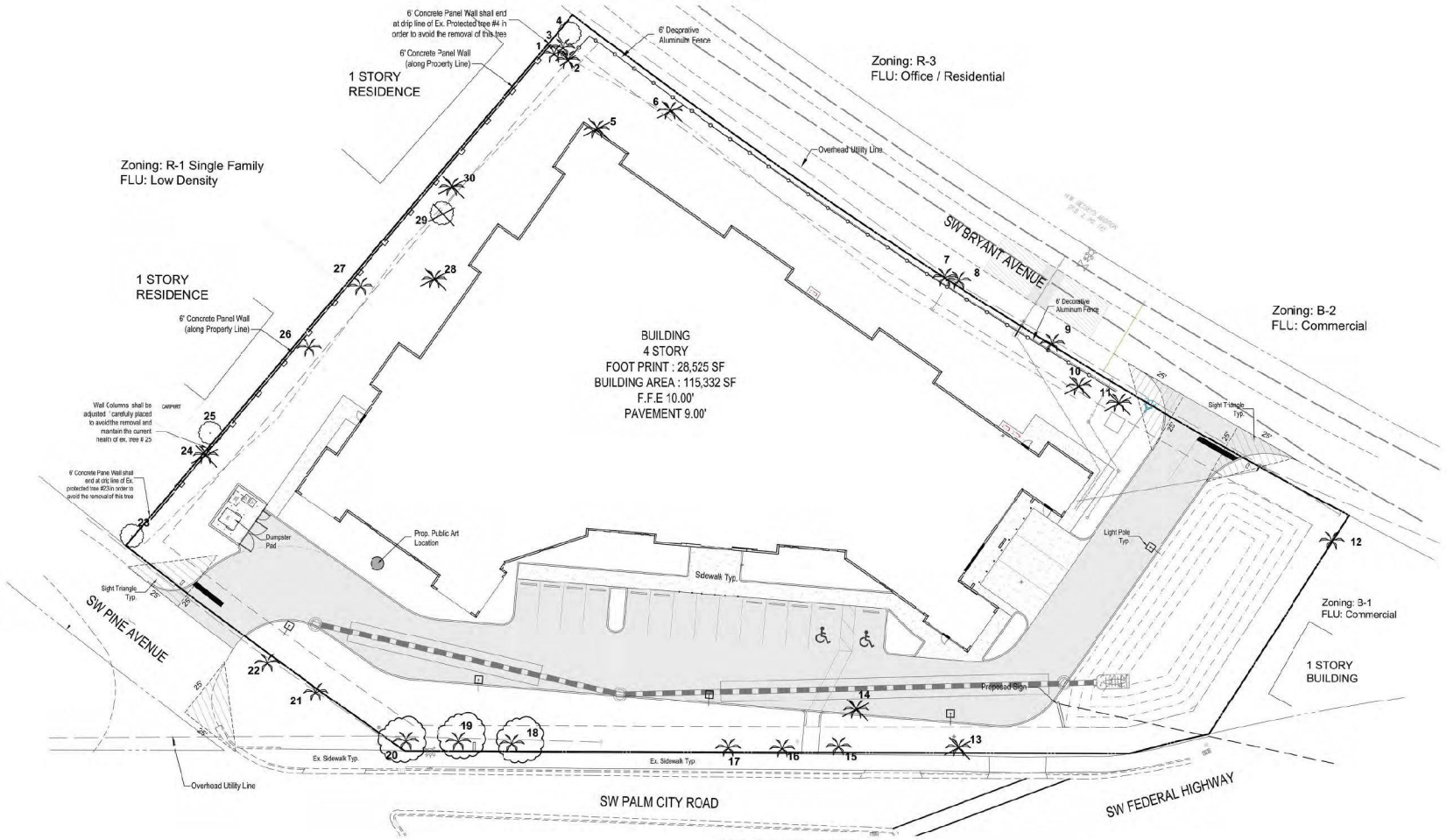
BRANDON ULMER
No. 68345
PROFESSIONAL ENGINEER
February 10, 2020
STATE OF FLORIDA
FLORIDA CERTIFICATE OF AUTHORIZATION No. 27525

SHEET TITLE:

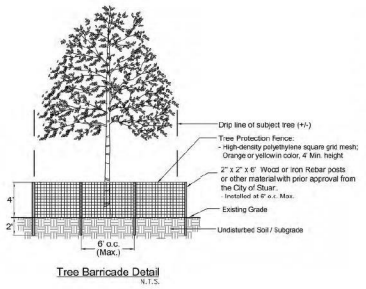
SITE PLAN

SHEET NUMBER:

C-05



Tree Protection / Barricade Detail



Tree Barricade Detail
N.T.S.

Tree Protection Notes

1. Existing trees that are to be preserved shall be barricaded according to the City's regulations.
2. Tree Protection Barricades shall be erected prior to the commencement of any work. All barricades must be maintained intact for the duration of construction.
3. Barricades must be constructed around the critical protection zone of each tree or cluster of trees.
4. During periods of development and construction, the areas within the drip-line of preserved trees shall be maintained at their original grade with pervious landscape material. Within these areas, there shall be:
   A. No trenching or cutting of roots
   B. No fill, compaction or removal of soil, and
   C. No use of concrete, paint, chemicals or other foreign substances
5. Barricades shall be constructed of a yellow or orange high density polyethylene square grid mesh fence with a min. height of 4 feet. Fencing shall be secured to posts with nylon cable ties at the top middle and bottom of each post. Posts shall be a 2"x 2" x 6' wood or iron rebar or other material with prior approval from The City of Stuart. Posts shall be spaced a max. of 6' o.c.

Existing Tree Chart

Tree #	Common Name	Size	Comment	Protected	Status
1	Cabbage Palm	15' ct.		No	Preserve
2	Cabbage Palm	20' ct.		No	Remove
3	Cabbage Palm	13'ct.		No	Preserve
4	Gumbo Limbo	15" Combined DBH	multi-trunk	Yes	Preserve
5	Cabbage Palm	17' - 18' ct.		No	Remove
6	Cabbage Palm	17' - 18' ct.		No	Remove
7	Cabbage Palm	10' ct.		No	Preserve
8	Cabbage Palm	10' ct.		No	Preserve
9	Cabbage Palm	10' ct.		No	Preserve
10	Cabbage Palm	16' ct.		No	Remove
11	Cabbage Palm	16' ct.		No	Remove
12	Cabbage Palm	8'-10' ct.		No	Preserve
13	Christmas Palm	8'-10' ct.	Triple	No	Remove
14	Christmas Palm	6'-8' ct.	Triple	No	Remove
15	Royal Palm	15' GW		No	Preserve
16	Royal Palm	12'- 13' GW		No	Preserve
17	Royal Palm	15' GW		No	Preserve
18	Royal Palm	15' GW		No	Relocate
19	Royal Palm	15' GW		No	Relocate
20	Royal Palm	15' GW		No	Relocate
21	Royal Palm	12'- 13' GW		No	Preserve
22	Royal Palm	15' GW		No	Preserve
23	Live Oak	10" DBH	Off-site	Yes	Preserve
24	Cabbage Palm	10' ct.		No	Remove
25	Live Oak	27" DBH	Off-site	Yes	Preserve
26	Cabage Palm	9" DBH		No	Preserve
27	Cabage Palm	17" DBH		No	Preserve
28	Cabage Palm	11" DBH		No	Remove
29	Scrub Oak	40" Combined DBH	multi-trunk shrub	No	Remove
30	Cabage Palm	10' ct.		No	Remove

Legend

Existing Trees to be Preserved

Existing Trees to be Removed

Existing Palm Trees to be Relocated (3 - Royal Palms)

* Note: See Existing Tree Chart for more information

Scale: 1" = 20'

0' 10' 20' 40' 60'

North

HJA DESIGN STUDIO
LANDSCAPE ARCHITECTURE
50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994
T 772.678.7200
F 772.678.7201
www.hjadesignstudio.com
LA 0000905

Stuart Self Storage LLC

City of Stuart Florida

Existing Tree / Removal Plan

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The following drawings are instruments of service to the Landscape Architect. They are not products of design. All ideas, designs, arrangements, and plans indicated or represented by these drawings are the property of the designer, and were created, evolved, and developed for use on and in connection with the specified project. None of such ideas, designs, arrangements, or plans shall be used by or disclosed to any person, firm or corporation for any purpose whatsoever without the permission of the designer.

REGISTERED LANDSCAPE ARCHITECT CRAIG MICHAEL HOUSTON LA0000905 STATE OF FLORIDA

Job No.	17045
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	06-4-18
	09-12-18 09-26-18
Revision Dates	11-15-19
	2-05-20

LP-1

Landscape Data

Total Site Area	80,332 sf / 1.85 Ac.
Landscape Area Required (20%)	16,066 sf / 0.37 Ac.
Landscape Area Provided (41%)	32,625 sf / 0.75 Ac.
Planted / Vegetation Areas	18,620 sf (57%)
Sod Areas	14,005 sf (43%)

1 Tree per 2,500 sf of Development site (Min. 50% Shade Trees)

Development Site	80,332 sf (1.85 Ac.)
Total Trees Required (80,332 sf / 2,500 sf)	33 Total Trees
Shade Trees Required (33 Req. Trees x 50%)	17 Trees
Total Trees Provided	87 Total Trees (44 Trees + 77 Palms @ 2:1 + 5 Palms @1:1)
Shade Trees Proviced	44 Trees

Perimeter Landscaping Adjacent to Streets

10' Min. Landscape Buffer- 1 Tree per 30 LF and perimeter hedge required. Not less than 25% of strip shall be groundcover.

SW Palm City Road:

Trees Required (313 LF / 30)	= 11 Trees
Trees Provided:	= 18 Trees (4 Trees + 16 Palms @ 2:1 + 6 Ex. / Relocated Palms @ 1:1)

SW Pine Avenue

Trees Required (135 LF / 30)	= 5 Trees
Trees Provided:	= 6 Trees (1 Trees + 4 Palms @ 2:1 + 3 Palms @ 1:1)

SW Bryant Avenue:

Trees Required (338 LF / 30)	= 12 Trees
Trees Provided:	= 24 Trees (3 Trees + 21 Palms @ 2:1 + 1 Ex. Palm @ 2:1)

Transitional Landscape Buffers (development incompatibility)

One Tree Per 30 L.F. Buffer shall include a buffer screen the width of which is 25 percent of the width of the required buffer. The buffer screen shall include a six-foot high wall or fence with five-foot wide landscape area located along the property line. Where a proposed non-residential development will abut a residential development,the five-foot wide landscape area shall be located outside the six-foot high wall or fence.
Sec. 6.04.06 B (4) - No Structure, mechanical equipment, trash receptacles, parking area or internal driveways shall be located in the common boundary buffer within 15 feet of the property line.

South Boundary: - Abutting Single family

Required Buffer Width : 55' (25' + 10' for each additional bldg. story)
Provided Buffer Width : 30'

Required Buffer Screen : 13.75 ' (55' Buffer width x 25%)
Provided Buffer Screen : 15' - 30'

Total Linear Feet : 270'

Trees Required: (270 LF / 30)	= 9 Trees
Trees Provided:	= 22 Trees (11 Trees + 1 Ex. Tree + 4 Ex. Palms @ 2:1 + 16 Palms @2:1)

Perimeter Landscaping Adjacent to Private Property:

5' Min. Landscape Buffer - 1 Tree per 30 LF and perimeter hedge required. Not less than 25% of strip shall be groundcover.

Along North Property Line (Commercial):

Trees Required: (101 LF / 30)	= 4 Trees
Trees Provided:	= 10 Trees (3 Trees + 4 Palms @ 2:1)

Interior Landscaping around Perimeter of Building:

A 5' min. landscape strip shall be provided along all sides of the building which abut a parking area. This strip shall contain 1 Tree per 30 LF and hedge.

Trees Required: (364 LF / 30)	= 12 Trees
Trees Provided:	= 12 Trees (4 Trees + 16 Palms @ 2:1)

Interior Landscaped Islands:

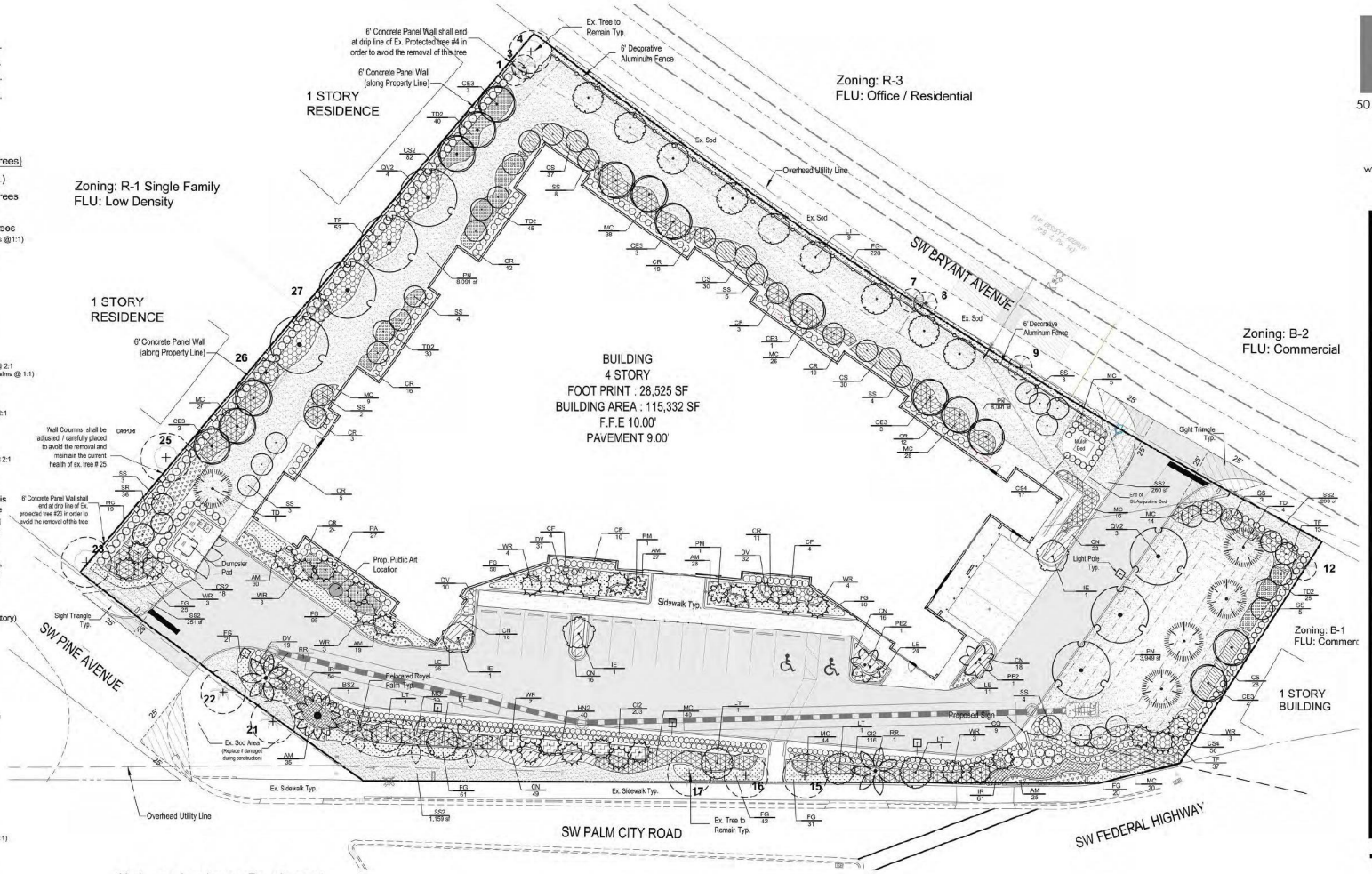
Each interior island shall contain a min. of 1 shade tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24".

Trees Required:	= 1 Tree
Trees Provided:	= 1 Tree

Interior Terminal Landscaped Islands:

Each interior island shall contain a min. of 1 shade tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24".

Trees Required:	= 4 Trees
Trees Provided:	= 4 Trees (2 Trees + 2 Palms @ 1:1)



Xeriscape Landscape Requirement

To obtain a development permit, an applicant shall attain a minimum of 50 points from he following table of design options. As used in the table, "list" means the list of drought tolerant species set forth in the most current South Florida Water Management District's Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape.

Design Options:	Points	Points Received
(1) Utilization of moisture sensing controller other than rain switch	5	
(2) Plan submitted with low, moderate and high water usage zones indicated on the landscape plan	5	
(3) Grass:		
25 - 50 % of the grass areas are made up of drought tolerant grass species from he list	5	
51 % or more of the grass areas are made up of drought tolerant grass species from the list	10	10
(4) Shrubs:		
25 - 50 % of the requirec shrubs are made up of drought tolerant species from the list	5	
51 % or more of the required shrubs are made up of drought tolerant species from the list	10	10
(5) Trees:		
25 - 50 % of the requirec trees are made up of drought tolerant species from he list	5	
51 % or more of the required trees are made up of drought tolerant species from the list	10	10
(6) Extra shade trees in vehicular use areas:		
25 % more than the required shade trees planted in the vehicular use areas.	5	
50 % more than the required shade trees planted in the vehicular use areas.	10	
(7) Sod area less than 50 percent of provided landscape area.	10	10
(8) Utilization of compacted mulched planting beds at least three inches in depth inall planted areas except ground covers. (Use of Cypress Mulch prohibited)	10	10

Total Points Provided: 50 Points

Legend

Existing Trees to be Preserved

Proposed Light Pole Typ.

Relocated Palm Trees (3 - Royal Palms)

* Note: See Existng Tree Chart on sheet LP-1 for more information

Scale: 1" = 20'

0' 10' 20' 40' 60'

North

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Landscape Plan

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The following drawings are instruments of service to the Landscape Architect. They are not products of design. All ideas, designs, arrangements, or plans indicated or representedby this drawing are owned by and the property of the designer, and were created, evolved, and developed for use on and in connection with the specified project. None of such ideas, designs, arrangements, or plans shall be used by or disclosedto any person, firm, or corporation for any purpose whatsoever without the written permission of the designer.

REGISTERED LANDSCAPE ARCHITECT CRAIG MICHAEL HOUSTON LA0006005 STATE OF FLORIDA

Job No.	17045
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	06-4-18, 09-12-18, 09-26-18
Revision Dates	11-15-19, 2-05-20

LP-2

Landscape Notes

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL THE REQUIREMENTS STATED UNDER DIVISION 1 - GENERAL REQUIREMENTS AND CONDITIONS AS WELL AS THE SPECIFIC CRITERIA OUTLINED HEREIN AND ON THE LANDSCAPE DRAWINGS INCLUDING ADDENDA AS MAY BE ISSUED BY THE OWNER.

2. THE SCOPE OF WORK FOR THE LANDSCAPE CONTRACTOR FOR THIS PROJECT SHALL INCLUDE THE PROVISION OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ALL TASKS ASSOCIATED WITH THE LANDSCAPE AND IRRIGATION INSTALLATION AS SHOWN ON THE DRAWINGS OR NOTED HEREIN. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR REASONABLE ACCESS TO POWER AND POTABLE WATER SOURCES AS REQUIRED.

3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING ALL WORK (NCLUDING DELIVERY, STORAGE AND DISPOSAL OF THEIR MATERIALS) IS PERFORMED IN COMPLIANCE WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THE WORK.

4. THE LANDSCAPE CONTRACTOR SHALL ASSIGN A QUALIFIED PROJECT MANAGER AND FIELD SUPERVISOR TO WORK DIRECTLY WITH THE LANDSCAPE ARCHITECT AND SUPERVISE THE WORK AT ALL TIMES THROUGH FINAL OWNER ACCEPTANCE. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT PROJECT MANAGER HAS A COMPLETE, CURRENT SET OF DOCUMENTS ON-SITE AT ALL TIMES.

5. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH EXISTING SITE CONDITIONS AND NOTIFYING THE OWNER IN WRITING OF ANY CONCERNS PRIOR TO COMMENCEMENT OF WORK. THIS EVALUATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, VERIFICATION OF SURFACE AND SUBSURFACE UTILITIES, GRADES, DIMENSIONS AND SOIL CONDITIONS.

6. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH PROJECT PLANS AND SCOPES OF WORK RELATED TO ASSOCIATED TRADES TO BE PERFORMED BY OTHERS IN ORDER TC IDENTIFY KEY COORDINATION ITEMS INCLUDING, BUT NOT LIMITED TO, SITE ACCESS, MATERIAL STORAGE, SCHEDULING AND SEQUENCING OF WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL SITE ISSUES WITH THE GENERAL CONTRACTOR.

7. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK, MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO THEIR ACTIVITIES. THE LANDSCAPE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY THAT MAY OCCUR AS A RESLLT OF THE EXECUTION OF THEIR WORK.

8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE AREA, MATERIALS AND EQUIPMENT WITHIN THE LIMITS OF WORK IN A SAFE, NEAT AND ORDERLY MANNER. EXCESS MATERIALS AND DEBRIS ARE TO BE REMOVED FROM THE WORKAREA NO LESS THAN WEEKLY OR AS DIRECTED BY THE GENERAL CONTRACTOR.

9. THE LANDSCAPE CONTRACTOR MUST TAKE PRECAUTIONS TC PROTECT ALL EXISTING SITE FEATURES PARKING LOTS, CURBS AND UTILITIES FROM DAMAGE. THIS APPLIES NOT ONLY TO THE AREA WITHIN THE LIMITS OF WORK BUT ALSO ALONG ANY LOCAL ACCESS ROADS.

10. THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZE LOCAL PRACTICES.

11. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO ENSURE THAT TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES (SILT FENCE, ORANGE GEO FENCE AND/OR OTHER MEASURES) ARE INSTALLED PRIOR TO BEGINNING EXCAVATION.

12. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PLANT MATERIALS AND THE PLANTING AREAS JNTIL FINAL ACCEPTANCE BY THE OWNER.

13. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE AGRONOMIC EVALUATION OF SOIL CHARACTERISTICS. EVALUATION MUST INCLUDE CHEMICAL ANALYSIS BY A QUALIFIED AGRICULTJRAL SOILS TESTING LABORATORY (CERTIFIED IN THE STATE OF FLORIDA). SOILS SAMPLE SHOULD BE TAKEN IMMEDIATELY FOLLOWING COMPLETION OF ROUGH GRADING ACTIVITIES AND SHOULD BE COLLECTED AT A RATE OF ONE SAMPLE FOR EACH 5,000 SQUARE FEET OF IMPACTED AREA, OR A TOTAL OF SIX, WHICHEVER IS GREATER. AT A MINIMUM THE CHEMICAL ANALYSIS OF THE SOIL SHOULD CONSIDER THE FOLLOWING:

A. PERCENTAGE OF ORGANIC MATTER
B. SALINITY
C. PH
D. LIME CONTENT
E. MINERAL NUTRIENTS INCLUDING CONCENTRATIONS OF NITROGEN, PHOSPHORUS, POTASSIUM, CALCIUM, MAGNESIUM, IRON, ZINC, MANGANESE, COPPER, SULFUR AND MOLYBDENUM.
F. POTENTIAL HAZARDS OR IMPEDIMENTS FOR PLANT GROWTH INCLUDING SALINITY, SODIUM CHLORIDE, BORON, IMPAIRED SOIL STRUCTURE OR DRAINAGE.
G. SAND FRACTION ANALYSIS AS A PERCENTAGE PASSING THROUGH 1", 1, AND NO. 200 SIEVES
H. PERCOLATION RATE IN INCHES PER HOUR.

THE ANALYSIS SHOULD ALSO INCLUDE SPECIFIC RECOMMENDATIONS TO THE OWNER FOR ANY AMENDMENTS AND BACKFILL MIXES FOR OPTIMUM PLANT GROWTH TO BE MADE TO THE SOILS PRIOR TO PLANTING. THE CONTRACTOR SHOULD INCLUDE THE COST FOR SOIL AMENDMENTS. THE CONTRACTOR IS TO PROVIDE THE OWNER WITH COPIES OF ALL SOIL TESTING RESULTS. SUBMITTAL DOCUMENTATION MUST ALSO CONTAIN A GRAPHIC SITE PLAN DEPICTING LOCATIONS FROM WHICH EACH SAMPLE WAS DRAWN.

14. THE LANDSCAPE CONTRACTORS BASE BID FOR SOIL PREPARATION IS TC INCLUDE THE FOLLOWING WITH THE UNDERSTANDING THAT MIX DESIGN MAY NEED TO BE ADJUSTED BASED ON OUTCOME OF AGRONOMIC TESTING.

A. TREES: 100% SITE SOIL WITH 6LB. TRIPLE SUPER PHOSPHATE PER CU. YD.
B. SHRUBS: 100% SITE SOIL WITH OSMOCOTE CONTROLLER RELEASE FERTILIZER (14-14-14) PER MANUFACTURER'S RECOMMENDATION.
C. THE SOILS TEST RESULTS TAKE PRECEDENCE OVER THE ITEMS NOTED IN A AND B ABOVE.

15. SHOULD OWNER AND LANDSCAPE CONTRACTOR AGREE WITH THE RECOMENDATION OF THE TESTING AGENCY TO FURTHER AMEND THE SOILS THE CONTRACTOR'S CONTRACT WILL BE ADJUSTED ACCORDINGLY. THE CONTRACTOR SHALL BE REQUIRED TO SJBMIT SAMPLES OF AMENDED SOILS TO BE RE-TESTED TO CONFIRM COMPLIANCE WITH RECOMMENDATIONS FOLLOWING THE SAME PROCEDURES AS THE ORIGINAL TESTS.

16. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE QUANTITIES OF EACH PLANT MATERIAL REQUIRED TO ADEQUATELY COVER THE AREA SHOWN ON THE LANDSCAPE PLANS AT THE PRESCRIBED SPACING AND NOTIFYING THE OWNER IMMEDIATELY OF ANY PERCEIVED DISCREPANCIES FOR RESOLUTION. THE PLANT SPACING CONTROLS BED LAYOUT, NOT THE PLAN QUANTITY FOR THAT PARTICULAR BED.

FINE GRADING NOTES

1. FINISHED GRADE IN PLANTING AREAS SHALL BE HELD 3" BELOW THE FINISHED ELEVATIONS SHOWN FOR ALL ADJACENT HARDSCAPE SURFACES.

2. ALL FILL REQUIRED SHALL BE CLEAN, WELL DRAINING SOIL. FILL SHALL BE CLEAN AND FREE OF ALL MATERIAL HARMFUL TO PLANT GROWTH AND DELETERIOUS MATERIAL SUCH AS ROCKS (LARGER THAN 2" DIA.), COMPACTED CLAY, ROADBED OR SURFACING MATERIAL, MUCK, ROOTS AND BRANCHES, ETC.

3. THE LANDSCAPE CONTRACTOR IS TO ENSURE THAT THEIR WORK DOES NOT ADVERSELY IMPACT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.

INSTALLATION NOTES

1. PLANT AND LANDSCAPE MATERIALS SHAL, CONFORM TO THE STANDARDS FOR FLORIDA NO. 1, AS GIVEN IN THE GRADES AND STANDARDS FOR NURSERY PLANTS, PART'S I & II, AS PREPARED BY THE FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES.

2. A 3" THICK LAYER OF ORGANIC NON-CYPRESS MULCH SHALL BE APPLIED TO ALL LANDSCAPE AND PLANTING AREAS.

3. ALL EXOTIC VEGETATION TO BE REMOVED FROM THE SITE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

4. THIS PLAN HAS BEEN DESIGNED TO MEET WITH THE TREE PLANTING REQUIREMENTS CONTAINED WITHIN THE FPI, DOCUMENT ENTITLED "PLANT THE RIGHT TREE IN THE RIGHT PLACE."

5. FOR EXISTING OR PROPOSED UTILITIES, NO TREE SHALL BE PLANTED WHERE IT COULD, AT MATURE HEIGHT, CONFLICT WITH OVERHEAD POWER LINES. LARGE TREES[HEIGHT AT MATURITY OF MORE THAN THIRTY (30) FEET] SHALL BE PLANTED NO CLOSER THAN A HORIZONTAL DISTANCE OF THIRTY (30) FEET FROM THE NEAREST OVERHEAD POWER LINE. MEDIUM HEIGHT TREE [HEIGHT AT MATURITY BETWEEN TWENTY (20) AND THIRTY (30) FEET] SHALL BE OFFSET AT LEAST TWENTY (20) FEET AND SMALL TREES [HEIGHT AT MATURITY OF LESS THAN (20) FEET] REQUIRE NO OFFSET.

6. NO TREE, SHRUBS, HEDGES OR VINES SHALL BE PLANTED WITHIN FIVE (5) FEET OF ANY EXISTING OR PROPOSED UTILITY POLE, GUY WIRE OR PAD MOUNTED TRANSFORMER. PALMS SHOULD BE PLANTED AT A DISTANCE EQUAL TO OR GREATER THAN THE AVERAGE FRONT LENGTH PLUS TWO (2) FEET FROM POWER LINES.

7. WETLAND BUFFERS, BUFFER PROTECTION AREAS, AND UPLAND PRESERVE AREAS SHALL BE PROTECTED FROM EXCAVATION, CONSTRUCTION, AND OTHER BUILDING MAINTENANCE ACTIVITIES.

8. TREES TO REMAIN DURING CONSTRUCTION SHALL BE PROTECTED AND BARRICADED. SEE TREE PROTECTION NOTE.

9. FERTILIZER SHALL BE COMPLETE WITH APPROXIMATELY THE FOLLOWING RATIO: 3N-1P-3K (+1MG FOR PALMS ONLY)

10. TREES AND PALMS ARE TO BE PLANTED IN ACCORDANCE TO LANDSCAPE PLAN. GOOD HORTICULTURAL PRACTICES MUST BE OBSERVED.

11. TREES AND PALMS ARE TO BE PLANTED IN THE RIGHT-OF-WAY (ROW) AT A MINIMUM OF FOUR (4) FEET FROM BACK OF CURB AT LOCATIONS IDENTIFIED ON THE LANDSCAPE PLAN. AWARDED BIDDER SHALL STAKE AND/OR PAINT PLANTING LOCATIONS IN THE FIELD. UPON APPROVAL BY THE CUSTOMER, THESE AREAS SHALL BE SPRAYED WITH AN APPROVED HERBICIDE AND MAINTAINED WEED-FREE FOR THE DURATION OF THE PROJECT.

12. EXCAVATE PLANTING HOLES WITH VERTICAL SIDES. DO NOT DISTURB SOIL AT BOTTOM OF PLANTING HOLES. MAKE EXCAVATIONS TWICE AS WIDE AS THE ROOT BALL DIAMETER AND SLIGHTLY LESS (TWO INCHES) THAN THE JISTANCE BETWEEN THE TOP-MOST ROOT IN THE ROOT BALL AND THE BOTTOM OF THE ROOT BALL. ALTERNATIVELY, EXCAVATE THE HOLE SLIGHTLY WIDER THAN THE ROOT BALL AND PLACE THE ROOT BALL IN THE HOLE SO THE TOP-MOST ROOT IS EVEN WITH OR SLIGHTLY (2 INCHES) HIGHER THAN THE SURROUNDING LANDSCAPE GRADE. THEN, LOOSEN THE SURROUNDING SOIL OUT TO A DIAMETER EQUAL TO TWICE THE DIAMETER OF THE ROOT BALL. FINALLY, PUSH THE LOOSENED SOIL TOWARD THE ROOT BALL TO FILL THE HOLE.

IF WATER FILLS THE BOTTOM OF THE PLANTING HOLE, ADD SOIL TO THE BOTTOM OF THE HOLE UNTIL THE WATER IS COVERED. PACK THIS ADDED SOIL FIRMLY. PLACE THE ROOT BALL ON THIS PACKED, SOLID SOIL, NOT IN WATER. NO PART OF THE ROOT BALL SHALL BE PLACED IN WATER. IF NECESSARY, BRING IN SOIL SIMILAR TO SITE SOIL TO COVER THE SIDES OF THE ROOT BALL, CREATING A RAISED MOUND. THE BASE OF THE MOUND (I.E. THE OUTER DIAMETER) CREATED SHALL BE AT LEAST SIX TIMES THE DIAMETER OF THE ROOT BALL.

WHEN PLANTING ON A SLOPE, THE TOP-MOST MAIN ROOT IN THE ROOT BALL SHALL BE EVEN WITH THE GRADE ON THE UPHILL SIDE OF THE TREE. SITE SOIL WILL NEED TO BE ADDED ON THE DOWN-HILL SIDE TO COVER THE SIDES OF THE ROOT BALL AND TO CONSTRUCT THE SOIL BERM TO HOLD WATER. THE AMOUNT OF SOIL ADDED ON THE DOWNHILL SIDE WILL DEPEND ON THE SLOPE AND SIZE OF THE ROOT BALL.

13. REMOVE ALL WOOD, PLASTIC, OR GRO-BAGS FROM THE ROOT BALL. SET PLANTS IN CENTER OF HOLES WITH THE TOP-MOST ROOT IN THE ROOT BALL AT THE SAME HEIGHT OR SLIGHTLY (2 INCHES) HIGHER THAN FINISHED LANDSCAPE GRADES AND PLUMB THE TREE SO THE TRUNK IS VERTICAL. BACKFILL FIELD SOIL AROUND SIDES OF ROOT MASS AND WORK EACH LAYER TO SETTLE AND ELIMINATE VOIDS AND AIR POCKETS. MATERIAL MUST BE WATERED IN AS PLANTED. PROVIDE APPROXIMATELY 5 GALLONS OF WATER PER INCH OF TRUNK CALIPER TO THE ROOT BALL ONCE ALL BACKFILL IS FILLED IN AROUND THE ROOT BALL.

14. PROVIDE A 2-3" HIGH SOIL BERM AROUND THE EDGE OF ROOT BALL TO FORM A SHALLOW SAUCER TO COLLECT WATER. THE WATERING SAUCER, REGARDLESS OF HOLE SIZE, IS TO BE AT EDGE OF ROOT BALL. ALTERNATIVELY, COBRA EDGING IS TO BE INSTALLED AT THE EDGE OF THE ROOT BALL.

15. BROADCAST OVER THE ROOT BALL AND BACKFILL SOIL AT THE RECOMMENDED RATE. A BROAD-SPECTRUM PRE-EMERGENT HERBICIDE PRIOR TO MULCHING.

16. APPLY A CONTROLLED-RELEASE FERTILIZER TO THE SOIL SURFACE UNDER THE MULCH AT LB. NITROGEN PER 1000 FT2, PRIOR TO MULCHING. NO OTHER AMENDMENTS ARE NECESSARY.

17. ON TREES UP TO 4" CALIPER, APPLY A THREE (3) -INCH LAYER OF MULCH TO AN EIGHT (8) -FOOT DIAMETER CIRCULAR AREA AROUND THE TRUNK. ON LARGER CALIPER TREES, APPLY A TWO (2) -FOOT DIAMETER MULCH AREA FOR EACH INCH OF TRUNK CALIPER. NO MULCH SHALL BE APPLIED TO THE INNER HALF OF THE ROOT BALL SURFACE.

18. TREES AND PALMS ARE TO BE SECURED BY AWARDED BIDDER AS SHOWN IN EXHIBITS A-C. (NOTE: STAKING IS OPTIONAL FOR MORE PROTECTED LOCATIONS)

19. A REPRESENTATIVE WILL INSPECT TREES AND PALMS DURING INSTALLATION. MATERIAL THAT IS IN SHOCK OR HAS BEEN DAMAGED DURING INSTALLATION SHALL BE REPLACED BY AWARDED BIDDER WITHIN FIVE (5) WORKING DAYS FROM NOTIFICATION.

20. REMOVE FROM WORK SITE ALL EXCESS MATERIALS (E.G., SOIL DEBRIS AND EQUIPMENT) DAILY THROUGH DURATION OF PROJECT. DAMAGES RESULTING FROM INSTALLATION SHALL BE REPAIRED BY AWARDED BIDDER.

21. PRUNING: IF THERE IS A DOUBLE LEADER IN THE TOP HALF OF THE TREE, SHORTEN ONE, BY ABOUT ONE-HALF, BACK TO A LIVE BRANCH THAT POINTS AWAY FROM THE TREE AND IS AT LEAST ONE-THIRD THE DIAMETER OF THE CUT LEADER. REMOVE BROKEN PORTIONS OF DAMAGED BRANCHES BACK TO A LIVE LATERAL BRANCH.

21. PRUNING. IF THERE IS A DOUBLE LEADER IN THE TOP HALF OF THE TREE, SHORTEN ONE, BY ABOUT ONE-HALF, BACK TO A LIVE BRANCH THAT POINTS AWAY FROM THE TREE AND IS AT LEAST ONE-THIRD THE DIAMETER OF THE CUT LEADER. REMOVE BROKEN PORTIONS OF DAMAGED BRANCHES BACK TO A LIVE LATERAL BRANCH.

22. REMOVE ALL STRING OR WIRE WRAPPED AROUND THE TRUNK. REMOVE ALL STRAPS, ROPE AND STRING (USED TO LIFT THE ROOT BALL. REMOVE ALL BURLAP AND WIRE FROM THE TOP OF THE ROOT BALL.

SOIL NOTES

1. CPF-SITE TOPSOIL SHALL BE NATURAL, FERTILE FRIABLE LOAM OR SANDY LOAM AS CLASSIFIED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CLASSIFICATION SYSTEM. THE SOIL SHALL CONTAIN NOT LESS THAN 3 PERCENT OR MORE THAN 8 PERCENT BY WEIGHT OF DECAYED ORGANIC MATTER (HUMUS) AS DETERMINED BY ASTM F-1647. THE TOPSOIL SHALL BE FREE OF STONES 1 INCH (25 MILLIMETERS) OR LARGER AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. TOPSIL SHALL NOT HAVE A PH OF LESS THAN 6.0 OR GREATER THAN 7.5, AND SHALL NOT BE DELIVERED OR USED FOR PLANTING WHILE IN A FROZEN OR MUDDY CONDITION.

IF ORGANIC AMENDMENTS ARE NEEDED TO OBTAIN THE SPECIFIC ORGANIC MATTER CONTENT OF THE TOPSOIL, THE ORGANIC MATTER SOURCE MAY BE A PEAT OR COMPOST MATERIAL. THE PEAT SHALL BE SPHAGNUM PEAT HAVING AN ASH CONTEN" NOT EXCEEDING 15 "ERCENT, AS DETERMINED BY ASTM D-2974. COMPOSTS MAY BE USED "ROVIDED THAT THE MATERIAL HAD AN ASH CONTENT NOT EXCEEDING 40 PERCENT.

ACCEPTANCE NOTES

1. INSPECTION TO DETERMINE ACCEPTANCE OF PLANTED AREAS WILL BE MADE BY THE CUSTOMER REPRESENTATIVE UPON AWARDED BIDDER'S REQUEST. PROVIDE NOTIFICATION A MINIMUM OF FIVE (5) WORKING DAYS BEFORE REQUESTED INSPECTION DATE.

PLANTED AREAS WILL BE ACCEPTED PROVIDED ALL REQUIREMENTS, INCLUDING MAINTENANCE, HAVE BEEN SATISFIED AND PLANT MATERIALS ARE IN A HEALTHY, VIGOROUS CONDITION.

2. THE CUSTOMER REPRESENTATIVE WILL PREPARE A "PUNCH LIST" OF THOSE ITEMS, WHICH MUST BE CORRECTED BEFORE RE-INSPECTION FOR FINAL ACCEPTANCE. THE REPRESENTATIVE WILL DETERMINE AN APPROPRIATE TIME PERIOD FOR CORRECTIONS. AWARDED BIDDER MUST REQUEST RE-INSPECTION TWO (2) WORKING DAYS IN ADVANCE.

SHRUB SCHEDULE

	SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
*	CI2	319	Green Coco Plum / Chrysobalanus icaco	3 gal	24" HT., FULL	Yes	24" o.c.
	CR	125	Red Tip Coccpium / Chryscbalanus icaco `Red Tip`	3 gal	24" HT., FULL	Yes	30" o.c.
*	CS2	100	Small-Leaf Clusia ' Clusia guttifera	3 gal	24" HT., FULL	Yes	36" o.c.
*	CS4	67	Small-Leaf Clusia ' Clusia guttifera	3 gal	24" HT., FULL	Yes	30" o.c.
	ACCENT	QTY	COMMON / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
	CF	8	Ti Plant / Cordyline fruticosa `Auntie Lou`	3 gal	24" - 30" Ht., 3ppp, Full	No	30" o.c.
**	CQ	9	Furple Crinum / Cinum augustum `Queen Emma`	7 gal	30" - 36" Ht., Full	No	48" o.c.
	SHRUBS / GROUND COVERS	QTY	COMMON / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
**	AM	164	Foxtail Fern / Aspreagus meyeri	1 gal	8 - 10" Ht., Full Pot	No	24" o.c.
*	CN	139	Dwarf Pitch Apple / Clusia rosea `Nana`	3 gal	12 - 14" HT. x 12 - 14" SPR., Full	Yes	24" o.c.
*	CS	125	Silver Button Wood / Conocarpus erectus sericeus	3 gal	20"-24" Ht., Full	Yes	30" o.c.
**	DV	98	Variqated Flax Lilly / Daniellia tasmanica `Variegata`	1 gal	14" - 16" Ht., 3ppp, Full	No	24" o.c.
*	FG	625	Green Island Ficus / Ficus microcarpa `Green Island`	3 gal	12 - 14" HT. x 12 - 14" SPR., Full	Yes	24" o.c.
*	HN2	40	Dwarf Firebush / Hamelia nodosa	3 gal	14" - 18" Ht., Full	Yes	30" o.c.
	IR	115	Dwarf Red Taiwan Ixora / Ixora x `Petite Taiwan Red`	3 gal	14" - 16" Ht. x 12" - 14" Spr., Full	No	20" o.c.
	LE	61	Liriope / Liriope muscari `Emerald Goddess`	1 gal	10" - 12" Ht., Full Pot	No	18" o.c.
**	MC	330	Fink Muhly / Muhlenbergia capillaris	1 gal	14" - 16" Ht., full	Yes	36" o.c.
**	PA	27	White Fountain Grass / Pennisetum setaceum `Alba`	1 gal	14" - 16" Ht. ,Full Pot	No	36" o.c.
*	SR	36	Saw Palmetto / Serenoa repens	3 gal	10" - 12" Ht. x 10" - 12" Spr., Full	Yes	36" o.c.
**	TF	103	Fakahatchee Grass / Tripsacum dactyloides	1 gal	18" - 20" Ht., Full	Yes	42" o.c.
**	TD2	140	Dwarf Fakahatchee / Tripsacum floridanum	1 gal	16" HT., FULL	Yes	36" o.c.

* **Drought Tolerant Shrub Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Shrubs	1,691 Shrubs
Drought Tolerant Shrubs Provided	1,451 Shrubs (86%)

** **Drought Tolerant Ground Cover / Grass Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Grasses / GC	940 Grasses / GC
Drought Tolerant Grasses / GC Provided	871 Grasses / GC (93%)

Native Shrub Requirement (50% Minimum)

Total Provided Shrubs	1,691 Shrubs
Native Shrubs Provided	951 Shrubs (56%)

Native Ground Cover / Grasses Requirement (50% Minimum)

Total Provided Grasses / GC	940 Grasses / GC
Native Grasses / Ground Covers Provided	573 Grasses / GC (61%)

TREE SCHEDULE

	TREES	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE
*		CE3	15	Green Buttonwood / Conocarpus erectus	2.5" Cal., 12' Ht. x 6' Spr., Std., 5-6' ct	Yes
*		IE	3	Eagleston Holly / Ilex x attenuata `Eagleston`	2.5 - 3" Cal., 12' Ht. x 6' Spr., Std, 5-6' ct.	Yes
		LT	14	Crape Myrtle Coral Pink / Lagerstroemia x `Tuscarora`	45 gal., 12' Ht. x 6' Spr., Multi-trunk 5-6' ct.	No
*		QV2	7	Southern Live Oak / Quercus virginiana	2.5" Cal., 12' Ht. x 6' Spr., Std., 5-6' ct.	Yes
*		TD	5	Bald Cypress / Taxodium distichum	2.5" Cal., 12' Ht. x 6' Spr., Std., 5-6' ct	Yes
	PALM TREES	CODE	QTY	COMMON / BOTANICAL NAME	SIZE	NATIVE
*		BS2	1	Silver Bismark Palm / Bismarckia nobilis `Silver` 1:1 ratio	B&B, 8` ct., Single specimen, full head, Root Pruned	No
*		PM	2	Pigmy Date Palm Multi-Trunk / Phoenix roebelenii 2:1 Ratio	8-10` OA, 4` CT, Triple specimen	
		PE2	2	Alexander Palm / Ptychosperma elegans 1:1 Ratio	10` - 13` ct., Double Specimen, Full Head	No
*		RR	2	Royal Palm / Roystonea regia 1:1 ratio	15` GW, 24` - 26` OA., Single Specimen, Heavy Trunk, Full Head.	Yes
*		SS	45	Cabbage Palm / Sabal palmetto 2:1 ratio	15 @ 14` ct., 15 @ 17` ct., 15 @ 20` ct., Stick Trunks	Yes
*		WR	30	Mexican Fan Palm / Washingtonia robusta 2:1 ratio	8 @ 14` ct., 10 @ 17` ct, 12 @ 20` ct.	No

* **Drought Tolerant Tree Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Trees	87 Trees
Drought Tolerant Trees Provided	85 Trees (97%)

Native Tree Requirement (50% Minimum)

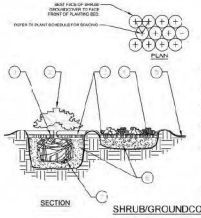
Native Trees Required (87 Trees x 50%)	44 Trees
Native Trees Provided	54 Trees (62%)

SOD SCHEDJLE

	SOD	QTY	COMMON / BOTANICAL NAME
*	PN	12,040 sf	Bahia Grass / Paspalum notatum
	SS2	1 965 sf	St. Augustine Grass / Stenotaphrum secundatum

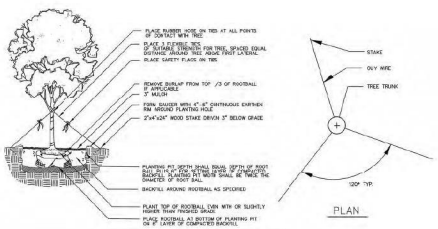
* **Drought Tolerant Sod Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Sod Area	14,005 SF
Drought Tolerant Sod Area Provided	12,040 SF (86%)



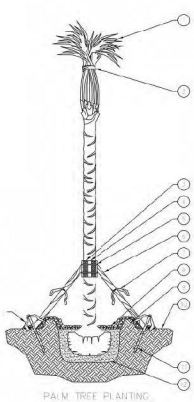
SHRUB/GROUNDCOVER PLANTING

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1"- 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL
2. WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASSHEIGHT.
3. 3" MULCH AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND- COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED IN THE PLANTING SPECIFICATION.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.

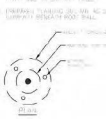


TREE PLANTING DETAIL
N.T.S.

PLAN



PALM TREE PLANTING



STAKE

HJA DESIGN STUDIO
LANDSCAPE ARCHITECTURE
50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994
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F 772.678.7201
www.hjcdesignstudio.com
LA 0000905

Stuart Self Storage LLC
City of Stuart
Florida
Landscape Specifications

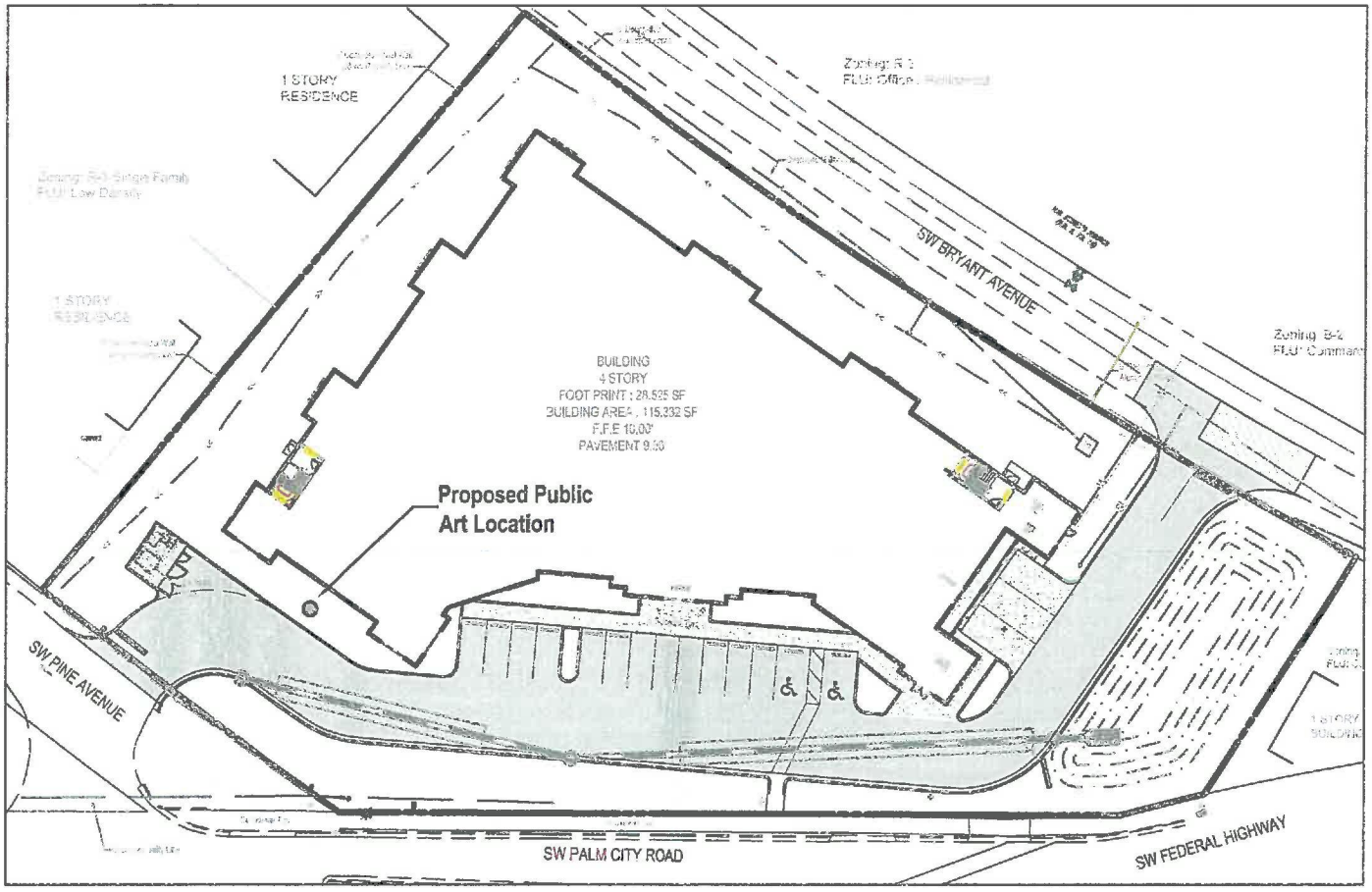
Copyright
The following drawings are instruments of service to the Landscape Architect. They are not products of design. All ideas, designs, arrangements, and plans indicated or represented by these drawings are the property of the designer and were created, evolved, and developed for use on and in connection with the specified project. None of such ideas, designs, arrangements, or plans shall be used by or disclosed to any person, firm, or corporation for any purpose whatsoever without the written permission of the designer.

REGISTERED LANDSCAPE ARCHITECT DOUGLAS MICHAEL HODGSON LA0000005 STATE OF FLORIDA

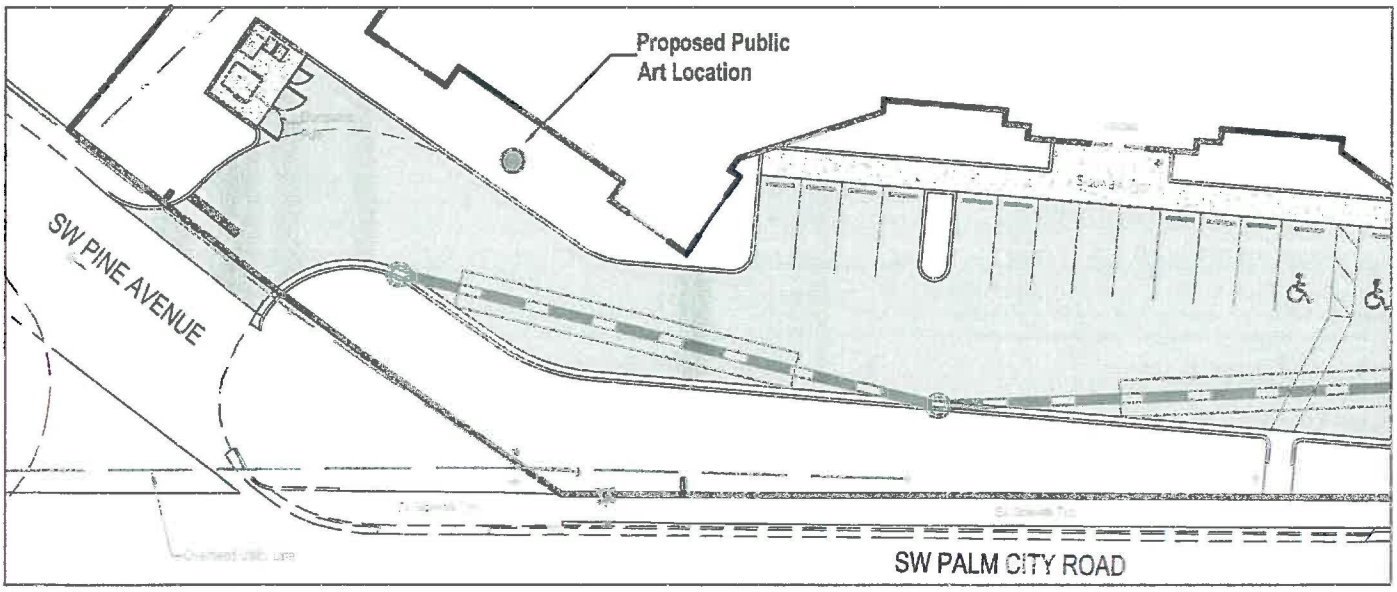
Job No.	17045
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	06-4-18, 09-12-18, 09-25-18
Revision Dates	11-15-19, 2 05 20

LP-3

Overall Site



Location Enlargement



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Stuart Self Storage LLC

City of Stuart — Florida

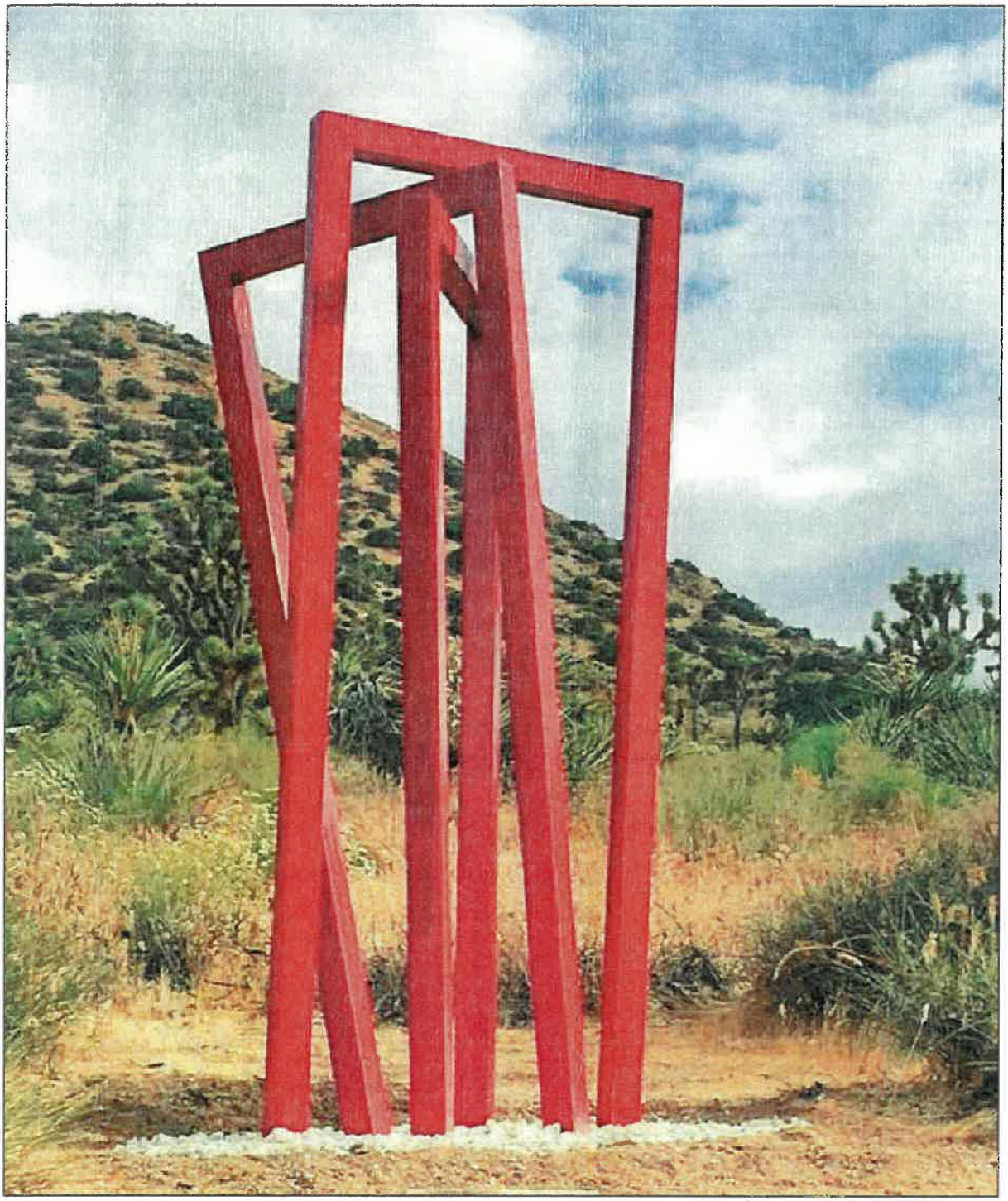
Public Art Exhibit

Date: 11-12-19

North

EX-1

Proposed Public Art (Sculpture)



Art Description

Sculpture Title:	Passageway
Artist:	S. Shigley
Medium:	Steel
Dimensions:	36" W x 96" H x 36" in

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Stuart Self Storage LLC

City of Stuart — Florida

Public Art Exhibit

Date: 11-12-19

EX-2

Inst. # 2729039
Bk: 3031 Pg: 1 Pages: 1 of 26
Recorded on:12/10/2018 10:08 AM Doc: GOV
Carolyn Timmann
Clerk of the Circuit Court & Comptroller
Martin County, FL
Rec Fees: $222.50

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2383-2018

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE CITY'S OFFICIAL ZONING MAP, THEREBY APPLYING A LAND DEVELOPMENT ZONING DESIGNATION OF CPUD "COMMERCIAL PLANNED UNIT DEVELOPMENT" TO A PARCEL OF LAND TOTALING 1.85 +/- ACRES, OWNED BY DELICETO, LLC., LOCATED AT 700 SW FEDERAL HIGHWAY, BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING THE "SAFE AND SECURE SELF-STORAGE AT STUART" COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD) CONSISTING OF 115,332 SQUARE FOOT WAREHOUSE FOR MINI STORAGE; PROVIDING FOR APPROVAL OF A FINAL SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS INCLUDING A TIMETABLE OF DEVELOPMENT, DECLARING THE PROJECT 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, PROVIDING FOR ACCEPTANCE BY THE APPLICANT AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by DELICETO, LLC. (owner) of a 1.85+/- acre parcel of undeveloped land located on 700 SW Federal Highway, and

WHEREAS, the City of Stuart has determined the need to assign CPUD zoning to said lands; and

WHEREAS, on September 10, 2018, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by the owners, amending the city's official zoning map and approving a final site plan for the construction of a 115,332 square foot warehouse for mini storage; and

WHEREAS, the owners have 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 this ordinance; and

WHEREAS, the City Commission, has considered the Owner's voluntary request for a new zoning designation, and has also considered the recommendation of the City staff.

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, this CPUD development will be in harmony with surrounding properties and their anticipated development; and

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 of amenities 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 this ordinance:

a. **Site Plan, Sheet 1 of 1, prepared by HJA Design Studio, dated 9.26.18.**
b. **Boundary Survey, Sheets 1of 1, HSQ Group, Inc., Professional Surveyors and Mappers dated 1.30.18.**
c. **Landscape Plan, Sheet L1, by HJA Design Studio, dated 9.26.18.**
d. **Lighting Plan, Sheet L1, by HJA Design Studio, dated 8.2.18.**
e. **Architectural Footprints and Elevations, Sheets A1 to A7, by Good and Edward Design Studios, dated 5/31/18**

SECTION 2: The Zoning designation of the subject property shall be established as "CPUD" Commercial Planned Unit Development on the City of Stuart's Official Zoning Map.

SECTION 3: 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 4: 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 5: 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 6: 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 7: This ordinance and agreement shall be effective upon the last of the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owners.

SECTION 8: The complete execution and recording of this Ordinance by the City Clerk shall occur no later than 45 days from the date of this approval, failing which this ordinance shall be void.

SECTION 9: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owners, 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 this 22nd day of October, 2018.

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

	YES	NO	ABSENT	ABSTAIN
KELLI GLASS LEIGHTON, MAYOR	Y			
BECKY BRUNER, VICE MAYOR	Y			
EULA R. CLARKE, COMMISSIONER	Y			
MERRITT MATHESON, COMMISSIONER	Y			
MIKE MEIER, COMMISSIONER	Y			

ADOPTED on second and final reading this 13th day of November, 2018.

ATTEST:

MARY R. KINDEL
CITY CLERK

KELLI GLASS LEIGHTON
MAYOR

APPROVED AS TO FORM AND CORRECTNESS:

MICHAEL MORTELL
CITY ATTORNEY

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

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 COMMERCIAL 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 COMMERCIAL 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:

DELICETO, LLC

Print Name: Doug Marek

David H. Cloran, Vice President

Print Name: ALEJANDRO ZURITA

OWNER'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this 29th day of November, 2018, by David H. Cloran, Vice President of Deliceto, LLC.

Doug Marek Notary Public State of Florida

Notary Seal

Personally Known X OR Produced Identification ____

Type of Identification Produced ____

Notary Public State of Florida
Doug Marek
My Commission GG 232821
Expires 08/15/2022

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this 3 day of December, 2018, by Kelli Glass-Leighton, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

Notary Seal

Notary Public State of Florida
Vanessa Leyland
My Commission GG 158000
Expires 11/06/2021

Vanessa Leyland

Personally Known ✓ OR Produced Identification _____

Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION

Exhibit "A"

Lots 147, 148 and 149, H. W. Bessey's Second Addition, according to Plat thereof, Plat Book 5, Page 52, Public Records of Palm Beach (now Martin) County, Florida.

Lots 150, 151, 152, 155 and 156, H. W. Bessey's Second Addition to the Town of Stuart, Florida, according to the Plat thereof filed May 29, 1914 and recorded in Plat Book 5, Page 52, Palm Beach (now Martin) County, Florida, Public Records. Less 13 feet taken from the East side of Lots 152 and 155 by the State of Florida for highway purposes in 1953 and less the 215 square feet, more or less, taken from the East side of Lots 152 and 155 by the State of Florida for highway purposes in 1962.

Lots 157 and 158, H. W. Bessey's 2nd Addition to the Town of Stuart, as in Plat Book 5, Page 52, Palm Beach (now Martin) County, Florida, Public Records.

INITIAL

EXHIBIT B – LOCATION MAP



EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents (Exhibit D)

1. The Safe and Secure Self-Storage at Stuart CPUD and use thereof shall comply with the following documents and drawings:
   - **f. Site Plan, Sheet 1 of 1, prepared by HJA Design Studio, dated 9.26.18.**
   - **g. Boundary Survey, Sheets 1of 1, HSQ Group, Inc., Professional Surveyors and Mappers dated 1.30.18.**
   - **h. Landscape Plan, Sheet L1, by HJA Design Studio, dated 9.26.18.**
   - **i. Lighting Plan, Sheet L1, by HJA Design Studio, dated 8.2.18.**
   - **j. Architectural Footprints and Elevations, Sheets A1 to A7, by Good and Edward Design Studios, dated 5.31.18**

Prior to Issuance of Site Permits

2. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of any site permits.

3. Final Development plans and/or Construction Drawings and Building Plans shall be submitted, reviewed, and approved by the City prior to the issuance of any Development Permits.

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

5. 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.

6. Prior to issuance of a building permit, the applicant shall either contribute the required art fee of one and one-half percent of the vertical construction cost or provide work of art on the development pursuant to Section 3.01.08.

Prior to City Commission Approval

7. Prior to City Commission Approval, the applicant shall provide staff with an updated site plan, showing a left-turn only sign and narrow the right turn apron at the SW Pine Avenue curb cut in order to restrict the vehicular flow away from the residential property. Similarly, the applicant shall provide a right-turn only sign and narrow the left turn apron at the SW Bryant Avenue.

8. Prior to City Commission Approval, the applicant shall provide staff with an updated site plan showing a sidewalk connection from the internal sidewalk to the existing sidewalk along Palm City Road.

Development and Construction

9. Except as otherwise set forth in the Safe and Secure Self-Storage and Stuart CPUD, development shall comply with the City Land Development Code. Any modifications to the Final Site Plan that exceeds 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 public hearing.

10. All applicable state or federal permits must be obtained before the commencement any development activities. Issuance of this development order/permit/approval by the City of Stuart does not in any way create any right on the part of an applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Stuart for the issuance of this order/permit/approval if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

11. Development of the Subject Property as a CPUD shall include an impervious area of not more than fifty-nine percent (59%) for the entire parcel within the CPUD. The maximum building

height within the CPUD shall be forty-five (45) feet, or 4 stories. Height shall be measured from the lowest permissible finished first floor elevation to the surface of a flat roof and to the eave of a pitched roof. The peak of a pitched roof may not exceed 15 feet above the maximum building height.

12. The development shall use reclaimed water (Purple Pipe) for watering common areas when available.

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

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

15. Construction activity shall be limited from 7.00 am to 6:00 pm Monday – Saturday.

16. 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.

17. Any existing infrastructure, sidewalk or private property that is damaged during construction shall be repaired or replaced prior to the issuance of a Certificate of Occupancy.

18. Lighting shall comply with Section 6.07.00 of the Land Development Code and reviewed by Police for CEPTED/Crime Prevention recommendations. Lighting shall include shields to direct the light away from residential areas.

19. All on-site utilities shall be buried.

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

Landscaping

21. The common buffer and other common areas shall be provided with landscaping with an irrigation system of sufficient capacity to maintain the landscaping in a healthy growing condition.

22. "Hat racking" of trees is prohibited on the property.

23. 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.

24. A landscape maintenance agreement, executed in accordance with the Land Development Regulations, shall be submitted prior to the issuance of the first Certificate of Occupancy any building shown on the Final Site Plan.

Open Space & Tree Mitigation Requirements and Littoral Plantings

25. Not less than 37% of the CPUD shall be open space as defined in the City Land Development Regulations. The applicant has provided 41% of the property as open space, including the perimeter landscape buffers and interior landscape area. Required open space may include native vegetation areas and landscape buffers between the CPUD and adjacent property; however, other required landscaping shall not count towards the open space requirement.

26. The applicant has not identified any existing trees that require mitigation. Notwithstanding, and pursuant to the Stuart Land Development Code, Section 5.05.02, the replacement or removal of existing specimen trees, such as palm trees found in the landscape buffers, shall fully comply with Section 5.05.02.

Signage

27. All signs throughout the CPUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit

Development. The monument sign(s) shall adhere to the design standards in the City's Land Development Code.

Development Timetable

28. Timetable for development shall be as follows:

Site and Building permit applications deemed sufficient for permit review under city codes and standards.	**September 1, 2020**
Final Certificate of Occupancy for all site and building improvements.	**January 1, 2022**

Allowable Uses

29. The following uses shall be permitted:

    a. Self-Storage Facility

Prohibited

30. No temporary or modular buildings are permitted on the property except for permitted temporary construction/leasing trailers.

31. Billboards are prohibited on the property.

32. Banners and any other sign or advertising device not in accordance with the City's Land Development Regulations are prohibited.

Location Map



Site Data

Total Site Area	1.85 Ac.(80,332 SF)
Future Land Use	Commercial
Existing Zoning	B-2
Existing Use	Vacant
Proposed Zoning	CPUD
Proposed Use	Storage Facility
Gross Floor Area	115,332 sf
Total Storage Units	1,009 units
Maximum Building Stories	4 - Story
Building Stories	3 - Story / 4 Levels
Maximum Building Height	45'
Proposed Building Height	45'
FAR	35%
Property Control #	05-38-41-002-000-01470-0

Open Space

Open Space Required:	16,066 sf	0.37 Ac.	20%
Open Space Provided:	29,843 sf	0.69 Ac.	37%

Impervious Area

Building Coverage	28,525 sf	0.65 Ac.	35%
Vehicular Use Area	16,453 sf	0.38 Ac.	20%
Paved Areas (Pavement / Curb / Sidewalks)	2,449 sf	0.06 Ac.	3%
Total:	47,427 sf	1.09 Ac.	59%

Pervious Area

Perimeter Landscape Buffers	29,843 sf	0.69 Ac.	37%
Interior Landscape Areas	3,062 sf	0.07 Ac.	4%
Total:	32,905 sf	0.76 Ac.	41%

Parking Requirements

	Required	Provided
Warehouse - Mini-storage Proposed rate per CPUD (1 per 75 units + 1 per employee) (1009 units / 75 units + 1 employee)	17 Spaces (Includes 2 Handicap Spaces)	17 Spaces (Includes 2 Handicap Spaces)

Building Setbacks

	Required (Min.)	Provided
Front:	30'	42'
Side:	5'	30'
Rear:	20'	30'

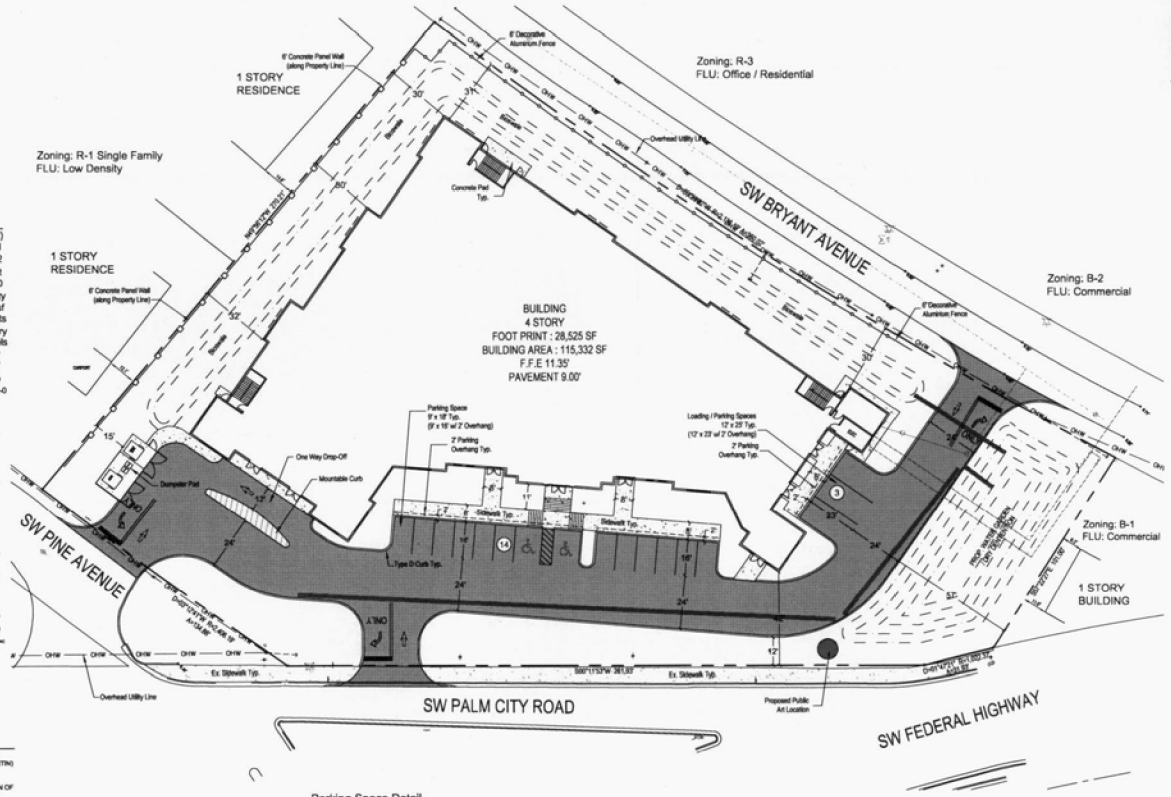
Legal Description

LOTS 147, 148 AND 149 H.W. BESSEY'S SECOND ADDITION, ACCORDING TO PLAT THEREOF, PLAT BOOK 5, PAGE 52, PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA.

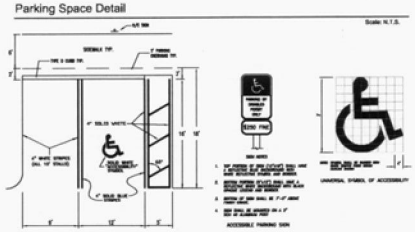
LOTS 150, 151, 152, 153 AND 156, H.W. BESSEY'S SECOND ADDITION TO THE TOWN OF STUART, FLORIDA, ACCORDING TO THE PLAT THEREOF FIELD MAY 29, 1914 AND RECORDED IN PLAT BOOK 5, PAGE 52, PALM BEACH (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS. LESS 13 FEET TAKEN FROM THE EAST SIDE OF LOT 152 AND 155 BY THE STATE OF FLORIDA FOR HIGHWAY PURPOSES IN 1953 AND LESS THE 213 SQUARE FEET, MORE O LESS, TAKEN FROM THE EAST SIDE OF LOTS 152 AND 155 BY THE STATE OF FLORIDA FOR HIGHWAY PURPOSES IN 1962, LOTS 157 AND 158, H.W. BESSEY'S 2ND ADDITION TO THE TOWN OF STUART, AS IN PLAT BOOK 5, PAGE 52, PALM BEACH (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS.

Notes

1. Final loading space locations may be adjusted prior to final site permit approval.



Parking Space Detail



Scale: 1" = 20'

0' 10' 20' 40' 60'

North

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Site Plan

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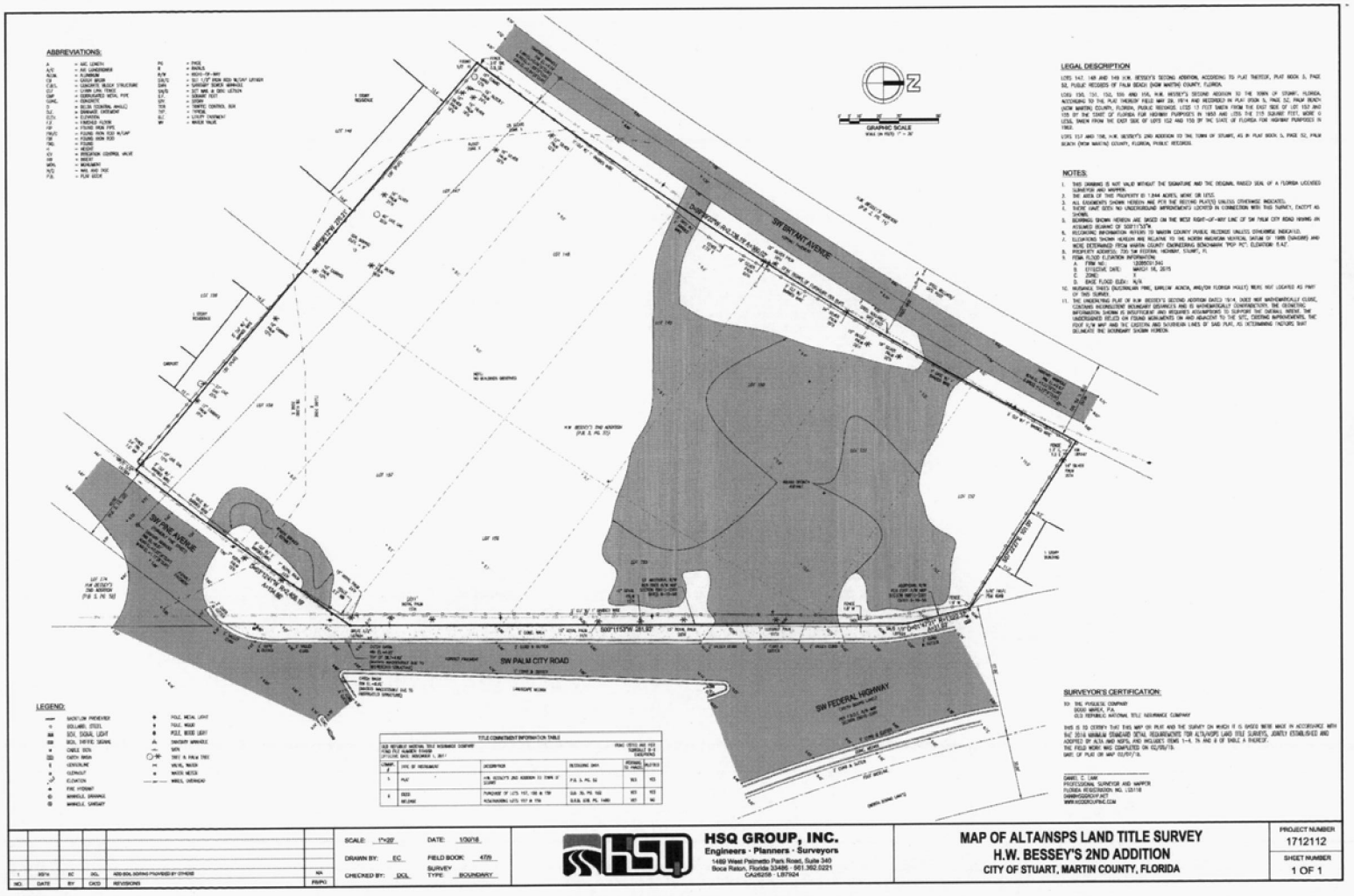
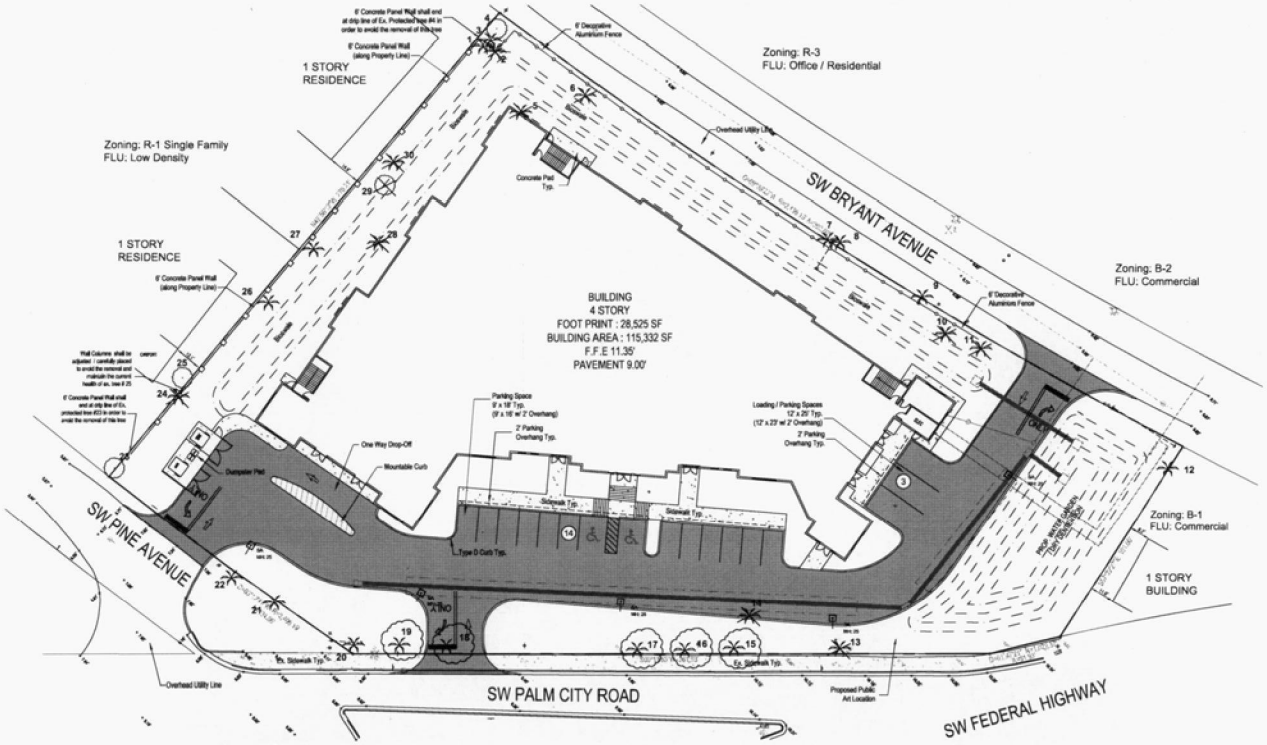
Job No.	17045
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	06-4-18 04-12-18
Revision Dates	04-26-18

Sheet 1 of 1


ABBREVIATIONS:
LEGAL DESCRIPTION
NOTES:
SURVEYOR'S CERTIFICATION:
LEGEND:
GRAPHIC SCALE
SW BRYANT AVENUE
SW PALM CITY ROAD
SW FEDERAL HIGHWAY
SW FINE AVENUE
TITLE COMMITMENT INFORMATION TABLE
HSQ GROUP, INC.
Engineers · Planners · Surveyors
1489 West Palmetto Park Road, Suite 340
Boca Raton, Florida 33486 - 561.392.0221
CA26258 - LB7924
MAP OF ALTA/NSPS LAND TITLE SURVEY
H.W. BESSEY'S 2ND ADDITION
CITY OF STUART, MARTIN COUNTY, FLORIDA
SCALE: 1"=20'
DATE: 1/30/18
DRAWN BY: EC
FIELD BOOK: 478
CHECKED BY: DCL
SURVEY TYPE: BOUNDARY
PROJECT NUMBER
1712112
SHEET NUMBER
1 OF 1



Existing Tree Chart

Tree #	Common Name	Size	Comment	Protected	Status
1	Cabbage Palm	10' ct		No	Preserve
2	Cabbage Palm	20' ct		No	Remove
3	Cabbage Palm	10'ct		No	Preserve
4	Crumbs Limbo	10" Combined DBH	multi-trunk	Yes	Preserve
5	Cabbage Palm	10' - 14' ct.		No	Remove
6	Cabbage Palm	12' - 14' ct.		No	Remove
7	Cabbage Palm	10' ct.		No	Preserve
8	Cabbage Palm	10' ct.		No	Preserve
9	Cabbage Palm	10' ct.		No	Preserve
10	Cabbage Palm	14' ct.		No	Remove
11	Cabbage Palm	14' ct.		No	Remove
12	Cabbage Palm	8'-10' ct.		No	Preserve
13	Christmas Palm	8'-10' ct.	Triple	No	Remove
14	Christmas Palm	6'-8' ct.	Triple	No	Remove
15	Royal Palm	15' GW		No	Relocate
16	Royal Palm	12' - 13' GW		No	Relocate
17	Royal Palm	15' GW		No	Relocate
18	Royal Palm	15' GW		No	Relocate
19	Royal Palm	15' GW		No	Relocate
20	Royal Palm	15' GW		No	Preserve
21	Royal Palm	12' - 13' GW		No	Preserve
22	Royal Palm	15' GW		No	Preserve
23	Live Oak	10" DBH	Off-site	Yes	Preserve
24	Cabbage Palm	10' ct.		No	Remove
25	Live Oak	27" DBH	Off-site	Yes	Preserve
26	Cabbage Palm	9" DBH		No	Preserve
27	Cabbage Palm	17" DBH		No	Preserve
28	Cabbage Palm	11" DBH		No	Remove
29	Scrub Oak	40" Combined DBH	multi-trunk shrub	No	Remove
30	Cabbage Palm	10' ct.		No	Remove

Legend

- Existing Trees to be Preserved
- Existing Trees to be Removed
- Existing Palm Trees to be Relocated (5 - Royal Palms)

* Note: See Existing Tree Chart for more information

Scale: 1" = 20'

North

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Existing Tree / Removal Plan

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Job No.	17045
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	06-16-18
	09-12-18
Revision Dates	09-26-18

LP-1

Landscape Data

Total Site Area (80,332 SF) 1.85 Ac.
Landscape Area Required (20%) 0.37 Ac.
Landscape Area Provided (41%) 0.76 Ac.

1 Tree per 2,500 sf of Development site (Min. 50% Shade Trees)

Development Site 80,332 sf (1.85 Ac.)
Total Trees Required (80,332 sf / 2,500 sf) 33 Total Trees
Shade Trees Required (33 Req. Trees x 50%) 17 Trees
Total Trees Provided 85 Total Trees
(44 Trees = 44 Palms @ 2:1 + 6 Palms @ 1:1 + 1 Ex. Tree + 5 Ex. Palms @ 2:1 + 6 Ex. / Relocated Palms at 1:1)
Shade Trees Provided 45 Trees

Perimeter Landscaping Adjacent to Streets

10' Min. Landscape Buffer- 1 Tree per 30 LF and perimeter hedge required. Not less than 25% of strip shall be groundcover.

SW Palm City Road:
Trees Required: (313 LF / 30) = 11 Trees
Trees Provided: = 14 Trees
(3 Trees + 8 Palms @ 2:1 + 7 Palms @ 1:1)

SW Pine Avenue:
Trees Required: (135 LF / 30) = 5 Trees
Trees Provided: = 6 Trees
(2 Trees + 3 Palms @ 2:1 + 3 Palms @ 1:1)

SW Bryant Avenue:
Trees Required: (338 LF / 30) = 12 Trees
Trees Provided: = 24 Trees
(13 Trees + 22 Palms @ 2:1)

Transitional Landscape Buffers (development Incompatibility)

One Tree Per 30 LF. Buffer shall include a buffer screen the width of which is 25 percent of the width of the required buffer. The buffer screen shall include a six-foot high wall or fence with five-foot wide landscape area located along the property line. Where a proposed non-residential development will abut a residential development,the five-foot wide landscape area shall be located outside the six-foot high wall or fence.
Sec. 6.04.06 B (4) - No Structure, mechanical equipment, trash receptacles, parking area or internal driveways shall be located in the common boundary buffer within 15 feet of the property line.

South Boundary: - Abutting Single family
Required Buffer Width : 55' (25' + 10' for each additional bldg. story)
Provided Buffer Width : 30'
Required Buffer Screen : 13.75 '(55' Buffer width x 25%)
Provided Buffer Screen : 15' - 30'
Total Linear Feet : 270'
Trees Required: (270 LF / 30) = 9 Trees
Trees Provided: = 21 Trees
(10 Trees + 1 Ex. Tree + 4 Ex. Palms @ 2:1 + 17 Palms @2:1)

Perimeter Landscaping Adjacent to Private Property:

5' Min. Landscape Buffer - 1 Tree per 30 LF and perimeter hedge required. Not less than 25% of strip shall be groundcover.

Along North Property Line (Commercial):
Trees Required: (101 LF / 30) = 4 Trees
Trees Provided: = 10 Trees
(7 Trees + 1 Ex. Palms @ 2:1 + 5 Palms @ 2:1)

Interior Landscaping around Perimeter of Building:

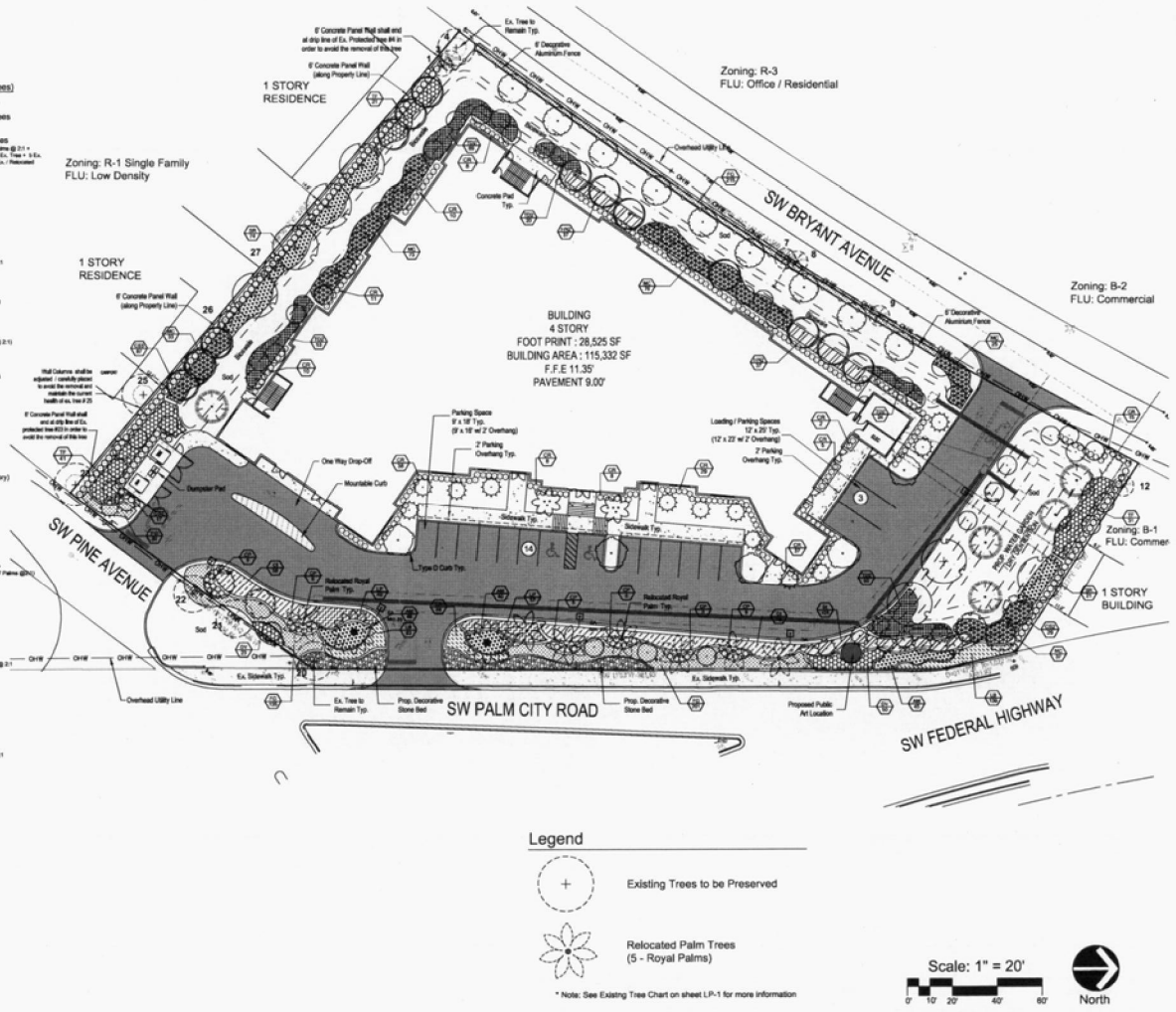
A 5' min. landscape strip shall be provided along all sides of the building which abut a parking area. This strip shall contain 1 Tree per 30 LF and hedge.
Trees Required: (364 LF / 30) = 12 Trees
Trees Provided: = 12 Trees
(4 Trees + 2 Palms @ 1:1 + 12 Palms @ 2:1)

Interior Landscaped Islands:

Each interior island shall contain a min. of 1 shade tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24".
Trees Required: = 1 Tree
Trees Provided: = 1 Tree

Interior Terminal Landscaped Islands:

Each interior island shall contain a min. of 1 shade tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24".
Trees Required: = 4 Trees
Trees Provided: = 4 Trees



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Landscape Plan

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Job No. 17045
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 06-4-18
08-12-18
01-28-19
Revision Dates

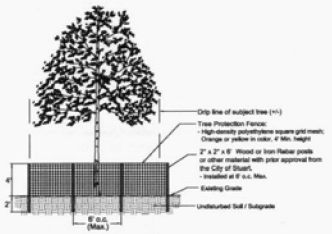
LP-2

TREE SCHEDULE

TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	NATIVE
	13	Green Buttonwood / Conocarpus erectus	12" HT. x 6" Spr. Min.	Yes
	5	Japanese Blueberry Tree / Elaeocarpus decipiens TM	12" HT. x 6" Spr. Min.	No
	5	Crape Myrtle / Lagerstroemia Indica " Muskogee "	12" HT. x 6" Spr. Min.	No
	9	Crape Myrtle Coral Pink / Lagerstroemia x "Tuscarora"	12" HT. x 6" Spr. Min.	No
	4	Japanese Privet / Ligustrum japonicum	8' - 9' Ht. x 8' - 9' Spr., Multi-trunk, 4" ct.	No
	7	Southern Live Oak / Quercus virginiana	12" HT. x 6" Spr. Min.	Yes
	5	Bald Cypress / Taxodium distichum	12" HT. x 6" Spr. Min.	Yes
PALM TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	NATIVE
	2	Silver Bismark Palm / Bismarckia nobilis "Silver" 1:1 ratio	10" CT Min.	No
	2	Alexander Palm / Ptychosperma elegans 1:1 ratio	10" ct. Min., Triple Specimen	No
	2	Royal Palm / Roystonea regia 1:1 ratio	10" CT Min.	Yes
	45	Cabbage Palm / Sabal palmetto 2:1 ratio	10" CT Min.	Yes
	23	Mexican Fan Palm / Washingtonia robusta 2:1 ratio	10" CT Min.	No

SHRUB SCHEDULE

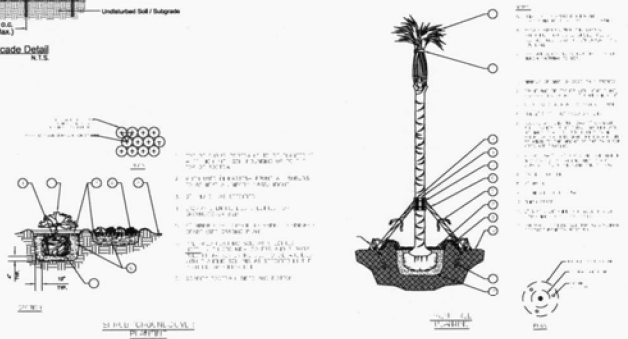
SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
CR	266	Red Tip Cocoplum / Chrysobalanus Icaco "Red Tip"	3 gal	20 - 24" HT., FULL	Yes	30" o.c.
CS2	48	Small-Leaf Clusia / Clusia guttifera	3 gal	20 - 24" HT., FULL	Yes	36" o.c.
CS3	85	Small-Leaf Clusia / Clusia guttifera	7 gal	36" - 42" Ht., Full	Yes	36" o.c.
ACCENT	QTY	COMMON NAME / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
CP	49	Bravo Croton / Codiaeum variegatum "Petra"	3 gal	18" - 24" Ht., Full		30" o.c.
SHRUBS / GROUND COVERS	QTY	COMMON NAME / BOTANICAL NAME	SIZE	DETAILS	NATIVE	SPACING
AM	133	Foxtail Fern / Asparagus meyeri	3 gal	* Full pot	No	24" o.c.
CI	151	Coco Plum / Chrysobalanus Icaco	3 gal	20"-24" Ht., Full	Yes	30" o.c.
DV	73	Variigated Flax Lily / Dianella tasmanica 'Variegata'	3 gal	Full	No	24" o.c.
FG	581	Green Island Ficus / Ficus microcarpa 'Green Island'	3 gal	Full	Yes	24" o.c.
HN2	74	Dwarf Firebush / Hamelia nodosa	3 gal	Full	Yes	30" o.c.
IX	101	Red Ixora / Ixora coccinea 'Maui Red'	3 gal	Full	No	24" o.c.
LB	320	Big Blue Lilyturf / Liriope muscari 'Big Blue'	1 gal	* Full pot	No	16" o.c.
LP	106	Purple Leaf Fringe Flower / Loropetalum chinense rubrum 'Plum Delight' TM	3 gal	Full	No	24" o.c.
MC	244	Pink Muhly / Muhlenbergia capillaris	1 gal	Full	Yes	36" o.c.
SR	95	Saw Palmetto / Serenoa repens	1 gal	Full	Yes	36" o.c.
TF	93	Fakahatchee Grass / Tripsacum dactyloides	1 gal	Full	Yes	42" o.c.
TD2	226	Dwarf Fakahatchee / Tripsacum floridanum	1 gal	Full	Yes	30" o.c.

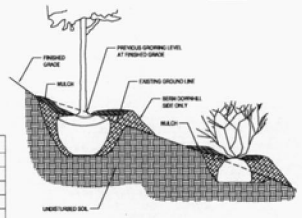


Tree Barricade Detail
N.T.S.

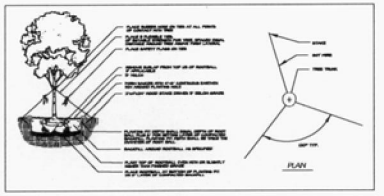
Tree Protection Notes

1. Existing trees that are to be preserved shall be barricaded according to the City's regulations.
2. Tree Protection Barricades shall be erected prior to the commencement of any work. All barricades must be maintained intact for the duration of construction.
3. Barricades must be constructed around the critical protection zone of each tree or cluster of trees.
4. During periods of development and construction, the areas within the drip-line of preserved trees shall be maintained at their original grade with pervious landscape material. Within these areas, there shall be:
   A. No trenching or cutting of roots
   B. No fill, compaction or removal of soil; and
   C. No use of concrete, paint, chemicals or other foreign substances
5. Barricades shall be constructed of a yellow or orange high density polyethylene square grid mesh fence with a min. height of 4 feet. Fencing shall be secured to posts with nylon cable ties at the top middle and bottom of each post. Posts shall be a 2"x 2" x 6' wood or iron rebar or other material with prior approval from The City of Stuart. Posts shall be spaced a max. of 8' o.c.





PLANTING ON SLOPE
N.T.S.



TREE PLANTING DETAIL
N.T.S.

Landscape Notes

1. Plant materials used in conformance with the provisions of this landscape code shall conform to the Standards for Florida No. 1 or better as given in "Grades and Standards for Nursery Plants" Part I and Part II, 1963, State of Florida, Department of Agriculture, Tallahassee.
2. Trees of species whose canopy could be damaged by or could cause damage to overhead power lines shall not be planted closer than a horizontal distance from overhead power lines of 30 feet for large-sized trees and 20 feet for medium-sized trees. Planting near pad mounted transformers shall not restrict access to or maintenance of the transformer, and a five foot clearance is recommended.
4. Ground cover used in lieu of grass shall be planted so as to present a finished appearance and reasonable complete coverage within three months of installation. All landscaped areas shall be sodded or otherwise covered with ground cover.
5. All required landscaping installed pursuant to this landscape code shall be installed according to accepted good planting practices.
6. All irrigation systems shall be designed, installed and maintained in such a manner as not to be a nuisance to adjacent properties and uses and to the general public.
7. All irrigation systems shall include a "rain switch" to monitor rain levels and irrigation needs.
8. Xeriscape areas must have a readily available water supply to provide temporary irrigation until plantings are established.
9. All native vegetation which is not located in areas requiring their removal as reflected by an approved plan document shall be retained in an undisturbed state as provided in Chapter 9, Resource Protection Related Development Standards.
10. All prohibited, exotic, and invasive species shall be removed from the entire site prior to the issuance of a certificate of occupancy.
11. Mulch shall be installed in all planting areas to a minimum depth of two to three inches.
12. All landscaping within a visibility triangle shall provide unobstructed cross-visibility at a level between three feet and six feet and shall comply with the most current edition of the State of Florida DOT Roadway and Traffic Design Standards, Index 546 regarding visibility triangles.
13. All walls and fences shall be maintained in good condition so as to present a neat and orderly appearance and shall be kept free from graffiti.
14. Any hedge materials located within an interior landscaped island shall be maintained at a height of not more than 24 inches.
15. To assure the health and survival of protected trees that are not to be removed, the contractor shall avoid the following kinds of tree injuries during all development activities: a. Mechanical injuries to roots, trunk, and branches. b. Injuries by chemical poisoning. c. Injuries by grade changes. d. Injuries by excavations. fill and. e. Injuries by paving.
16. Prior to any land preparations or other development activities a protective barrier easily visible to equipment operators shall be placed around all protected trees so as to encompass the entire tree protection zone.
17. No attachment, wires (other than supportive wires), signs or permits may be fastened to any protected tree.
18. No equipment, construction materials or debris of any kind shall be placed within the protective barrier.

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Landscape Specifications

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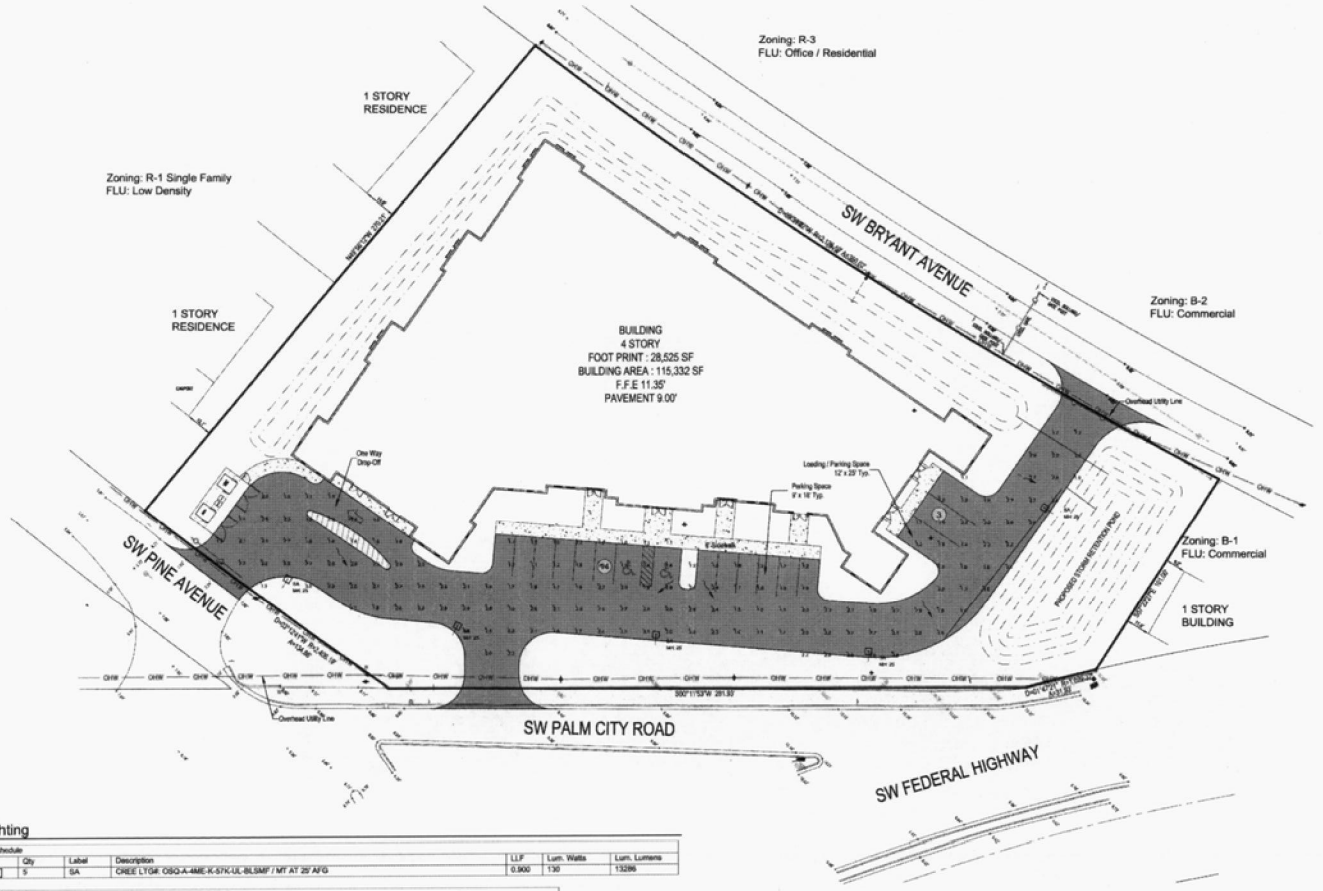
Job No.	17049
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	08-4-18
	04-12-18
Revision Dates	04-26-18

LP-3



Site Lighting

Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Lum. Watts	Lum. Lumens
	9	SA	CREE LTG# OSQ-A-4ME-K-57K-UL-BLSMF / MT AT 25' AFG	0.900	130	13286

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING AREAS	Illuminance	Fc	1.98	3.3	1.0	1.98	3.30

GENESIS LIGHTING

Lighting Photometric Plan prepared by Genesis Lighting

Scale: 1" = 20'

0' 10' 20' 40' 60'

North

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Site Lighting Plan

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Job No. 13045
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 8-2-18
Revision Dates

L-1



REAR (WEST) ELEVATION

SCALE: 1/8" = 1'-0 (SW BRYANT AVE)



LEFT (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0

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Evergreen, CO 80439

321-271-0748
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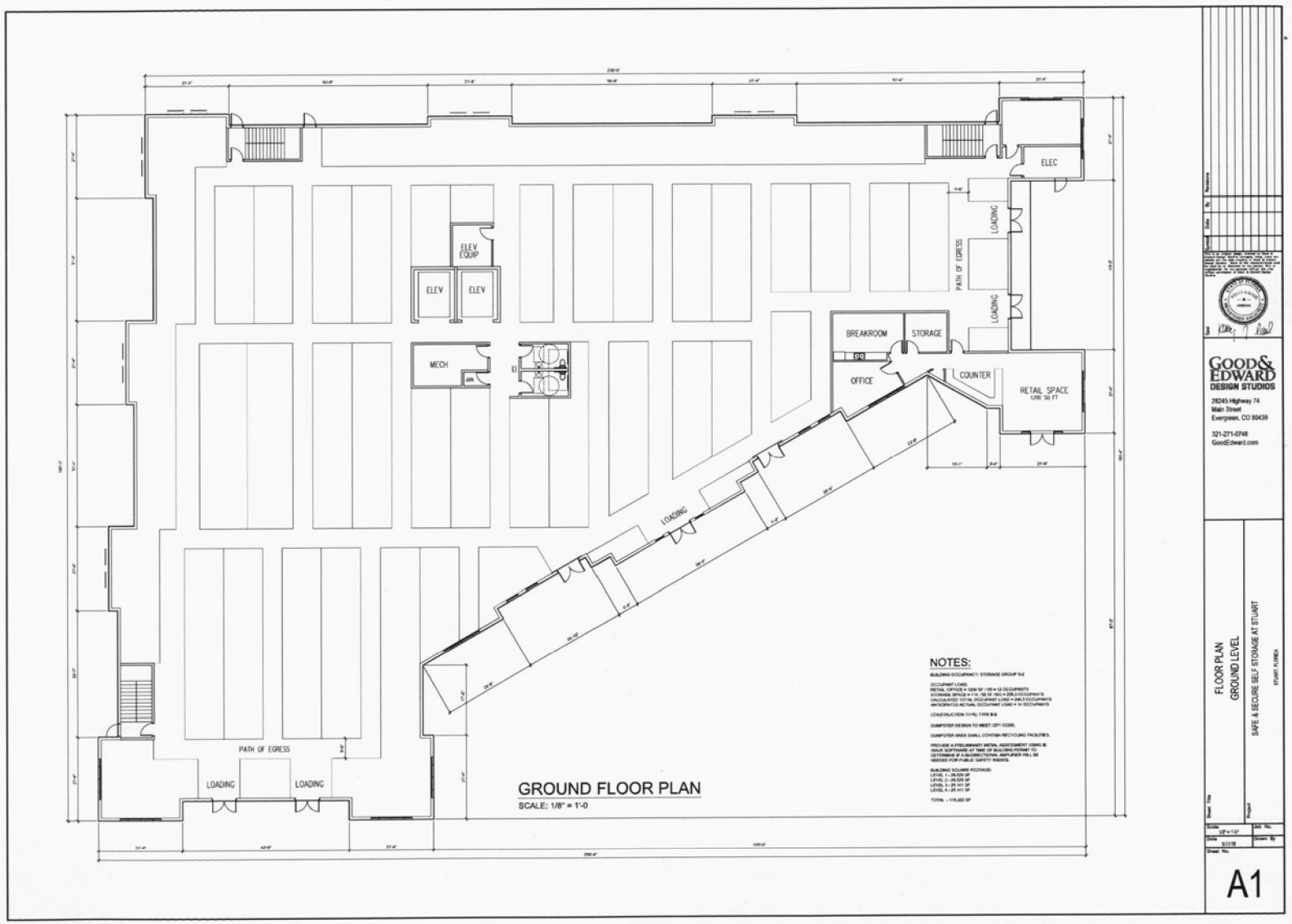
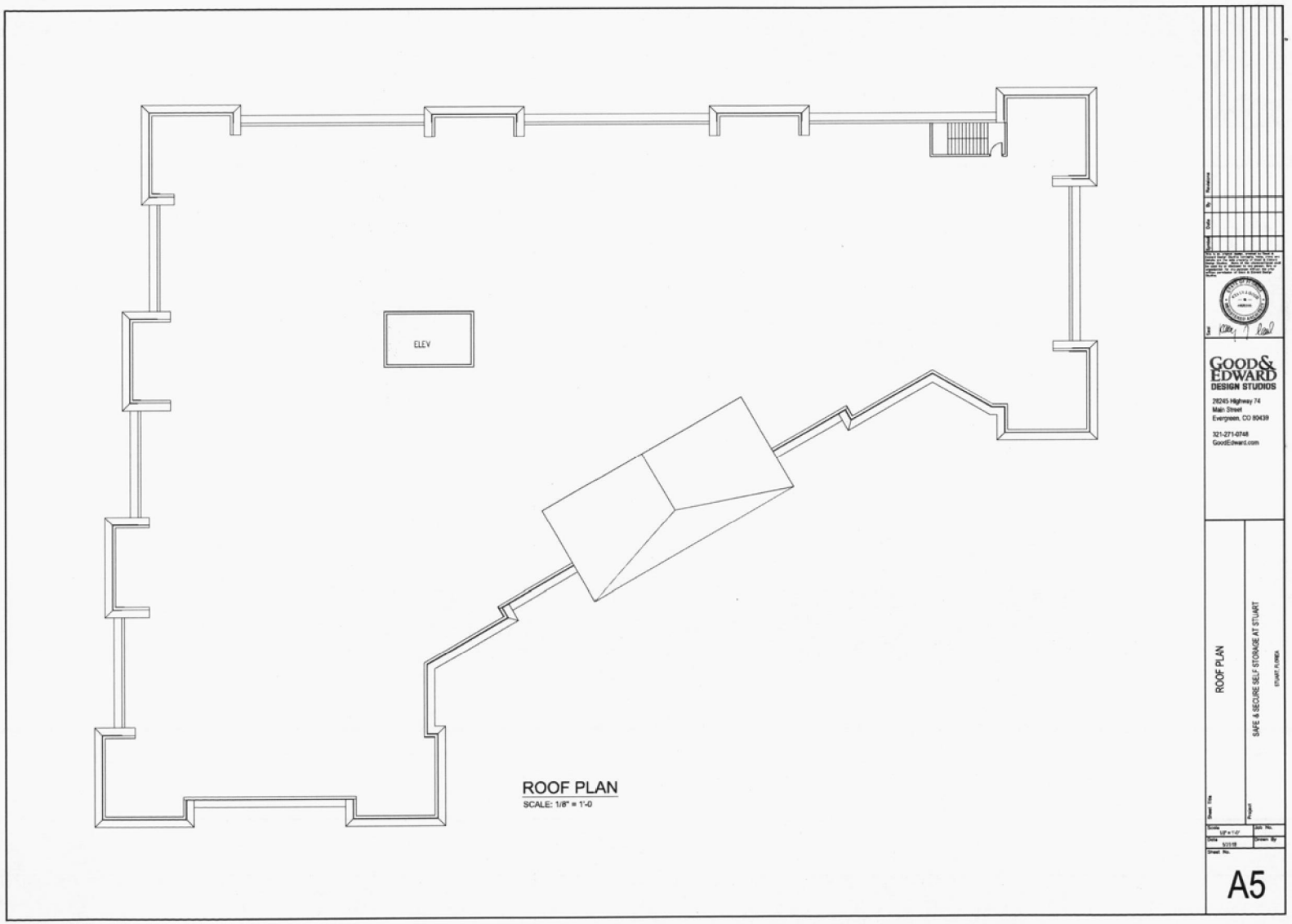
ELEVATIONS

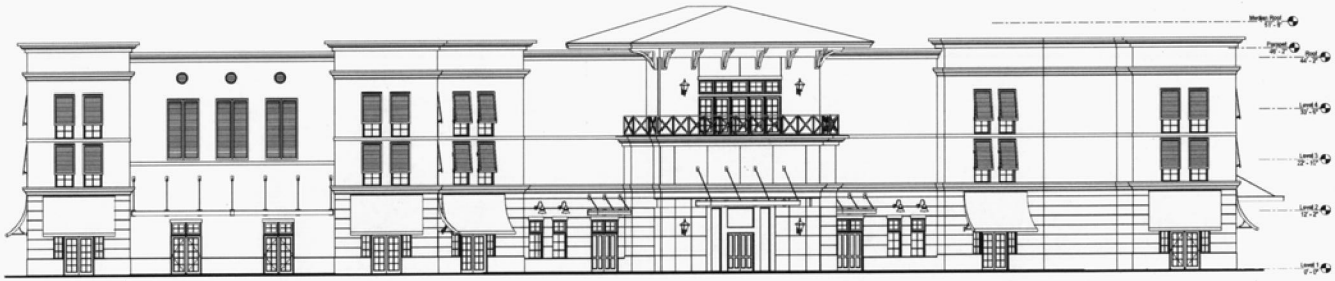
SAFE & SECURE SELF STORAGE AT STUART

STUART, FLORIDA

A7


ELEC
ELEV EQUIP
ELEV
ELEV
MECH
MEN
WOMEN
BREAKROOM
STORAGE
OFFICE
COUNTER
RETAIL SPACE
1,000 SQ FT
LOADING
PATH OF EGRESS
LOADING
LOADING
LOADING
PATH OF EGRESS
LOADING
LOADING
GROUND FLOOR PLAN
SCALE: 1/8" = 1'-0
NOTES:
BUILDING OCCUPANCY: STORAGE GROUP S-2
OCCUPANT LOAD:
CONSTRUCTION TYPE: TYPE II-B
DUMPSTER DESIGN TO MEET CITY CODE.
DUMPSTER AREA SHALL CONTAIN RECYCLING FACILITIES.
BUILDING SQUARE FOOTAGE:
LEVEL 1 - 26,529 SF
LEVEL 2 - 26,529 SF
LEVEL 3 - 25,911 SF
LEVEL 4 - 25,911 SF
TOTAL - 115,880 SF
GOOD & EDWARD
DESIGN STUDIOS
28245 Highway 74
Main Street
Evergreen, CO 80439
321-271-0748
GoodEdward.com
FLOOR PLAN
GROUND LEVEL
SAFE & SECURE SELF STORAGE AT STUART
STUART, FLORIDA
Scale
1/8" = 1'-0"
Date
5/31/18
Job No.
Drawn By
Sheet No.
A1


ELEV
ROOF PLAN
SCALE: 1/8" = 1'-0
GOOD& EDWARD
DESIGN STUDIOS
28245 Highway 74
Main Street
Evergreen, CO 80439
321-271-0748
GoodEdward.com
ROOF PLAN
SAFE & SECURE SELF STORAGE AT STUART
A5



FRONT (EAST) ELEVATION

SCALE: 1/8" = 1'-0 (SW PINE AVE & SW PALM CITY RD)



RIGHT (NORTH) ELEVATION

SCALE: 1/8" = 1'-0

GOOD& EDWARD
DESIGN STUDIOS
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Evergreen, CO 80439
321-271-0748
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ELEVATIONS

SAFE & SECURE SELF STORAGE AT STUART

A6



REAR (WEST) ELEVATION

SCALE: 1/8" = 1'-0 (SW BRYANT AVE)



LEFT (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0

GOOD& EDWARD DESIGN STUDIOS

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ELEVATIONS

SAFE & SECURE SELF STORAGE AT STUART

STUART, FLORIDA

A7

City of Stuart

121 SW Flagler Avenue • Stuart • Florida 34994
Telephone (772) 288-5306
Fax (772) 288-5305

City Clerk Department
Mary R. Kindel
City Clerk

mkindel@ci.stuart.fl.us

December 6, 2018

Clerk of the Circuit Court
Attn: Recording
P.O. Box 9016
Stuart, FL 34995

RE: PLEASE RECORD:
Ordinance 2383-2018; Safe and Secure Self-Storage at Stuart CPUD – Rezoning & Final Site Plan Approval

Please record the above named documents into the public records of Martin County. Upon completion, please return the original document back to my attention via inter-office mail.

Should you have any questions or comments, please do not hesitate to contact me at 772-288-5306 or mkindel@ci.stuart.fl.us.

Thank you,

Mary R. Kindel
City Clerk

Enc.

Invoice No. 705

Stuart

CITY OF STUART

INVOICE

Customer

Name Safe & Secure Self-Storage

City State

Phone

Misc

Date 11/29/2018

Order No.

Rep

FOB

Qty	Description	Unit Price	TOTAL
	Project Name: Ordinance No. 2383-2018, Safe & Secure Self-Storage		
	Recording Cost: 15 pages	129.00	$129.00
	RECORDCC 001-208100		
	Project Name: MISCREV		
	Advertising Fees: Palm Beach Post 11/1/2018	103.20	$103.20
	RECORDCC 001-208100.		
		SubTotal	$232.20
		Shipping	$0.00
	Tax Rate(s)	0.00	$0.00
			$232.20
		Balance Due	$232.20

Payment Select One...

Comments **PAYMENT DUE UPON RECEIPT**

Name

CC #

Expires

Office Use Only: 12/6/18

pd ck# 10571 to City

PLEASE MAKE CHECK PAYABLE TO: City of Stuart
Mail or deliver to the City of Stuart, City Clerk 121 SW Flagler Avenue, Stuart, FL 34994

QUESTIONS OR COMMENTS REGARDING THIS INVOICE SHOULD BE DIRECTED TO THE CITY OF STUART AT 772-288-5306

Invoice No. 708

Stuart

CITY OF STUART

INVOICE

Customer

Name: Safe & Secure Self Storage

City: State:

Phone:

Misc

Date: 12/6/2018

Order No.:

Rep:

FOB:

Qty	Description	Unit Price	TOTAL
	Project Name: Ordinance No. 2383-2018, Safe and Secure Self-Storage		
	Recording Cost: Additional 11 Pages (exhibits)	95.00	$95.00
	RECORDCC 001-208100		
	Project Name: MISCREV **Advertising Fees:** RECORDCC 001-208100.		

SubTotal		$95.00
Shipping		$0.00
Tax Rate(s)	0.00	$0.00
Balance Due		$95.00

Payment Select One...

Comments **PAYMENT DUE UPON RECEIPT**

Name:

CC #:

Expires:

Office Use Only: 12/6/18

pd ck#3816 to City

PLEASE MAKE CHECK PAYABLE TO: City of Stuart

Mail or deliver to the City of Stuart, City Clerk 121 SW Flagler Avenue, Stuart, FL 34994

QUESTIONS OR COMMENTS REGARDING THIS INVOICE SHOULD BE DIRECTED TO THE CITY OF STUART AT 772-288-5306