K. Determination of compliance with transportation requirements
Findings of Compliance:
The Traffic Division of the Public Works Department finds this application in compliance.
Agree

L. Determination of compliance with county surveyor
Agree.

M. Determination of compliance with engineering, stormwater and flood management requirements
Unresolved issues:
Item #1:
Right-of-way Improvements
1. As previously requested, a 7.5' right-of-way dedication along NE Savannah Road is required for this project. Display line work and label the proposed dedication on the Final Site Plan and Construction Plans accordingly. Note: Additional right-of-way may be required near the eastern leg of the proposed roundabout to accommodate the crosswalk and refuge islands.
The requested 7.5 ft right-of-way dedication along SE Savannah Road has been added to the Final Site Plan and Construction Plans.
2. As previously requested, extend the surveyed limits to include the existing eastbound right turn lane into the Tropical Acres development.
Additional survey information for the subject area was obtained from the Savannah Road Multi Modal Enhancements project plans (the Bike Lanes Plans) and has been added (see Sheet 9).
3. There appears to be a power pole which is missing from the survey. The pole is location on the eastern side of the right-of-way at approximately STA 56+80.
The subject power pole was added to the roundabout plans at the indicated station (see Sheet 9).
4. The minimum radius for all splitter island curbing shall be 3-feet.
Acknowledged, the splitter island curbing radii were adjusted to 3-feet (see Sheet 9).
5. The bicycle ramps shall have the same minimum width as the bicycle lanes, which is 5-feet.
Acknowledged, the bicycle ramps were adjusted to 5-feet (see Sheet 9).
6. The northeast bicycle ramp is currently shown with a cross slope of approximately 14%. Slope should be reduced to 2% max.
Acknowledged, the northeast bicycle ramp was adjusted to 2% max cross slope (see Sheet 9).
7. Some of the bicycle ramps exceed the maximum allowable angle from parallel to the roadway/sidewalk. The typical angle permitted by FDOT is roughly 20-degrees and the maximum allowable angle is 35-degrees. [FDOT Design Manual Figure 213.8.1 (2019)]
Acknowledged, the bicycle ramps were adjusted to between 20-degrees and 35-degrees from parallel to the roadway/sidewalk (see Sheet 9).
8. Provide directional indicators at the top of the bicycle ramps to provide a tactile cue for visually impaired pedestrians to continue down the sidewalk. [FDOT Design Manual 213.8.2 (2019)]
Directional indicators have been added at the top of the bicycle ramps to provide a tactile cue for visually impaired pedestrians to continue down the sidewalk (see Sheet 9).
9. Provide additional detail at the intersection of the northwest bicycle ramp and the roadway. It is unclear how the curb transitioning will work in this area.
The northwest bicycle ramp design has been revised (see Sheet 9).

10. At STA 55+60, the proposed sidewalk width shall be increased to 8-feet within the location of the right-of-way (Including the proposed right-of-way dedication). Additionally, the sidewalk should be reconfigured to eliminate the 90-degree bend resulting in an alignment with the crosswalk.

Acknowledged, this area was revised (see Sheet 9).

11. The pedestrian refuge area within the northern crosswalk is shown to have a running slope of 5%. The refuge area shall act as an ADA landing, and therefore the maximum allowable slope is 2% in both directions. Revise grading accordingly.

Acknowledged, this area was revised (see Sheet 9).

12. The pedestrian refuge area within the eastern crosswalk does not meet the minimum required dimensions and shall be eliminated. The crosswalk at this location will now be continuous.

Acknowledged, this area was revised (see Sheet 9).

13. As previously requested, the proposed eastern crosswalk is shown with a cross slope exceeding 2%. Revise grading accordingly.

Acknowledged, this area was revised (see Sheet 9).

14. Provide additional grading information for the proposed western crosswalk, including the curb ramps.

Acknowledged, this area was revised (see Sheet 9).

15. Provide F-Curbing for the central island in lieu of D-Curbing.

Acknowledged, the central island curbing was changed to Type F curb (see Sheet 9).

16. The construction plans appear to propose grading within the Tropical Acres property. The plans indicate a construction easement will be granted for the work within private property; however, the County will need the ability to maintain the banks of the new slope in perpetuity. Therefore, a permanent maintenance and access easement or a right-of-way dedication will be required in this area. Another option would be to use a gravity wall and pedestrian handrail to eliminate the need for offsite grading.

Per the project meeting with the County Engineer on September 25, 2019, the roundabout grading was lowered on the east side of the roundabout adjacent to the Tropical Acres property. With the grading change, all back-slope grading is now contained within the Savannah Road right-of-way (see Sheet 9).

17. The County does not permit the removal of pavement striping via water blasting or painting. Therefore, as previously requested, extend the limits of the mill and overlay to match the limits of the proposed striping.

The limits of the mill and overlay have been extended to match the limits of the proposed striping, and the future Savannah Road Multi-Modal Enhancement Plans (see Sheet 9).

18. Provide the radius of curvature for the profile grade lines on the Project Control Sheet.

Acknowledged, radius of curvature for the profile grade lines were added to the Project Control Sheet 6.

19. The realignment of the northbound travel lane on NE Savannah Road requires the right turn lane into Tropical Acres to be reconfigured. The bicycle ramp should not be located within the taper of the turn lane.

Acknowledged, this area was revised (see Sheet 9).

20. Extend the median north of the roundabout to STA 60+15. Additionally, revise the end of the median to become a bull nose rather than a taper.

The median north of the roundabout was extended to STA 60+15, and the end of the median was revised to a bull nose rather than a taper. Please refer to Sheet 9.

21. For maintenance purposes, revise the grading around storm structure SD-2 to eliminate the need for a slotted box.

Per the September 25, 2019 project meeting with the County Engineer, the drainage design was revised to change this structure to a manhole and to capture the area drainage with an additional pipe and MES.

22. Remove the storm pipe shown between structures SD-2 and SD-3 that crosses the road in a non-perpendicular manner. Relocate the pipe to connect structures SD-3 and SD-6 instead.

Per the September 25, 2019 meeting with the County Engineer, this storm pipe was deleted (see Sheet 9).

23. Revise the roadway cross slopes throughout the complete circulation of the roundabout to be a consistent slope (Min. 2%).

Acknowledged, the roundabout cross slopes were revised (see Sheet 9).

24. Revise the minimum profile slope of the northbound travel lane (STA 57+20 to 58+10) to be 0.3%.

Acknowledged, the minimum profile slope of the northbound travel lane was revised (see Sheet 9).

25. It is not clear why the northbound profile grade line is approximately 1-foot higher than the southbound profile grade line within the roundabout. Consider lowering the northbound elevation to match the southbound elevation. This revision should help other grading related issues.

Acknowledged, the northbound profile grade line was lowered to match the southbound profile grade line to help with the other grading issues (see Sheets 9, 12 and 13).

26. Provide an additional cross section through the center of the roundabout.

The cross section at STA 56+49 is through the center of the roundabout (see Sheet 12).

27. Review the proposed roundabout plans for consistency with the Savannah Road Resurfacing and Bike Lanes Plans. Ensure the locations of all proposed bike ramps and bike lanes align with the bike lanes on the Resurfacing Plans. Additionally, review the notes and specifications sheets to ensure they are consistent.

The Savannah Road Resurfacing and Bike Lanes Plans were reviewed, and the roundabout plans were revised for consistency.

28. In anticipation of the roundabout construction as an alternative bid to the Savannah Road Resurfacing project, revise the proposed pay item numbers to be consistent with the Resurfacing project. Note: Do not include the FM# on the roundabout plans.

Acknowledged, the pay item numbers on Sheet 2 were revised to be consistent with the Resurfacing project.

29. Remove all proposed utility work from the plans. All utility related work will be permitted separately with a separate Martin County Right-of-Way Use Permit.

Acknowledged, there is no utility work in the roundabout plans; only valve box adjustments (see Sheet 14).

30. The proposed project is not Martin County funded. Therefore, remove all Martin County logos and BOCC information from the plans.

Per the September 25, 2019 project meeting with the County Engineer, the construction contract will be funded by the developer's pre-payment of impact fees to Martin County. The contractor will be paid by, and the roundabout construction contract will be administered by, Martin County using the pre-paid impact fees and developer funding. It was decided that the current format and MC logos are appropriate.

31. Include Martin County Standard Detail R-60 within the detail sheets.

Acknowledged, Martin County Standard Detail R-60 was added to Sheet 5.

Item #2: Off-Street Parking

1. As previously requested, provide adequate vehicular turnaround space where pavement comes to a dead end. This occurs south of the proposed clubhouse (STA 15+00), north of Building 1 (STA 17+15), and south of Building 8 (STA 37+60). If dead end length exceeds 150', which appears to occur at STA 35+95 to STA 37+70, provide fire apparatus turnaround per NFPA 1 latest standards. The

geometrics of all turnarounds shall allow vehicles to complete the turning maneuver with a maximum three-point movement.

A parking space is marked as no parking at each location for turnaround purposes.

2. As previously requested, provide separate resident and guest entry lanes to the development. Additionally, the location of the electronic entry gate box shall be relocated such that vehicles can make a U-turn if access to the development is denied.

The gated entry has been deleted.

3. Provide a minimum of 3 queuing spaces for the gated entrance. Driveways shall be designed with adequate on-site storage for entering and exiting vehicles to reduce unsafe conflicts with through traffic or on-site traffic and to avoid congestion at the entrance. [Martin County, Fla., LDR Section 4.845.G.8 (2001)]

The gated entry has been deleted.

Item #3: Consistency with Other Plans

1. The bearings and distances were correctly shown on the Final Site Plan in the first submittal, but they seem to have been omitted with the second submittal. Revise the Final Site Plan to display the bearings and distances again.

See revised master/final site plan enclosed.

2. As previously requested, display all traffic control items, such as stop bars and pedestrian crosswalks, on the Final Site Plan to be consistent with the Horizontal Control Plan.

See revised master/final site plan enclosed.

3. Some of the proposed ADA parking stalls appear to be missing curb ramps on the Horizontal Control Plan. The ramps are correctly shown on the Final Site Plan and Paving, Grading, and Drainage plan; so, it appears that a layer was accidentally turned off on the Horizontal Control Plan. Revise for consistency. [Martin County, Fla., LDR Section 4.627.E (2009)]

Acknowledged, this has been revised (see Sheet 5 of 28).

Item #4: Stormwater Management Construction Plans

1. Revise the box culvert phasing plan to allow full flow of Warner Creek during both phases. Staff suggests moving the sheet piles roughly 5-feet to the east during Phase 1. This will allow for the partial construction of the headwalls on the east side of the eastern headwall. The sheet piles for Phase 2 can then be tied into the partially constructed headwall while allowing both culverts to be fully open.

A Timber Bridge will be constructed in lieu of the box culvert. The developer has hired York Bridge Concepts, a design-build engineering contractor that will design and install the bridge. Warner Creek will remain completely open during bridge construction (no phasing is required to build the bridge). As per the enclosed email from Michelle Cullum dated 11-26-19, construction plans for the bridge will be provided prior to construction.

2. As previously requested, there appears to be insufficient room to match to existing grades without entering the 5' preserve setback at the location of the dumpster pads (STA 36+10). Consider using a retaining wall at that location, or provide a cross section to demonstrate that the current grading works.

Acknowledged, this has been revised as noted (see Sheet 9 of 28).

3. Note: The detailed design elements the box culvert system, including but not limited to the structural calculations as well as construction details for the culvert/wingwall foundations, culvert headwall, culvert toe slab, wingwalls, and roadway traffic barriers, will be reviewed at post-approval. The pre-construction meeting will not be scheduled until the final design is reviewed and approved by the County Engineer.

Acknowledged, please note that a box culvert will not be constructed for the Warner Creek crossing. A Timber Bridge will be constructed for the Warner Creek crossing and the detailed design elements, including but not limited to, the structural calculations as well as construction details for the abutments, pile bents, girders and decking, wingwalls, and roadway traffic barriers, will be provided for review at post-approval by York Bridge Concepts, a design-build engineering contractor. This approach was confirmed in the 11-26-19 email from Michelle Cullum.

Item #5: Development Phasing Plan

1. The current notes associated with the phasing plan appear to describe the sequence of construction within each phase. All references to sequencing or scheduling shall be removed. Instead, the requirements for the Core Infrastructure and Certificate of Occupancy shall be listed for each phase. See Pennock Preserve PUD phasing plan as an example.

Please refer to the enclosed revised CO Phasing Plan (see Sheet 4 of 28), which has been revised per our meetings with staff. The detail is provided to ensure all required items are constructed for each Certificate of Occupancy requested, as previously requested by the Development Review Administrator.

2. The sub-phasing of required design elements on a building by building basis will not be permitted. Revise the phasing boundaries to be consistent between the Earthwork, Drainage, Utility, Paving, and Landscaping plans.

Acknowledged, please refer to the enclosed revised CO Phasing Plan (see Sheet 4 of 28).

3. The Club House and Pool shall be completed within Phase I and finished before the issuance of the first apartment building certificate of occupancy.

Acknowledged, please refer to the enclosed revised CO Phasing Plan (see Sheet 4 of 28).

4. The proposed pavement shown on the paving plan for Phase II should be revised to include the main access drive up to STA 28+80, as stated in bullet point four under the Phase 2 notes.

Acknowledged, only one plan view is now included (see Sheet 4 of 28).

5. The stormwater management report utilizes two basins for the post-development design and assumes the whole site will be constructed at the same time. The proposed phasing of construction will result in calculation values which are different than the final design. Provide additional calculations, or a supplemental section within the report which demonstrates that each phase of construction will have the required stormwater infrastructure available to meet the design storms.

Although the project stormwater management system will be constructed as two (2) drainage basins, all ponds will be constructed in Phase 1. The first drainage basin is for all area east of Warner Creek, and the second basin is for all area west of Warner Creek. Note that this matches the CO Phasing, because clearing, grubbing & mass grading of drainage basin 2 cannot be constructed until the bridge is built to provide access across Warner Creek. Once the bridge is completed, the mass grading and the basin 2 drainage system (including all ponds for CO Phases 2 and 3) will be constructed prior to requesting the Building No. 2 Certificate of Occupancy. Please refer to Sheet 4 of 28.

N. Determination of compliance with addressing and electronic file requirements
Addressing and Electronic File Submittal
Findings of Compliance:
Agree.

O. Determination of compliance with utilities requirements
Water and Wastewater Service

Unresolved Issues:

Item #1: Drawings Must Be Approved

The construction drawings must be approved by the Utilities and Solid Waste Department prior to sign off by the Department of permit applications and agreements.
Agree. The revised permit drawings have been submitted directly to the Utilities Department.

Item #2: Water And Wastewater Service Agreement
The applicant must submit an executable, final draft water and wastewater service agreement to the Growth Management Department for review by the Legal and Environmental Services departments prior to approval of the final site plan. The 'Water and Wastewater Service Agreement' must be executed and the applicable fees paid within sixty 60 days of final Martin County approval of the request.
Agree.

Wellfield and Groundwater Protection
Findings of Compliance:
Agree.

P. Determination of compliance with fire prevention and emergency management requirements
Fire Prevention
Findings of Compliance:
Agree.

Emergency Preparedness
Findings of Compliance:
Agree.

Q. Determination of compliance with ADA requirements
Unresolved Issues:
Item #1: The sidewalk cross slopes exceed 2% at the location of the Warner Creek Maintenance Access Driveways. Revise elevations accordingly.
The sidewalk cross slopes for the Warner Creek maintenance access turnouts have been revised to 2% maximum and the access driveways will be constructed with 6-inch minimum thickness concrete.

R. Determination of compliance with Martin County Health Department and School Board Requirements:
Findings of Compliance.
Agree.

S. Determination of compliance with legal requirements
Review Ongoing

T. Determination of compliance with adequate public facilities requirements
Noted.

U. Post-approval requirements
Noted.

V. Local, State and Federal Permits
Noted.

W. Fees
Noted.

X. General application information
Agree.

Y. Acronyms
Noted.

Z. Attachments
Noted.

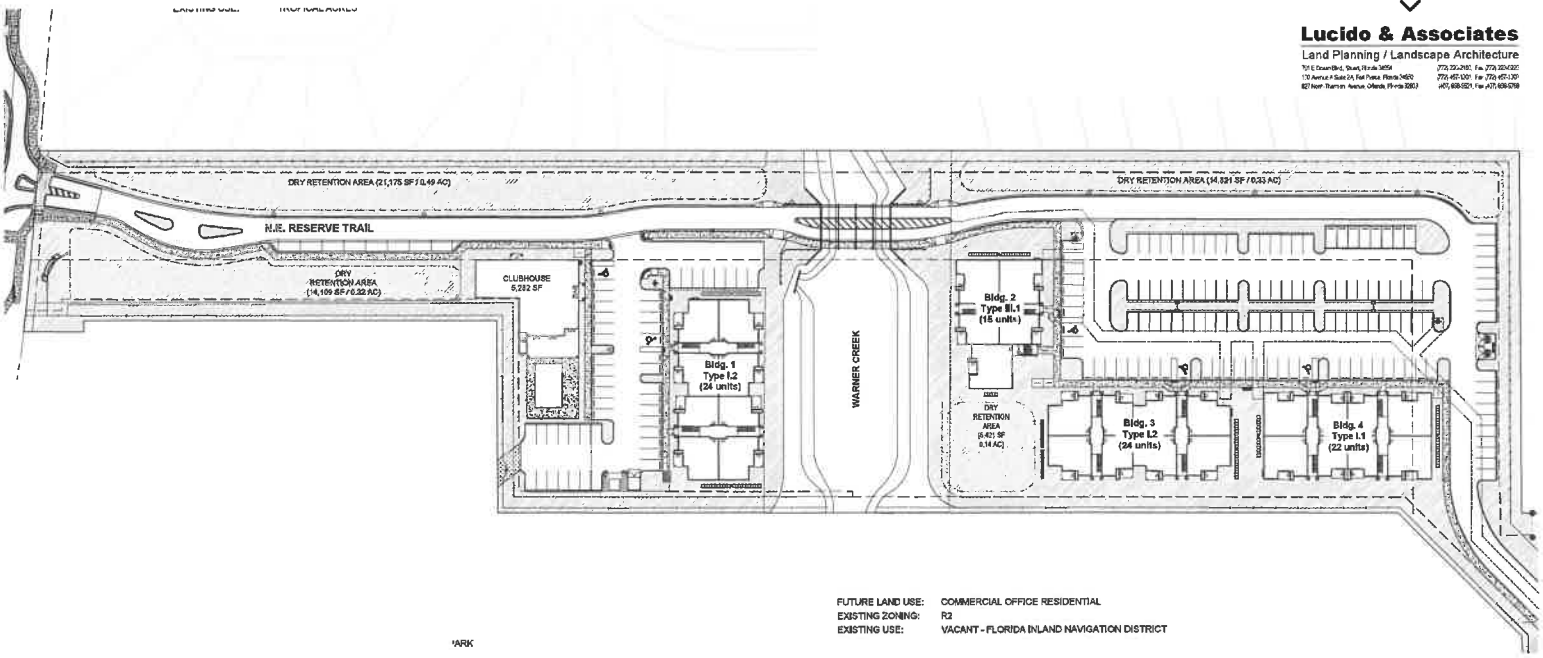
I trust these responses and the revised plans satisfactorily address the comments contained in the staff report and allow this project to move forward to the next available County Commission meeting.

Please feel free to contact me if you have any questions or need additional information.

Sincerely,

Morris A. Crady, AICP
Senior Vice President
Encl.

Lucido & Associates
Land Planning / Landscape Architecture



FUTURE LAND USE: COMMERCIAL OFFICE RESIDENTIAL
EXISTING ZONING: R2
EXISTING USE: VACANT - FLORIDA INLAND NAVIGATION DISTRICT

OPEN SPACE SITE DATA

Total Site Area:	23.01 acres (100%)
Required Open Space:	11.5 acres (50%)
Provided Open Space:	**14.55 acres (63.2%)**
Landscape Areas:	5.97 ac.
Retention Areas:	2.66 ac.
Upland Preserve:	5.50 ac.
Excess Upland Restoration:	0.42 ac.

Area Previously Included as Open Space but not Allowable
Area Previously Not Included as Open Space but is Allowable

SCALE

The Reserve at Jensen Beach
Open Space Exhibit
Jensen Beach, Martin County, Florida

NORTH

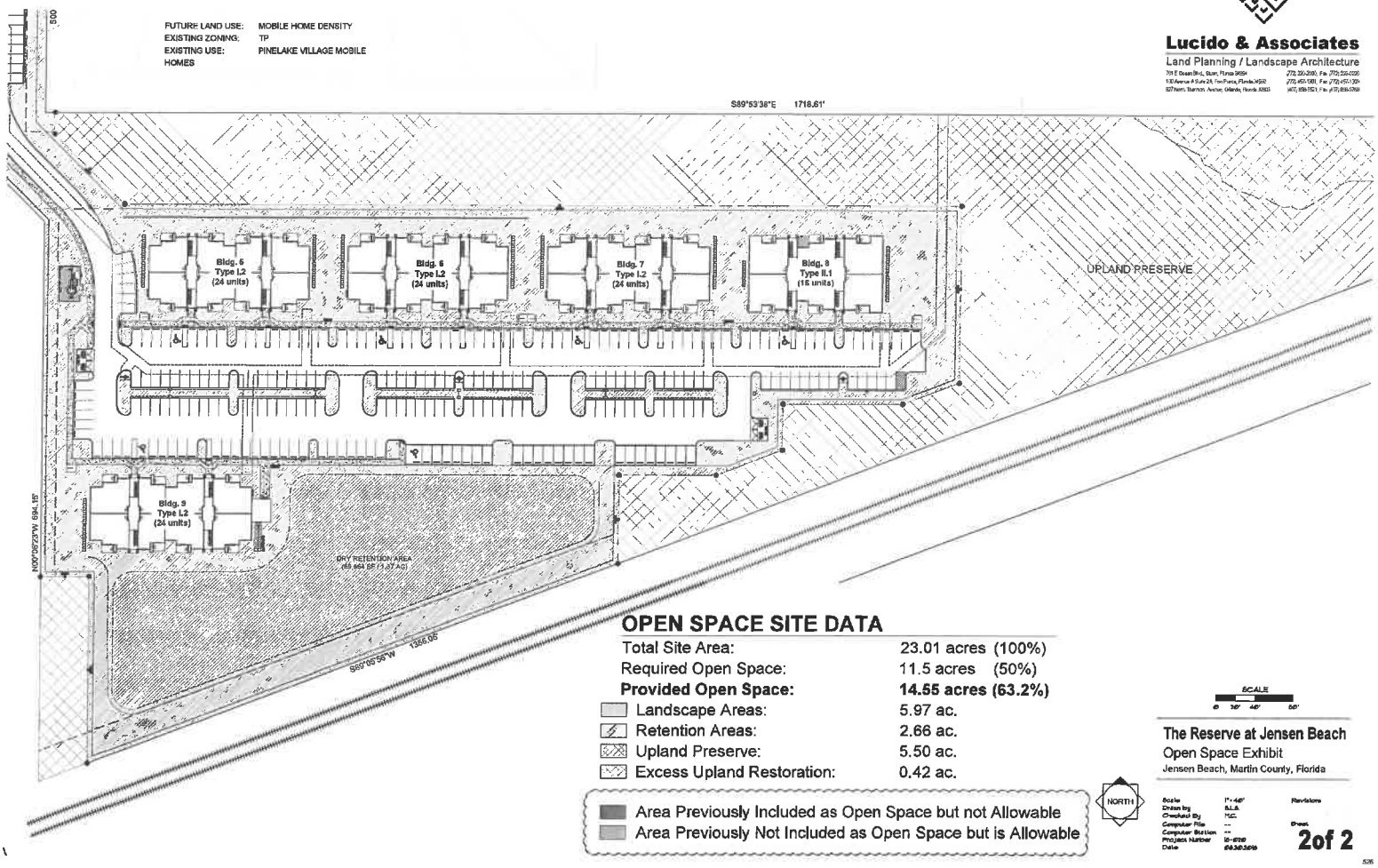
Scale	1" = 40'	Revisions
Drawn By	ALA	
Checked By	MC	
Computer File	--	
Computer Station	--	
Project Number	[illegible]	
Date	[illegible]	

Sheet **1 of 2**

525

Lucido & Associates
Land Planning / Landscape Architecture
701 E Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 220-2225
1130 Avenue A Suite 2A, Fort Pierce, Florida 34950 (772) 461-1001, Fax (772) 461-1009
527 North Garnett Avenue, Orlando, Florida 32803 (407) 839-1521, Fax (407) 839-0768

FUTURE LAND USE: MOBILE HOME DENSITY
EXISTING ZONING: TP
EXISTING USE: PINELAKE VILLAGE MOBILE HOMES



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Area Previously Included as Open Space but not Allowable
Area Previously Not Included as Open Space but is Allowable

NORTH

SCALE
0 30' 40' 50'

The Reserve at Jensen Beach
Open Space Exhibit
Jensen Beach, Martin County, Florida

Scale 1"=40'
Drawn by S.L.A.
Checked By H.C.
Computer File --
Computer Station --
Project Number 15-0720
Date 09.30.2016

Revisions

Sheet **2of 2**

lucido&associates
Land Planning / Landscape Architecture

Martin County Comprehensive Growth Management Plan (CGMP) Density Allocation and Intensity Standards

The Reserve At Jensen Beach Compliance Analysis

November 19, 2019

Density Calculations:

Future Land Use:	COR - up to 10 units per acre (upa)
	Medium Density - up to 8 upa
Existing Zoning:	COR-2 and RM-8

Total Site Area:	**23.01 ac.**
COR Land Use:	8.71 ac.
Medium Density:	14.30 ac.

Maximum Density Calculations Per CGMP Policy 4.1E.4

COR-2: 8.71 ac. x 10 upa =	87 units
RM-8: 14.30 ac. x 8 upa =	114 units

Proposed Density Per CGMP Policy 4.1E.4

Proposed Units in COR-2:	85 units
Proposed Density in COR-2:	9.8 upa
Proposed Units in RM-8:	112 units
Proposed Density in RM-8:	7.8 upa

Proposed Dwelling Unit Type:
Multi-family

Surrounding Property Characteristics:
The subject property abuts developed Mobile Home properties to the north. The properties to the south consist of developed industrial uses including the VFW meeting hall, vacant property owned by the Florida Inland Navigation District (FIND) that is designated for COR future land use, and the FEC Railroad tracks, which also extends to the eastern corner of the site.
NE Savannah Road is adjacent to the western border of the property.

There are no single-family homes adjacent to the proposed development.

701 East Ocean Boulevard Stuart, Florida 34994
tel: 772.220.2100 **fax:** 772.223.0220 **web:** www.lucidodesign.com

Comprehensive Growth Management Plan Density Transition Policies:

Policy 4.1F.1. Projects directly adjacent to lands used or designated for higher intensity use may be given maximum density.
Compliance response and analysis: The adjacent industrial use and the FEC railroad tracks are higher intensity uses. The future land use on the adjacent mobile home park allows up to 8 units per acre, which is comparable to the proposed density. However, within the density transition zone, the proposed project has been designed at significantly less density than the existing mobile home development.

Policy 4.1F.2. Projects immediately adjacent to lands used or designated for lower density use should be given less than maximum density.
(1) In all such cases the project with higher density shall provide for reduced density next to the existing lower density residential area.
(2) Within the urban service districts where lot sizes in the existing residential development are two acres or less and density is more than 1 unit per 2 acres, the following shall apply:
For the residential portion of said project abutting the existing development or area of lesser density, a density transition zone of comparable density and compatible dwelling unit types shall be established in the new project for a depth from the shared property line that is equivalent to the depth of the first tier of the adjoining development's lower density (i.e., the depth of the first block of single-family lots).

Policy 4.1F.3. The following criteria shall be met when applying Policy 4.1F.2.

(1) For purposes of this policy, abutting property is the same as "adjacent" or "adjoining" or "immediately adjacent" property and shall refer to property with a shared property line regardless of easements on the abutting properties. Properties separated by an existing road with a minimum 30 foot right of way shall not be considered abutting.
(2) Lands outside the urban service district, agricultural property and residential lots 2 acres or larger shall be protected by buffers and by 4.1F.2. but the tiering Policy in 4.1F.2. (2) shall not apply.
(3) Where the tiering Policy 4.1F.2. (2) applies, there shall be no requirement to construct residential units within the applicable area of the proposed development. However, if the area is left vacant, no other construction shall be allowed except for underground utilities, sidewalks, swales, stormwater ponds and dry retention areas.

Compliance response and analysis:
Density transition <u>does not</u> apply to the south, east or west boundaries because the adjacent properties are designated for nonresidential uses.

Density transition <u>does</u> apply to the tier of mobile home units to the north, which is approximately 100 feet deep.

<u>Mobile Home Tier Analysis</u>
As demonstrated on the attached Density Transition Exhibit, the proposed project has been designed with a density transition zone with significantly reduced density than the existing mobile home development. Specifically, the first tier of mobile home lots adjacent to the COR

land use is approximately 100 feet in depth and consists of approximately 4.06 acres. Within the mobile home tier, there are 29 mobile home units and/or vacant lots, which represents a density of 7.14 units per acre. Within the adjacent tier on the proposed project a portion of apartment building #4 (i.e. 4 units) is within the density transition zone (3.61 acres), which equates to a density of only 1.11 units per acre.

The first tier of mobile home lots adjacent to the Medium Density land use is also approximately 100 feet in depth and consists of approximately 3.29 acres. Within the mobile home tier, there are 15 mobile home units which represents a density of 4.56 units per acre. Within the adjacent tier on the proposed project no units are proposed. The density transition zone along this portion of the site is composed entirely of upland preserve and a small dry retention area.

Compatible Dwelling Unit Type

While it is the applicant's preference to eliminate all proposed units within the density transition zone (DTZ), the current policy interpretation prohibits roads (i.e. entrance road) within the DTZ unless a building or a portion of a building is also located within the DTZ. To this end, staff required a portion of building #2 to be located within the DTZ and directed the applicant to reduce the height of that portion from 3 stories to 2 stories to address compatibility of dwelling types. From a planning perspective, mobile home development is considered a transitional land use between multi-family and single family development and is therefore considered a compatible dwelling unit type.

(4) Other buffers required by the Comprehensive Plan or Land Development Regulations shall also be applicable.

Compliance response and analysis:

As demonstrated on the site and Landscape Plans required buffers have been provided in accordance with the Comprehensive Plan and the land development regulations.

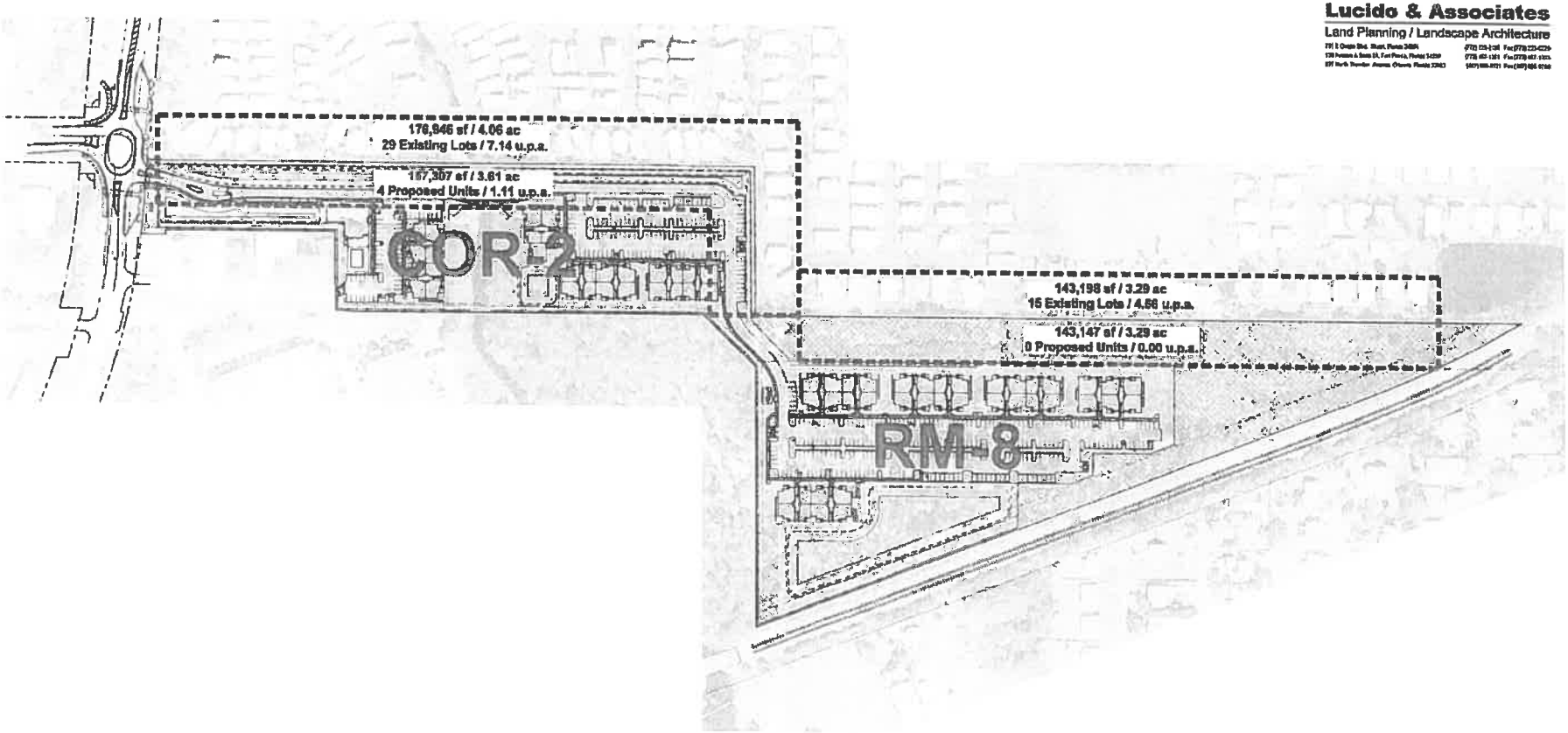
(5) Residential structures within a Mixed Use Overlay. A mixed use development containing residential units within a Mixed Use Overlay shall not be required to have a residential structure on that part of the project abutting existing development or area of lesser density within the Mixed Use Overlay. Buffers shall be as provided in Policy 4.3A.7.

Compliance response and analysis:

Not applicable. The project is not located within a mixed use overlay.

CONCLUSION:

The project is in compliance with the density allocations and intensity standards of the Martin County Comprehensive Growth Management Plan and Land Development Regulations.



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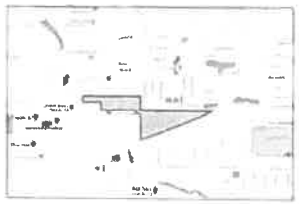

Location Map

NORTH

SCALE

0 50 100 200

The Reserve at Jensen Beach

Density Transition Exhibit

Jensen Beach, Martin County, Florida

Scale	1" = 100'	Revisions
Drawn by	N.L.S	
Checked By	FLC	
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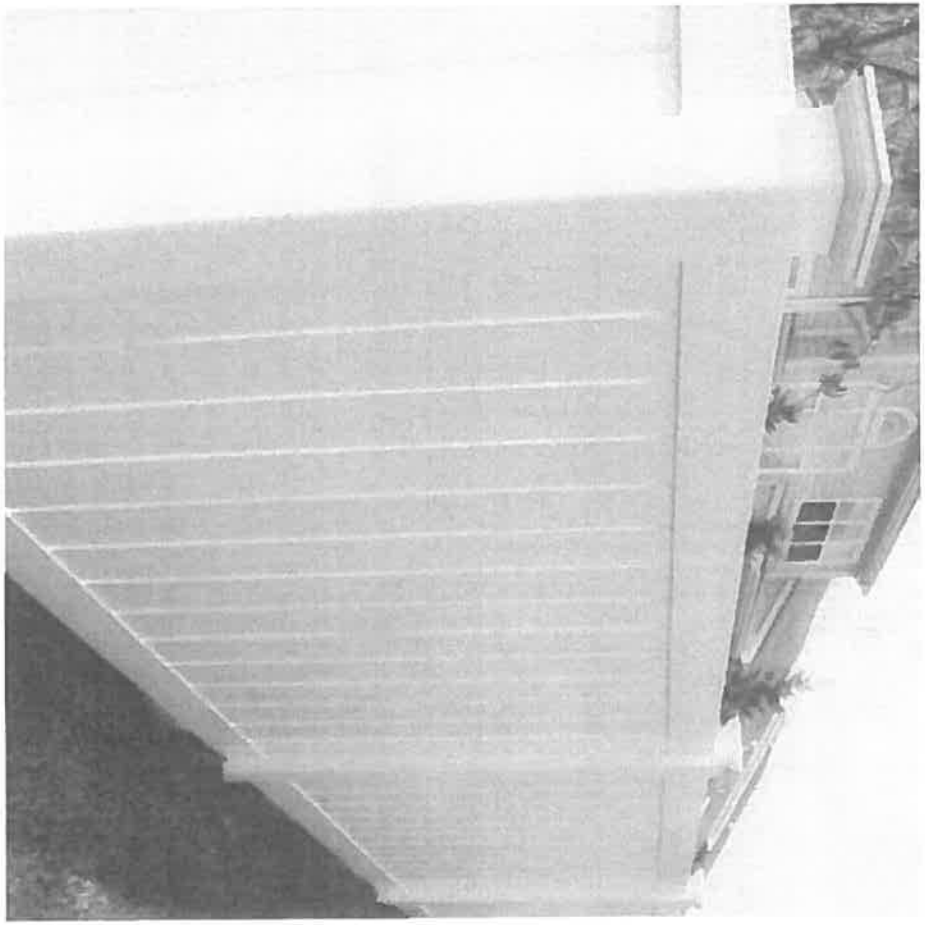
Computer Station	--	
Project Number	16-010	
Date	04.04.2016	**1 of 1**



Morris Crady

From: Michelle Cullum <mcullum@martin.fl.us>
Sent: Tuesday, November 26, 2019 8:23 AM
To: Morris Crady
Cc: Lisa Wichser; David Moore; Catherine Riiska
Subject: RE: The Reserve at Jensen Beach -Timber Bridge

Good Morning Morris,

Thank you for the update. Yes, that approach is acceptable. We will include a condition in the Development Order that will require the signed and sealed structural plans for the timber bridge to be submitted with the post approval documents. We did this for a similar project in Palm City.

Please let me know if you have any questions.

Have a Happy Thanksgiving!

Michelle Cullum, P.E.
Development Review Administrator
Public Works Department
Martin County Board of County Commissioners
772-288-5512 (office)

From: Morris Crady <mcrady@lucidodesign.com>
Sent: Monday, November 25, 2019 1:14 PM
To: Michelle Cullum <mcullum@martin.fl.us>; Lisa Wichser <lwichser@martin.fl.us>; David Moore <davidm@martin.fl.us>
Subject: FW: The Reserve at Jensen Beach -Timber Bridge

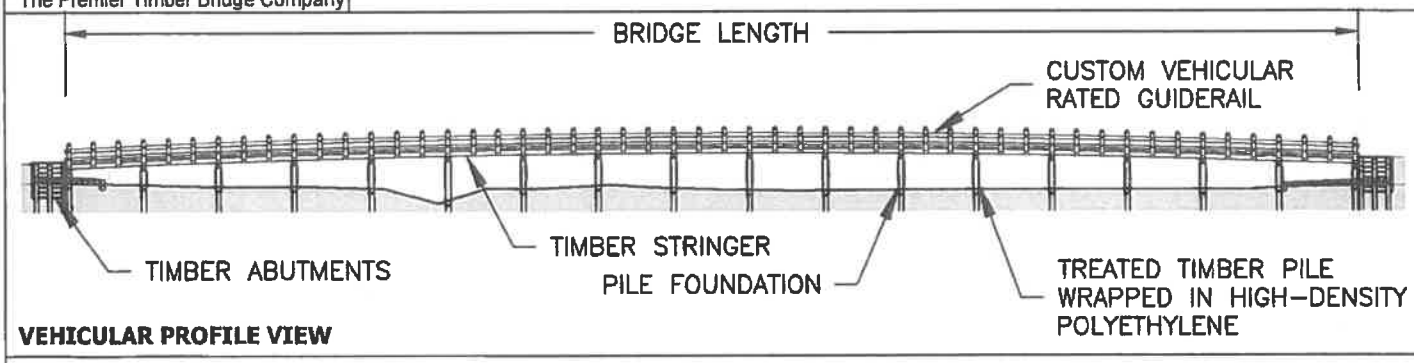
Hi Michelle,
We are getting closer to a resubmittal, which will include a timber bridge over Warner Creek by York Bridge Concepts, who I believe has done other work in the County.
Our client has entered into a contract for the bridge construction plans but it will be 60 to 90 days before the plans are completed.
Rather than wait on the plans and resubmit in 60 to 90 days, we would like to resubmit without the final bridge construction plans.

The site and construction plans will show the transition on each side of the creek and the specific plan view details.
And we will include the attached documents and e-mails below to show our commitment to York Bridge Concepts as the supplier.
Since the company is well known and has a qualified set of specifications, can you condition the engineering department's review on providing the final bridge construction details prior to scheduling the pre-construction meeting?
We would like to avoid another round of review based on the bridge construction plan alone.

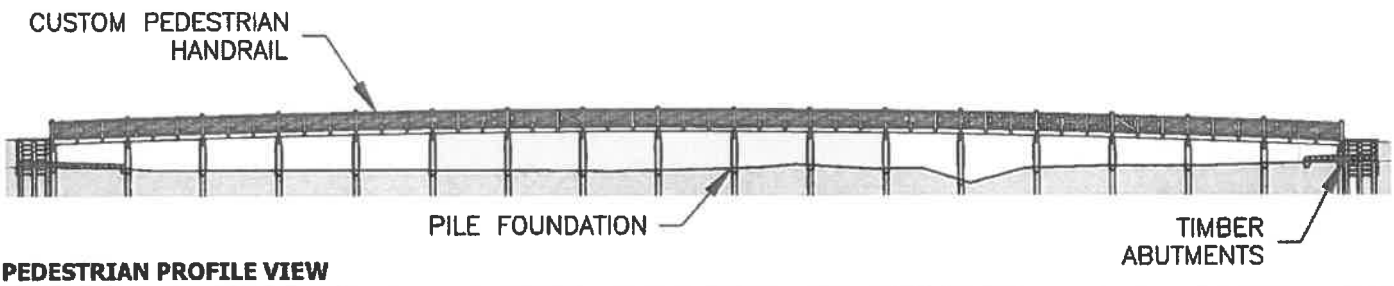
Please confirm this approach is acceptable.

YORK BRIDGE CONCEPTS
The Premier Timber Bridge Company

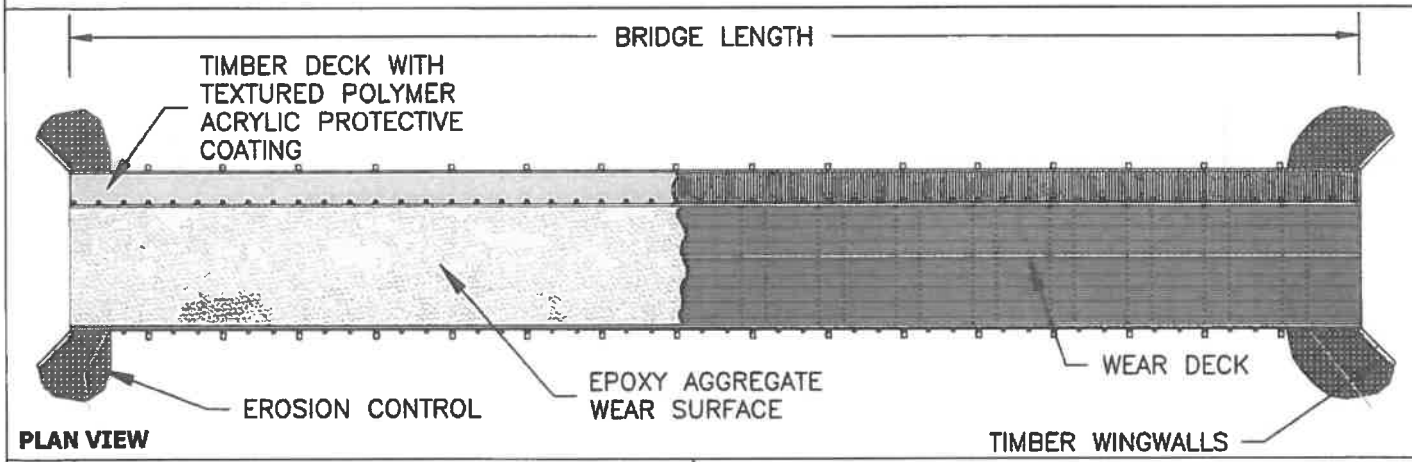
VEHICULAR REPETITIVE SPAN (DOUBLE LANE) WITH PEDESTRIAN SECTION



VEHICULAR PROFILE VIEW



PEDESTRIAN PROFILE VIEW

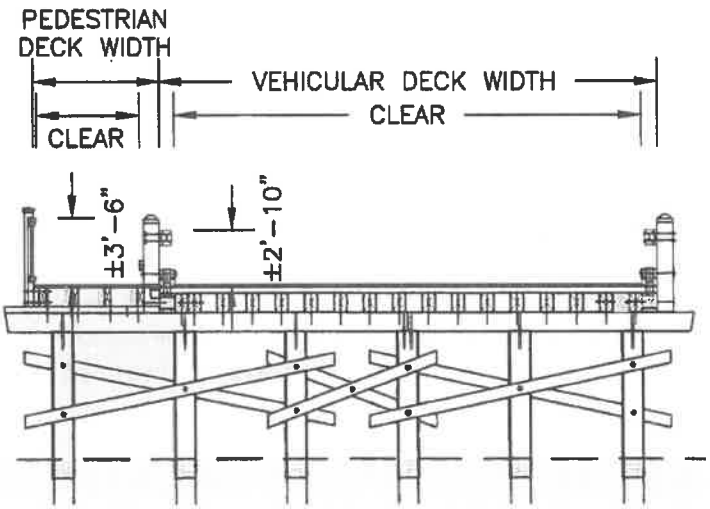


PLAN VIEW

NOTES & SPECIFICATIONS:

- THIS BRIDGE DESIGNED AT HS-20 CAPACITY
  - •• UPGRADES TO HS-25 OR HL-93 AVAILABLE
- DECK WIDTHS AVAILABLE OF 20'-0" TO 32'-0"
- ANY LENGTH AVAILABLE
- ALL WOOD IS .60 CCA TREATED SOUTHERN YELLOW PINE (TREATED DOUGLAS FIR OPTION AVAILABLE FOR WESTERN APPLICATIONS)
  - •• PEDESTRIAN SECTION HAS .23 CA-C ON SOME COMPONENTS
- TRANSLUCENT OIL ON RAILING SYSTEM, AND OUTSIDE STRINGER
- ACRYLIC/POLYMER ON PILE FOUNDATION

SECTION VIEW



VENDOR CONTACT INFO

YORK BRIDGE CONCEPTS
813.482.0613 I WWW.YBC.COM
2420 BRUNELLO TRACE I LUTZ, FL 33558

The Reserve at Jensen Beach

Savannah Road, Martin County, Florida

Project No. 1329.2

STORMWATER MANAGEMENT REPORT

PREPARED FOR:

MARTIN COUNTY ENGINEERING & SOUTH FLORIDA WATER MANAGEMENT DISTRICT

PREPARED BY:

CAPTEC Engineering, Inc.
301 NW Flagler Avenue
Stuart, Florida 34994
(772) 692-4344
EB-0007657

December 2019

JOSEPH W. CAPRA, P.E.
FLORIDA P.E. LICENSE NO. 37638

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Appendices:

1. Drainage Calculations (with BMP Trains)
2. Existing Conditions ICPR Reports
3. Proposed Conditions ICPR Reports
4. Summary of Existing and Proposed ICPR Model Conditions
5. Geotechnical Reports
   A. Geotechnical Engineering Report River's Edge Apartments (*ECS Florida, LLC – 12/18/17*)

   B. Limited Subsurface Soil Exploration and Preliminary Geotechnical Engineering Evaluation, Reserve at Jensen Beach, Proposed Residential Development (*Andersen Andre Consulting Engineers, Inc. 9/7/18)*

1.0 INTRODUCTION

This report presents the design of the surface water management system of the proposed Reserve at Jensen Beach project. The proposed development consists of Multi-Family Apartments and is located in Jensen Beach, within Martin County, Florida. The report also describes related information discovered during the pre-design site reconnaissance and data research.

2.0 BACKGROUND

2.1 Project Location

The project site is located at longitude 80°13'37" West and latitude 27°13'37" North, within Section 27, Township 37 South, Range 41 East in Jensen Beach, Martin County, Florida. The project site is comprised of two adjacent land parcels: a rectangular shaped west parcel; and a triangular shaped east parcel. The rectangular west parcel is bordered to the west by NE Savannah Road, to the north by the Tropical Acres Mobile Home Park, to the east by the Pinelake Village Mobile Home subdivision, to the south by the Veterans of Wars (VFW), and the Florida Inland Navigation District (FIND) Parcel. The project land parcels are joined by an easement granted by FIND recorded in OR Book 02107 Pp. 1544-1552. Warner Creek flows from north to south through the center of the west parcel. The triangular east parcel is bordered to the north by the Pinelake Village Mobile Home Park, to the south by the Florida East Coast (FEC) Railroad Right of Way, and to the west by the FIND Parcel. Refer to the attached Location Map on **Exhibit 1**.

2.2 Project Description

The total project area is 23.15± acres, and is divided into two basins. Basin #1 is the portion of the site west of Warner Creek. Basin #2 is the portion of the site east of Warner Creek and includes the FIND easement and the upland preserve area that is located entirely within the triangular shaped east parcel of the site. The proposed improvements will consist of nine multi-family apartment buildings (totaling 197 units), on-site paved surfaces (roadways, parking areas and sidewalks), an on-site surface water management system (dry retention areas, inlets and pipe conveyance systems), a potable water distribution system, and a wastewater collection / transmission system. The project will also provide water quality for the proposed NE Savannah Road and Coy Senda Roundabout project (see Section 4.5) that is adjacent to the project site as well as the installation of a drainage bypass system for off-site flows from Jensen Park Estates and NE Savannah Road to Warner Creek (see Section 4.6).

3.0 EXISTING CONDITIONS

3.1 Existing Land Use

The site is currently vacant and heavily vegetated. The triangular shaped east parcel currently drains predominately by overland sheet flow, from north to south to the swale along the north side of the FEC railroad, and then west into Warner Creek. The triangular shaped east parcel will contain upland preserve area, all of which is located within Basin #2. The rectangular shaped west parcel is bisected by Warner Creek with the west half currently draining, predominately by overland sheet flow, into an existing ditch, which also conveys off-site flows to Warner Creek. The east half of the rectangular parcel currently drains predominately by overland flow from the

northeast to the southwest and into Warner Creek. The site contains existing ditches and berms which will be regraded and replaced during construction. An existing ditch located on the western parcel, conveys off-site surface water from Jensen Park Estates and NE Savannah Road to Warner Creek. During construction, the ditch will be filled, regraded and piped with 42"- 54" diameter Reinforced Concrete Pipes (RCPs) to Warner Creek. This project area has not been previously permitted for any development. Refer to the attached Aerial Map on **Exhibit 2**.

SFWMD conducted a Jurisdictional Determination site inspection on April 19, 2018. Based on provided information and the results of the site inspection, jurisdictional other surface waters (OSW) as defined in Chapter 62-340, Florida Administrative Code, exist on the property, as shown on **Exhibit 13**, which identifies the boundaries of the property inspected and the approximate landward limits of the other surface waters. Also, the section of Warner Creek through the project site is NOT Sovereign/Submerged Lands (SSL) according to FDEP as shown on **Exhibit 14**.

3.2 Flood Zone

The project area lies within FEMA Flood Zone "X" and Flood Zone "AE-7" as shown on FEMA Map Number 12085C0151G (Effective March 16, 2015). The majority of the project area lies in FEMA Flood Zone "X" which is outside the boundary of the 100-year frequency flood. Warner Creek, however, is located in Flood Zone "AE-7" which lies within areas of 100-year flood zone with a predicted flood stage of EL 7.00 NAVD. Therefore, floodplain compensation is required for all floodplain encroachment related to development of the site. Refer to Section 4.7 for further information about the Floodplain Compensating Storage. Refer to the attached FEMA Flood Zone Map on **Exhibit 3**.

3.3 Soils

The Soil Survey of the Martin County Area, Florida (USDA, SCS 1981) indicates that the surficial soils are primarily Paola and St Lucie sands - 0 to 8 percent slopes (6), Jonathan sand – 0 to 5 percent slopes (41) and traces of Waveland and Immokalee fine sands (4). Refer to the attached Soil Conservation Survey (SCS) Map on **Exhibit 4**.

Two geotechnical reports have been completed for the project, both include limited subsurface exploration, laboratory testing and geotechnical analyses of the soils encountered. The first report was conducted by ECS Florida, LLC, dated December 18, 2017 and concentrated in the area of the proposed roundabout on NE Savannah Road. The report contains design recommendations for pavement, earthwork operations and general construction considerations. A copy of the report is included in **Appendix 5A**.

The second geotechnical report was conducted by Andersen Andre Consulting Engineers, Inc. (AACE) dated September 7, 2018. The report consisted of 24 hand augers, laboratory testing, and engineering analysis. The AACE geotechnical report also provides preliminary geotechnical design recommendations for structures and pavement, retention ponds, and the suitability of encountered soils for use as fill material. A copy of the report is included in **Appendix 5B**.

Refer to **Exhibits 9-11** for Pre-Development Nutrient Loading Map, and Pre & Post Land Coverage Maps. These exhibits depict land coverage / soil information on-site. They also include

tables indicating how nutrient loading parameters (BMPTrains – **Appendix 1.15**) were determined. Due to the site's existing and proposed conditions, the maximum nutrient load reduction practical limit was set at 90% by the South Florida Water Management District during the Pre-Application Meeting.

3.4 Groundwater Elevations

During AACE's geotechnical evaluation of the site, groundwater was observed in hand augers for an average depth of about 7' below ground for Basin #1 (the area west of Warner Creek) and 3' below ground for Basin #2 in the low area adjacent to the FEC Railroad tracks. Based on the existing conditions topographic survey and the locations of the hand auger borings, approximate surface elevations for each hand auger boring was established and the normal groundwater elevation is estimated to be Elevation 0.50' NAVD. The seasonal high groundwater elevation is assumed to be two (2) feet above the normal groundwater elevation level (2.50 NAVD).

3.5 Topography

All elevations reference North American vertical Datum of 1988 (NAVD 1988) unless otherwise noted. According to the topographic survey prepared by Betsy Lindsay, Inc., the site elevations range from approximately EL 2.4 to EL 24.0. The rectangular shaped parcel west of Warner Creek is relatively flat gradually sloping eastward to the top of bank of Warner Creek. The rectangular shaped parcel east of Warner Creek is also relatively flat with natural ground elevations between EL 15.6 to 11.2 NAVD and gradually sloping west to the top of bank of Warner Creek.

In the triangular shaped east parcel east of Warner Creek, a high ridge is located through the north central portion of the property with elevations ranging between EL 20.0 and EL 24.0 NAVD. From this ridge, natural ground slopes north to elevations between EL 10.0 and EL 15.00 NAVD along the north property line, and slopes southward to an existing ditch along the FEC Railroad Right-of-Way with elevations ranging between 2.90 and 6.80 NAVD, and then westward to Warner Creek. There are other surface waters as determined by SFWMD in the eastern portion of the project site that borders the FEC Railroad Tracks (as noted above in Section 3.1).

The majority of the site outfalls to Warner Creek by overland flow, or through existing ditches. Additionally, the existing NE Savannah Road fronting the property has a centerline elevation ranging from approximately EL 14.10 to EL 13.70 NAVD. Martin County LIDAR information substantiates these elevations, contours and slope patterns. Refer to the attached USGS Quadrangle Map on **Exhibit 5** for additional topographic information.

4.0 SURFACE WATER MANAGEMENT SYSTEM

4.1 Stormwater Modeling

In 2009, CAPTEC Engineering completed the Leilani Heights / Warner Creek Basin Storm Water Quality Retrofit Storm Water Management Study for Martin County (ERP #43-02364-P). This study modeled the over 5,000-acre Warner Creek watershed. This model was utilized as the existing condition model for the Reserve at Jensen Beach project (See **Appendix 2** for Existing ICPR Model Reports).

4.2 Proposed Drainage Basin and Control Elevation

The SWM site area consists of 23.15± acres, and is modeled as two separate basins. Basin #1 consists of the northwest portion of the site, located west of Warner Creek. Basin #2 consists of the remainder of the northwest portion east of Warner Creek, the FIND easement, and the entire southeast parcel, which includes the proposed upland preserve areas. Warner Creek bisects the rectangular, northwest portion of the site and is the drainage divide for the two drainage basins.

From the geotechnical report, normal groundwater elevations were assumed at an elevation of 0.50 NAVD. Seasonal high groundwater elevations were assumed to be approximately two feet above observed groundwater depths (2.50 NAVD). These elevations were used for the recovery analysis in the drainage calculations (**Appendix 1**).

Storm event rainfalls were determined using the South Florida Water Management District (SFWMD) Rainfall Records (**Exhibit 6A-6C**). Refer to **Exhibit 8** for the Proposed Drainage Area Map depicting the drainage area boundaries and additional site data information.

4.3 Water Quality Treatment

The stormwater management system provides water quality treatment for the proposed development by means of five dry retentions areas. For Basin #1, two interconnected dry retention areas are proposed to provide water quality treatment. The provided water quality volume for Basin #1 is in excess of the required SFWMD Water Quality requirements and meets the required pollutant reductions per the BMP Trains Calculations (up to 90% practical limit reduction). An FDOT Type E Inlet (CS-1) is the Basin #1 control structure which outfalls into Warner Creek, which has a normal elevation of -0.25 NAVD.

For Basin #2, three interconnected dry retention areas are proposed to provide water quality treatment. The provided water quality volume is in excess of the required SFWMD Water Quality requirements and meets the required pollutant reductions per the BMP Trains Calculations (up to 90% reduction). An FDOT Type E Inlet (CS-2) is the Basin #2 control structure which also outfalls into Warner Creek, which has a normal elevation of -0.25 NAVD. Refer to **Appendix 1** for the water quality calculations.

4.4 Allowable Discharge

In 2009, CAPTEC Engineering completed the Leilani Heights / Warner Creek Basin Storm Water Quality Retrofit Storm Water Management Study for Martin County. This study modeled the over 5,000-acre Warner Creek watershed and was the basis for the three Warner Creek basin water quality retrofit projects. This model was utilized as the existing condition model for the Reserve at Jensen Beach project (See **Appendix 2** for Existing ICPR Model Reports).

The proposed project site is located within the existing model basins, "VFW", "49+58" and "FIND". The pre-development allowable discharge rates for the project site were determined on a per acre discharge rate established in the existing model and multiplied by the acres for each proposed basin. The existing maximum runoff discharge rates are provided in **Table 4.4** below.

Table 4.4 – Allowable Discharge Rates – 25 Year / 3 Day Storm Event

Basin	Area (ac)	Existing Maximum Runoff (cfs)	Discharge Rate (cfs/acre)
VFW	5.88	15.81	2.68
FIND	36.98	43.09	1.16
049+58	4.74	11.59	2.44

Basin #1 (3.30 acres) falls entirely within the VFW basin, which results in an allowable maximum discharge of 8.84 cfs. Basin #2 (11.37 acres) falls within two basins: the FIND basin (6.63 acres) and the 049+58 basin (4.74 acres). Applying the discharge rate of the existing basins to the proposed areas of Basin #2 results in a total maximum discharge rate of 19.25 cfs (7.69 + 11.56).

The combined Post-development discharge rates for the 25-year, 3-day storm event for Basin #1 and Basin #2 do not exceed the pre-development allowable discharge rates as shown below and in the Post Development ICPR Model Reports (**Appendix 3**). A summary of existing and proposed model conditions is included as **Appendix 4**.

Basin	Allowable Discharge 25-year 3-day (cfs)	Proposed Discharge 25-year 3-day (cfs)
Basin 1	8.84	4.59
Basin 2	19.25	23.08
TOTAL	**28.09**	**27.67**

4.5 Storm Water Attenuation

The surface water management system will provide storage volume to maintain the proposed pavement above the ICPR routed 10-year 1-day storm stage. A perimeter berm is provided above the ICPR routed 25-year 3-day storm stage. The Finished Floor Elevations of the proposed buildings are provided at or above the 100-year 3-day (zero discharge) storm stage calculated in the drainage and stage/storage calculations in **Appendix 1**.

Table 4.5 – Stormwater Attenuation

Basin 1			***Basin 2***		
Storm Event	**Required**	**Provided**	**Storm Event**	**Required**	**Provided**
10 year – 1 day (routed)*	8.94	9.50	10 year – 1 day (routed)*	8.70	9.00
25 year – 3 day (routed)*	9.64	10.20	25 year – 3 day (routed)*	9.43	9.65
100 year – 3 day (zero discharge) **	10.75	11.05	100 year – 3 day (zero discharge) **	11.00	11.10

**Required elevation derived from ICPR Proposed Conditions Model*
***Required elevation derived from Drainage Calculations (Appendix 1)*

4.6 NE Savannah Road Drainage

The existing on-site ditch located on the western portion of the rectangular parcel conveys existing runoff from NE Savannah Road, and outfalls via double – 36" CMPs into Warner Creek. The existing ditch will be replaced by a piped stormwater bypass system, and the ditch will be filled and regraded as shown on the construction plans. The proposed pipe system will provide conveyance for this offsite flow through the project site and into Warner Creek. Although, the majority of NE Savannah Road will be conveyed to the proposed pipe system, the eastern half of the NE Savannah Road Roundabout (approximately 0.62 ac) will outfall into the on-site Basin #1. The Required Water Quality Volume for the entire NE Savannah Road Roundabout is included in the total treatment volume of Basin #1 (Refer to **Appendix 1**). The existing Martin County drainage easement over the ditch will be replaced with the proposed Drainage, Utility and Access Easement shown on Sheet 5 of the Construction Plans.

4.7 Proposed Bypass Pipe Sizing

As noted above, the existing ditch located in the western portion of the site conveys flow from the existing Jensen Park Estates and NE Savannah Road and outfalls into Warner Creek via double 36" CMPs. The proposed pipe system will provide conveyance for this offsite flow through the project site to Warner Creek. The Pre-Development 100-yr/3-day storm ICPR calculations indicate that the existing double 36" RCPs under Savannah Road discharge 62.35 cfs to the existing on-site ditch. The Post-Development discharge will consist of the offsite flow and the Basin #1 Control Structure CS-1 flow (51 cfs for the 25-yr/3-day and 66 cfs for the 100-yr/3-day). The proposed 42" RCP and 54" RCP pipe system has been designed to convey and discharge the offsite Savannah Road flow into Warner Creek at non-erosive velocities.

4.8 Warner Creek Floodplain Compensating Storage

Refer to **Exhibit 7** for the Floodplain Compensation Exhibit for Warner Creek. The portion of Warner Creek located on-site lies in FEMA Flood Zone "AE-7", which is within areas of 100-year flood zones with a predicated stage of EL 7.00 NAVD. Modifications to Warner Creek for the project development must maintain the 100-year pre-development volume of the Creek within the project limits. The existing 100-year floodplain contains 6,636 CY (4.11 ac-ft) at EL 7.00 NAVD, and the attached **Exhibit 7** shows that the post-development 100-year floodplain volume exceeds the pre-development volume.

5.0 CONCLUSION

The proposed Reserve at Jensen Beach project is located on NE Savannah Road just east of Jensen Park Estates. The site is currently vacant and heavily vegetated on the southeastern portion. The proposed improvements will consist of multi-family apartment buildings and its infrastructure. As described above, the proposed design meets or exceeds Martin County and SFWMD criteria for storm water management requirements.

6.0 REFERENCE MATERIAL

1. SFWMD ERP Information Manual Volume IV
2. Soil Survey of the Martin County Area, Florida (USDA, SCS 1981)
3. USGS Quad Map
4. FEMA Flood Map

The Reserve at Jensen Beach

Savannah Road, Martin County, Florida

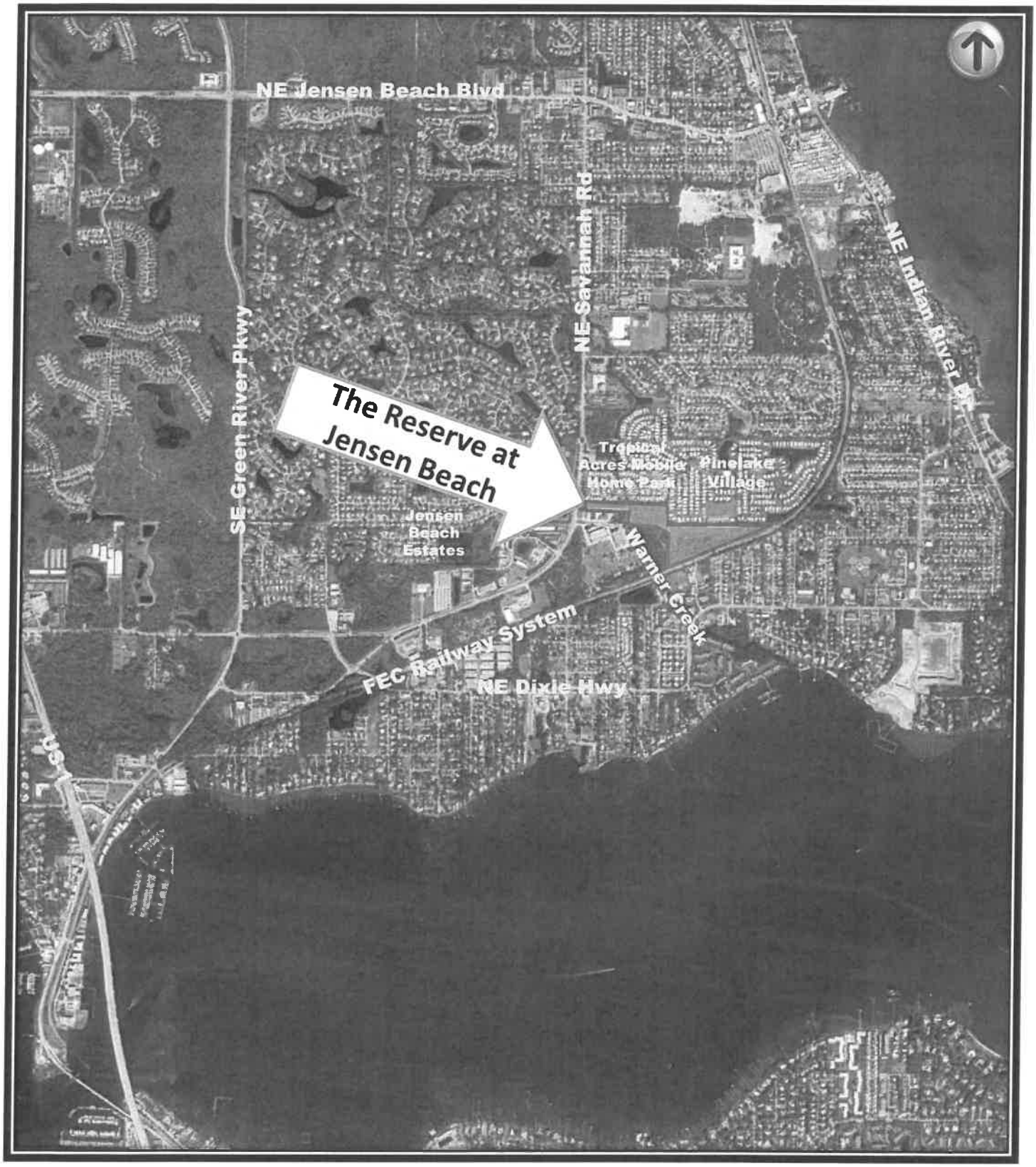
Project No. 1329.2

EXHIBITS

Exhibit 1	Location Map
Exhibit 2	Site Aerial
Exhibit 3	FEMA Flood Map
Exhibit 4	USGS Quadrangle Map
Exhibit 5	Soils Survey Map
Exhibit 6A	SFWMD Rainfall Record (10-year / 1-day)
Exhibit 6B	SFWMD Rainfall Record (25-year / 3-day)
Exhibit 6C	SFWMD Rainfall Record (100-year / 3-day)
Exhibit 7	Floodplain Compensation Exhibit
Exhibit 8	Overall Site Drainage Area Map
Exhibit 9	Pre-Development Nutrient Loading Map
Exhibit 10	Pre-Development Land Coverage Map
Exhibit 11	Post Development Land Coverage Map
Exhibit 12	Roundabout (Off-site)
Exhibit 13	Informal Wetland Delineation
Exhibit 14	SFWMD ERP #43-02364 (No Sovereign/Submerged Lands (SSL) on-site)

CAPTEC Engineering, Inc.

Civil Engineering Professionals



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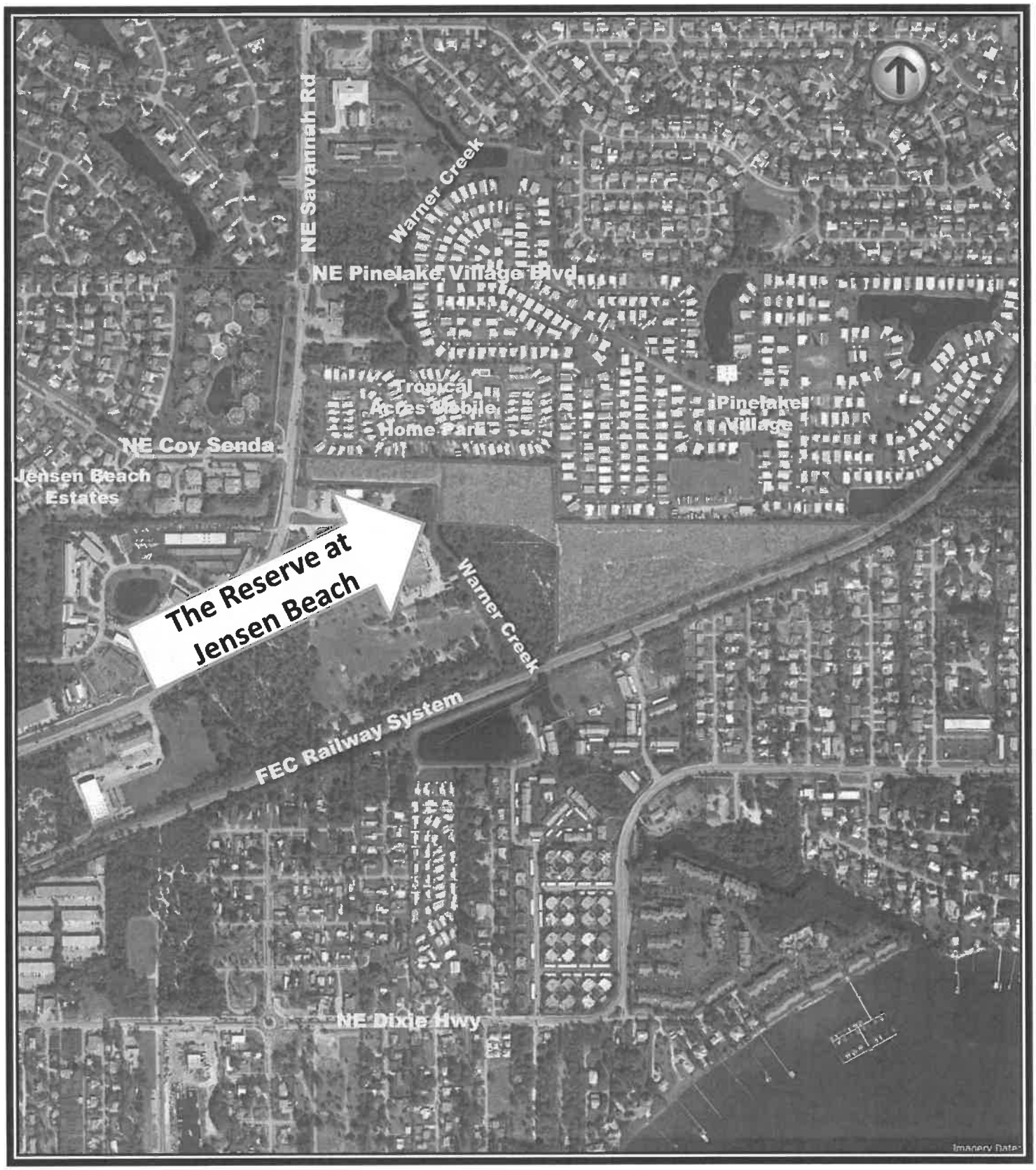
Civil Engineering Professionals

EXHIBIT 1 – LOCATION MAP
1329.2 – The Reserve at Jensen Beach Drainage Report



CAPTEC Engineering, Inc.
Civil Engineering Professionals

EXHIBIT 2 – AERIAL IMAGE
1329.2 – The Reserve at Jensen Beach Drainage Report

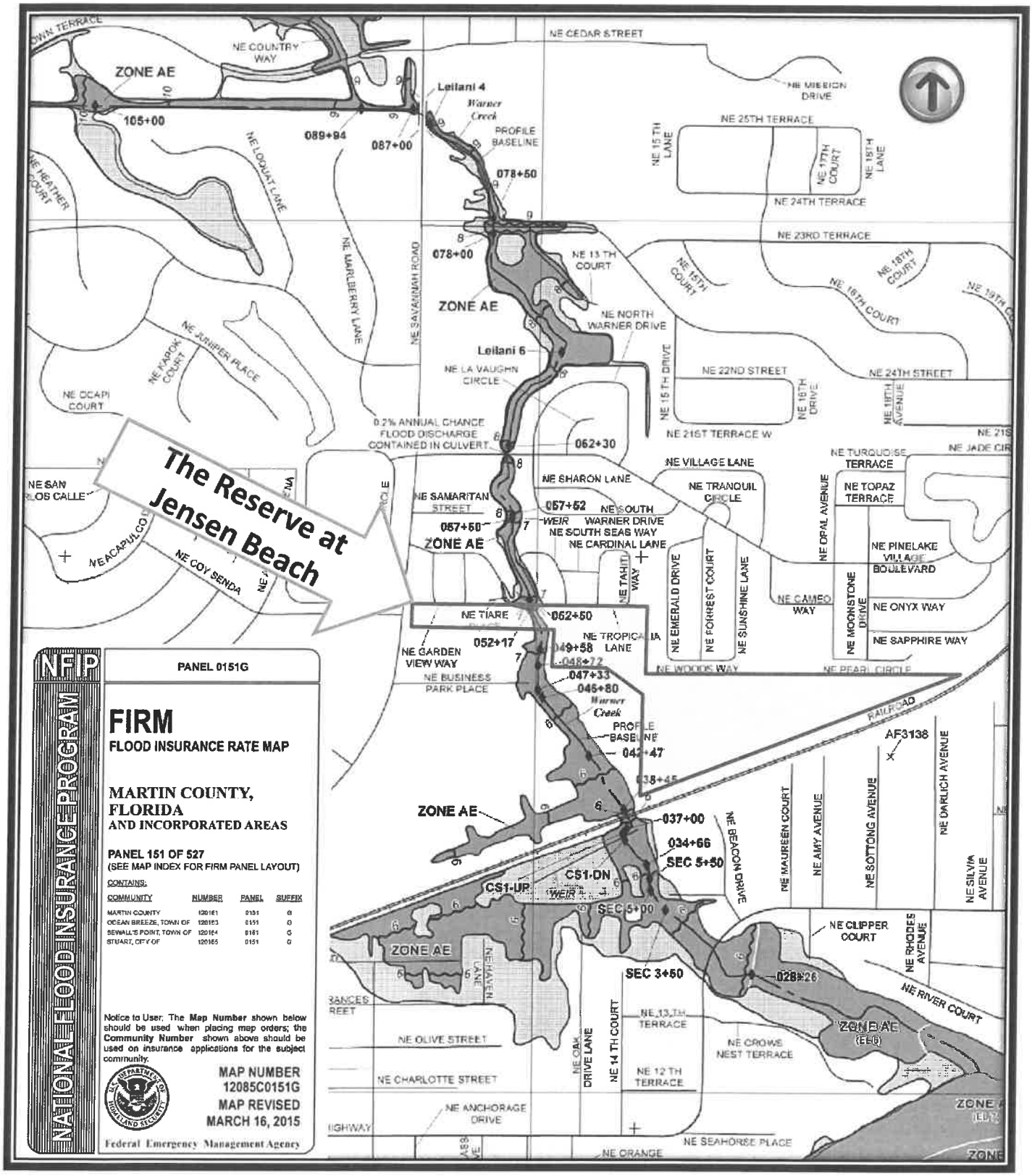


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EXHIBIT 3 – FEMA FLOOD MAP - ZONE AE (EL 7 NAVD)
1329.2 – The Reserve at Jensen Beach Drainage Report

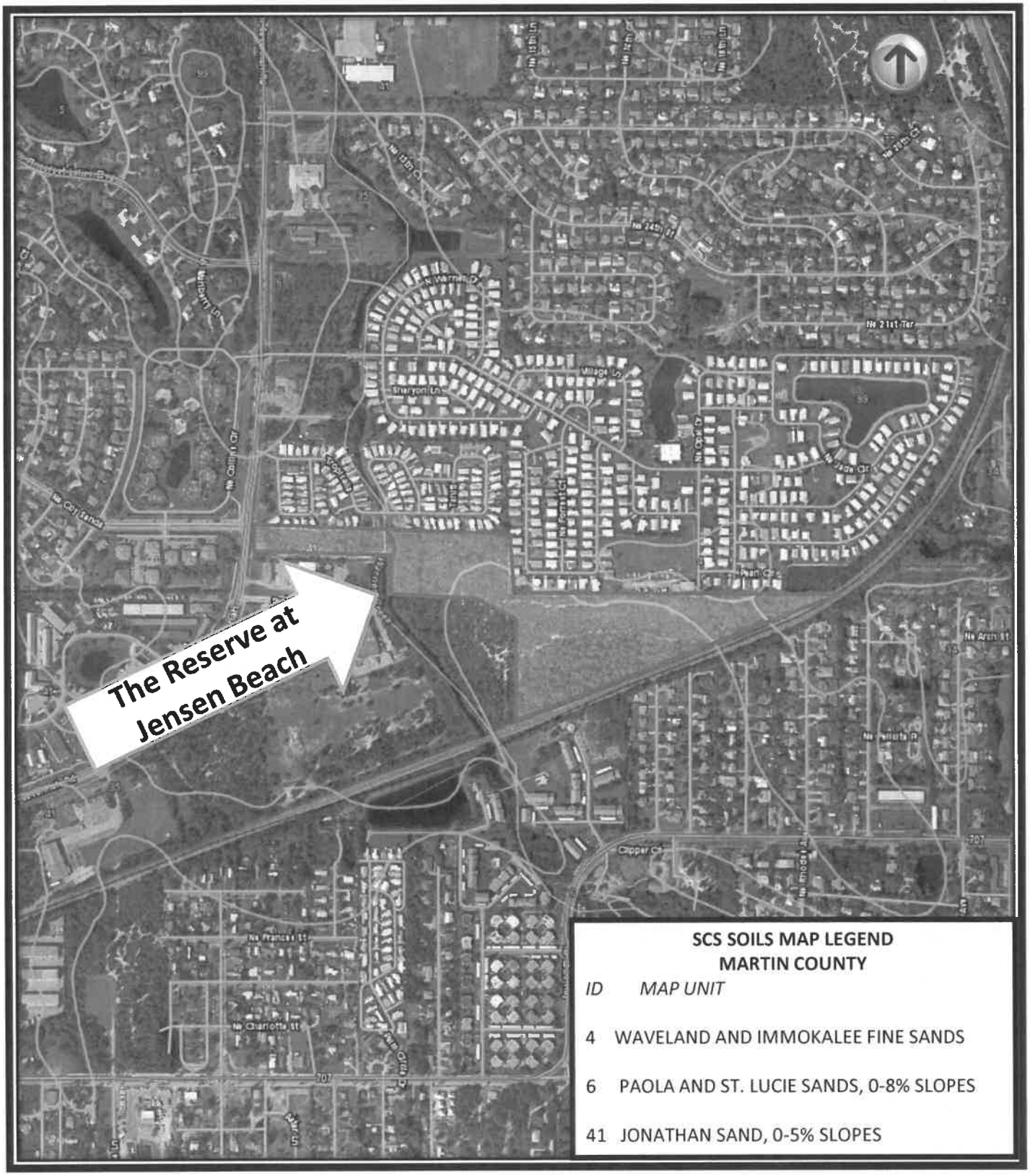

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EXHIBIT 4 – SCS SOIL SURVEY
1329.2 – The Reserve at Jensen Beach Drainage Report

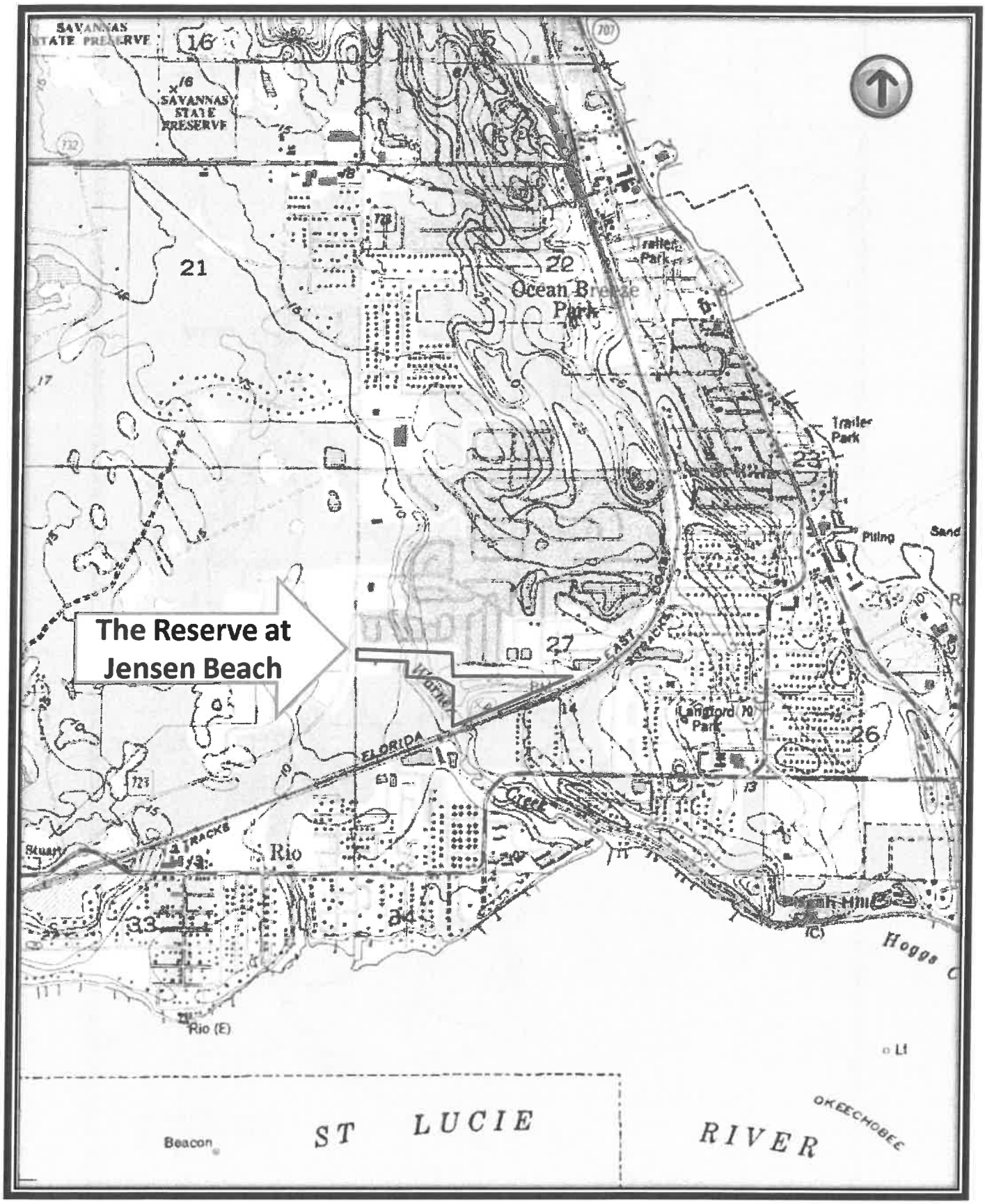

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EXHIBIT 5 – U.S.G.S. QUAD MAP
1329.2 – The Reserve at Jensen Beach Drainage Report

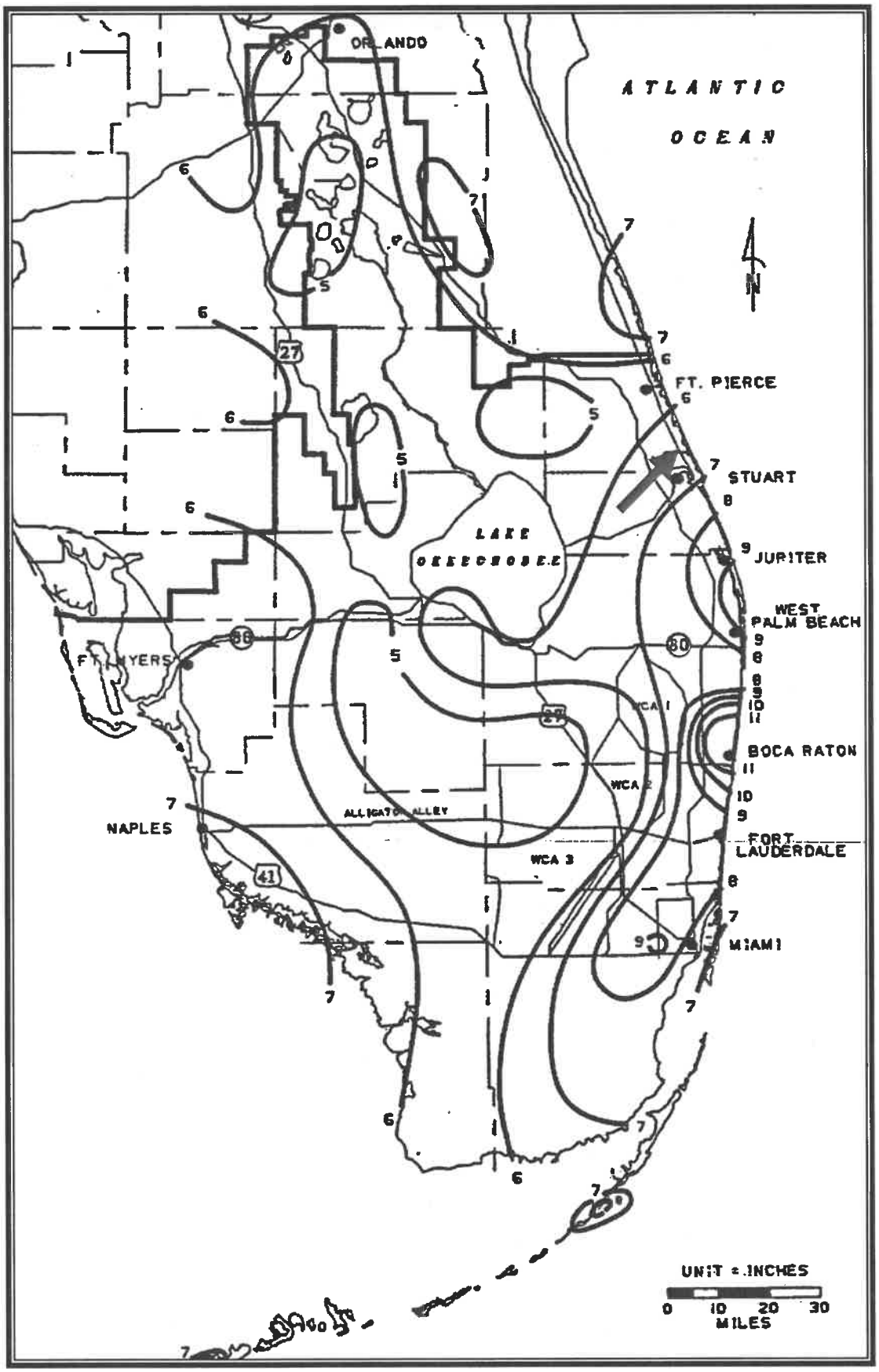

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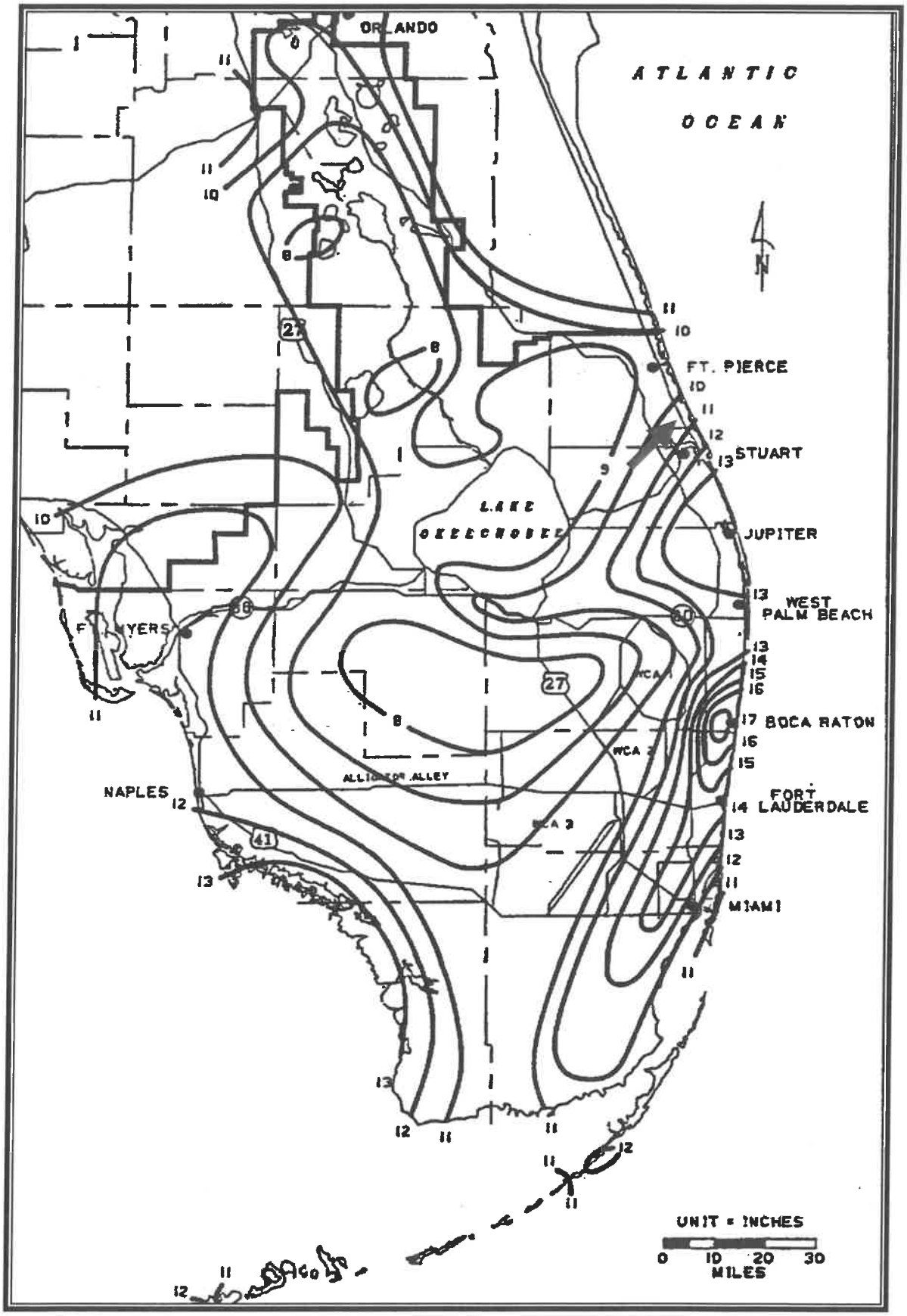
EXHIBIT 6A – SFWMD 1-DAY RAINFALL, 10-YEAR RETURN PERIOD
1329.2 – The Reserve at Jensen Beach Drainage Report



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Civil Engineering Professionals

EXHIBIT 6B – SFWMD 3-DAY RAINFALL, 25-YEAR RETURN PERIOD
1329.2 – The Reserve at Jensen Beach Drainage Report

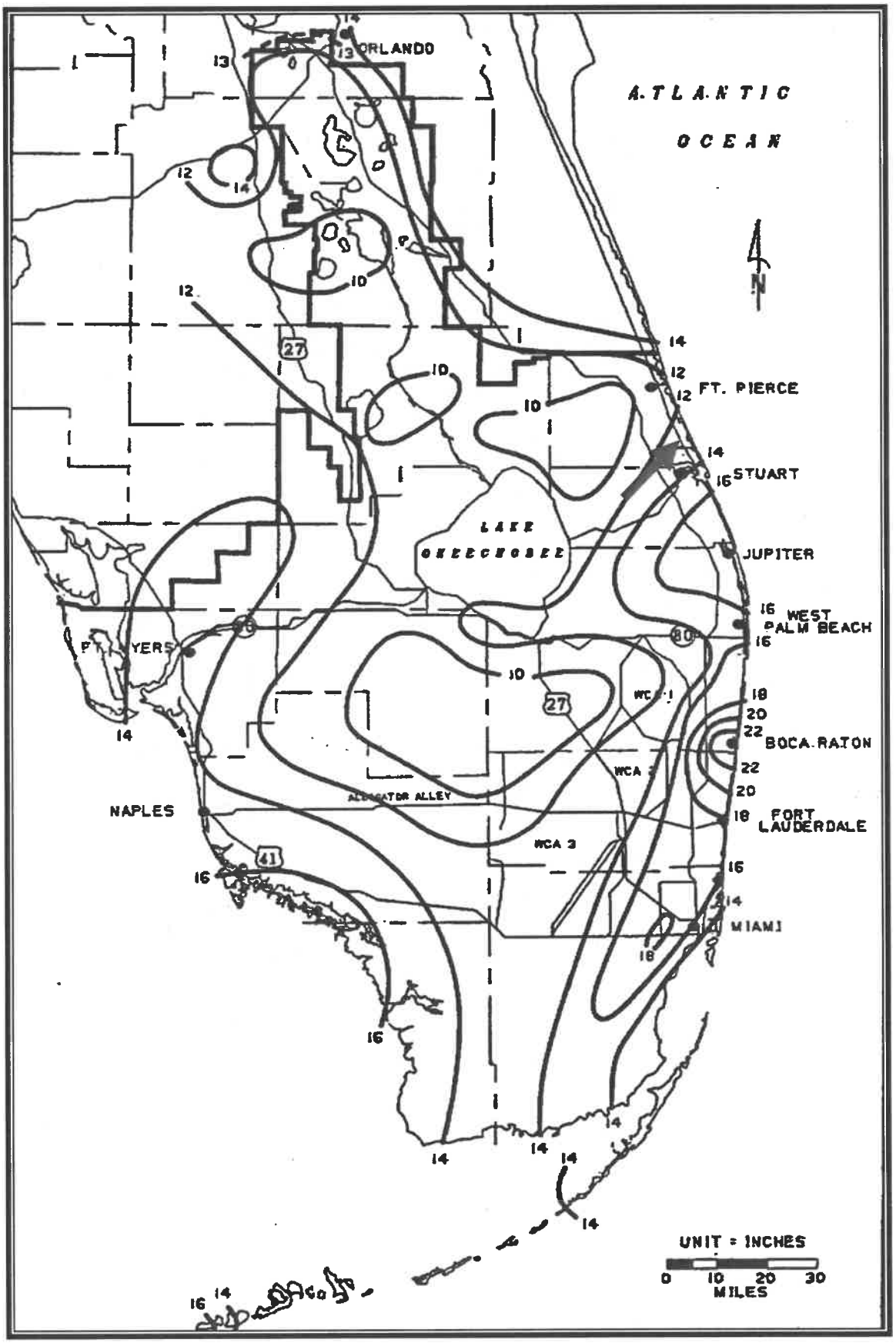
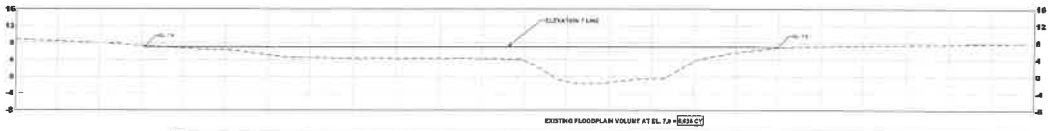
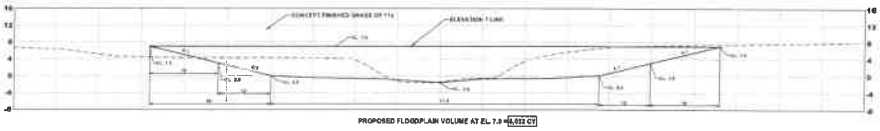


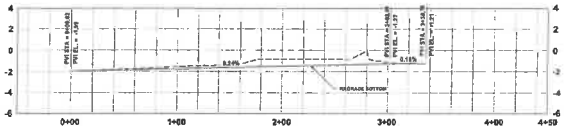
EXHIBIT 6C – SFWMD 3-DAY RAINFALL, 100-YEAR RETURN PERIOD
1329.2 – The Reserve at Jensen Beach Drainage Report





SECTION AA

SCALE: 1" = 10'

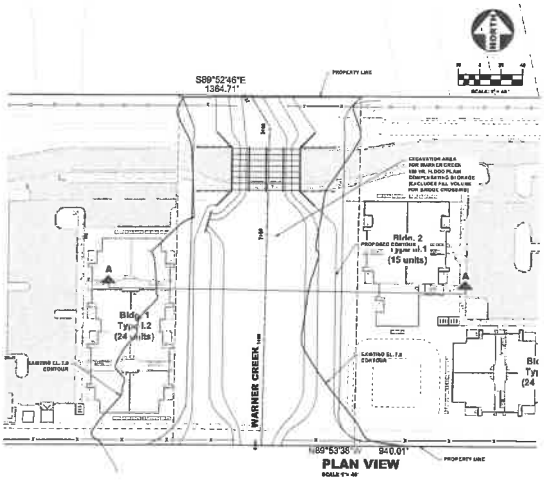


PROFILE WARNER CREEK

SCALE: HORIZ. = 1" = 20' VERT. = 1" = 1'

WARNER CREEK EXISTING

WARNER CREEK PROPOSED



PLAN VIEW

SCALE: 1" = 40'

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
FAX: (772) 692-4341
E-mail: capteclnfo@gocaptec.com
Engineering Business
No. EB-0007657

DRAWN BY: BDC
DESIGNED BY: DPM
CHECKED BY: MLT
PROJECT No.: 1329.1
SCALE: 1" = 40'
ORIG. SCALE:

SCALE VERIFICATION
1" BOLD BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

No.	BY	REVISION	DATE
1	BDC	RE-ORIENTATION	10-8-13

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

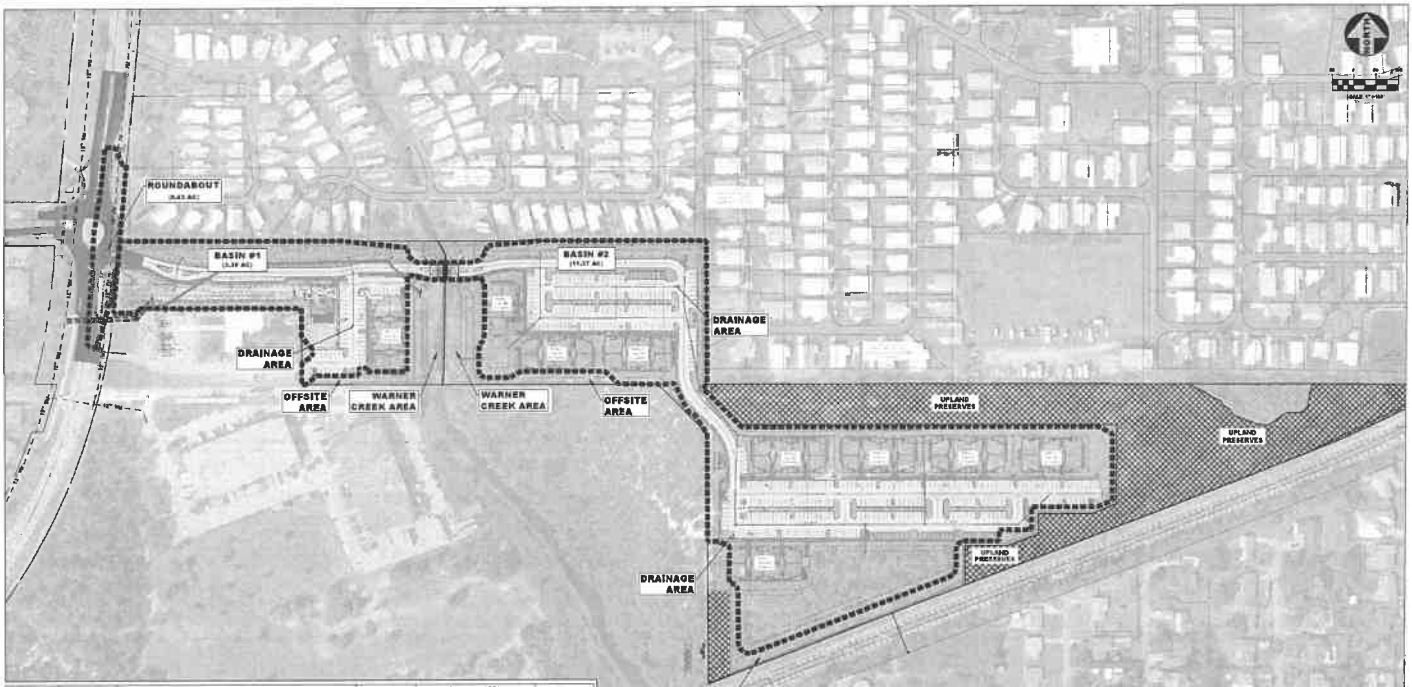
WARNER CREEK
FLOODPLAIN COMPENSATION EXHIBIT (EXHIBIT #7)

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37538

FLOODPLAIN VOLUME 10-11 FILL_BETWEEN CARDS.FILE

SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
SHEET 1 OF 1



PROJECT AREA	DRAINAGE BASIN AREA	IMPERVIOUS AREA					PERVIOUS AREA		
		BUILDINGS	POOL	PAVEMENT	SIDEWALK/ CURB/DRIVE	IMPERVIOUS AREA	DRY RETENTION AREA	LANDSCAPE AREA	PERVIOUS AREA
ROUNDABOUT	0.61	0.00	0.00	0.28	0.14	0.42	0.00	0.20	0.20

PROJECT AREA	AREAS	OFF-SITE AREA	WARNER CREEK	UPLAND BUFFER	DRAINAGE BASIN AREA	IMPERVIOUS AREA					PERVIOUS AREA			
						BUILDINGS	POOL	PAVEMENT	SIDEWALK/ CURB/DRIVE	IMPERVIOUS AREA	DRY RETENTION AREA	LANDSCAPE AREA	PERVIOUS AREA
1	4.06	0.39	0.37	0.00	3.30	0.38	0.02	0.85	0.31	1.56	0.81	0.93	1.74
2	19.09	1.42	0.38	5.92	11.37	1.97	0.00	3.52	0.72	6.21	1.85	3.31	5.16
TOTAL PROJECT SITE	23.15	1.81	0.75	5.92	14.67	2.35	0.02	4.37	1.03	7.77	2.66	4.24	6.90

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007867

DATE: 11/19/2019
DRAWN BY: TJS
DESIGNED BY: SPM
CHECKED BY: JMC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE: _____

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

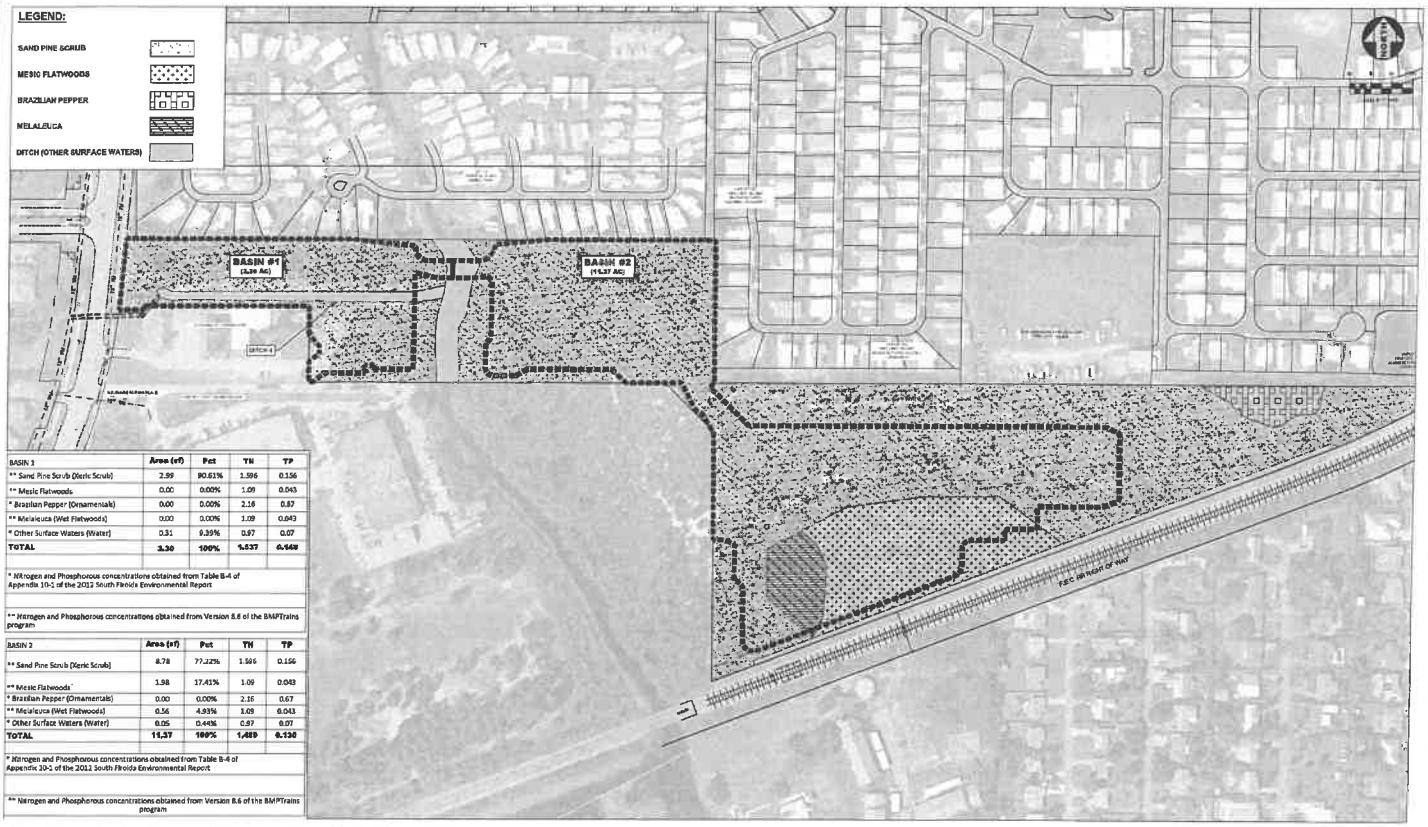
MARTIN COUNTY, FLORIDA

OVERALL SITE DRAINAGE AREA MAP (EXHIBIT #8)

Joseph M. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37139

CAD FILE: SITE DRAINAGE AREA MAP
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 1 OF 1



BASIN 1	Area (af)	Pct	TN	TP
** Sand Pine Scrub (Xeric Scrub)	2.09	90.61%	1.596	0.156
** Mesic Flatwoods	0.00	0.00%	1.09	0.043
* Brazilian Pepper (Ornamentals)	0.00	0.00%	2.16	0.67
** Melaleuca (Wet Flatwoods)	0.00	0.00%	1.09	0.043
* Other Surface Waters (Water)	0.21	9.39%	0.97	0.07
TOTAL	**2.30**	**100%**	**1.537**	**0.468**

* Nitrogen and Phosphorous concentrations obtained from Table B-4 of Appendix 10-1 of the 2012 South Florida Environmental Report

** Nitrogen and Phosphorous concentrations obtained from Version 8.6 of the BMPTrains program

BASIN 2	Area (af)	Pct	TN	TP
** Sand Pine Scrub (Xeric Scrub)	8.78	77.22%	1.596	0.156
** Mesic Flatwoods	1.98	17.41%	1.09	0.043
* Brazilian Pepper (Ornamentals)	0.00	0.00%	2.16	0.67
** Melaleuca (Wet Flatwoods)	0.56	4.93%	1.09	0.043
* Other Surface Waters (Water)	0.05	0.44%	0.97	0.07
TOTAL	**11.37**	**100%**	**1.489**	**0.130**

* Nitrogen and Phosphorous concentrations obtained from Table B-4 of Appendix 10-1 of the 2012 South Florida Environmental Report

** Nitrogen and Phosphorous concentrations obtained from Version 8.6 of the BMPTrains program

NOTE: REFER TO APPENDIX 1.16 FOR ALL NUTRIENT LOADING CALCULATIONS (BMPTRAINS VER 8.5)

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: capteclnfo@gocapteC.com
Engineering Business
No. EB-0007867

DATE 10/12/2011
DRAWN BY: TJS
DESIGNED BY: SFW
REVIEWED BY: JWC
PROJECT No: 1329.2
HORIZ. SCALE: 1" = 200'
VERT. SCALE:

SCALE VERIFICATION
1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DISTANCES ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

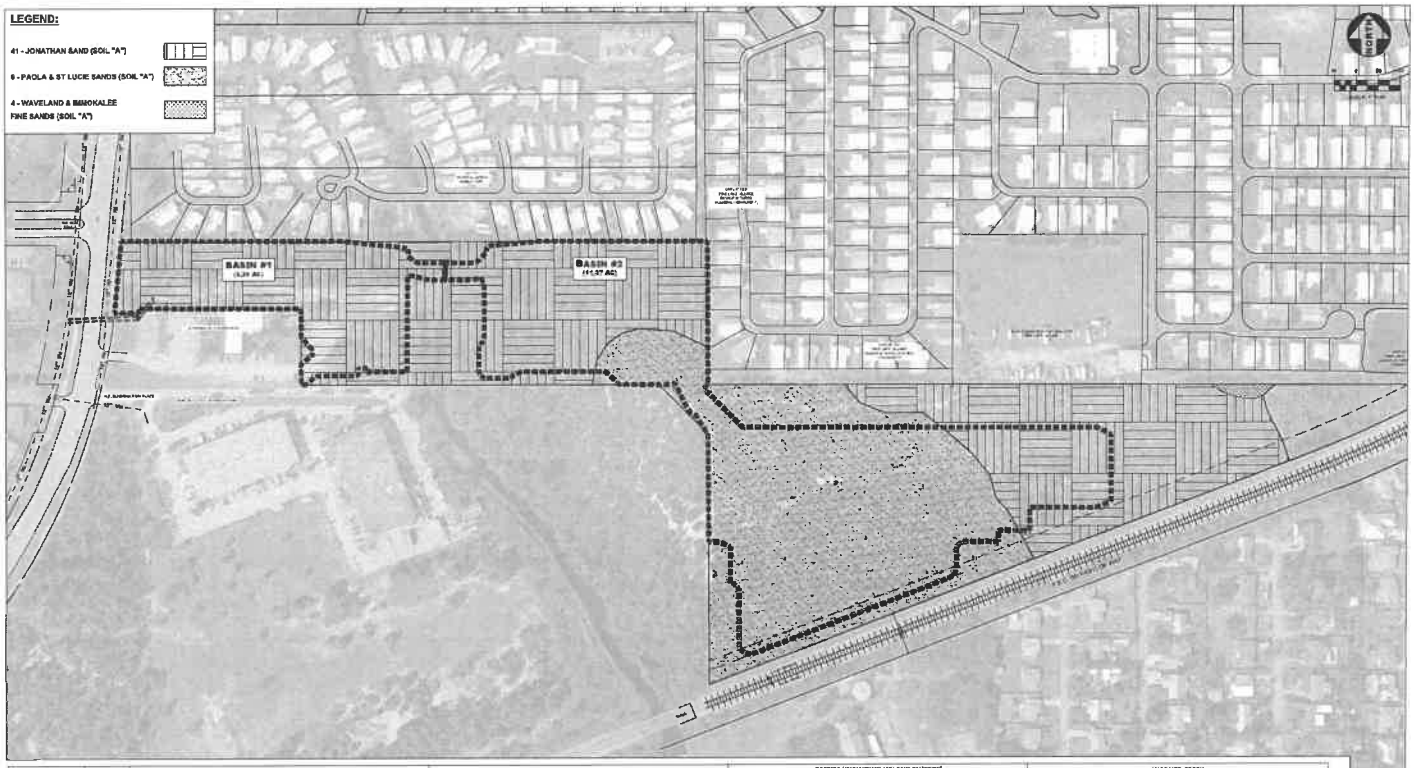
MARTIN COUNTY, FLORIDA

PRE-DEVELOPMENT NUTRIENT LOADING MAP (EXHIBIT #9)

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37408

LAND COVERAGE MAP FOR EXHIBIT 22.00 PE.S

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 1 OF 1



		BASIN 1							BASIN 2							OFFSITE (INCLUDING UPLAND BUFFERS)							WARNER CREEK						
Land Coverage	CN (Land Type)	Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct
Soil Type (A)	39	3.30		3.30	39.00				11.37		11.37	39.00				7.73		7.73	39.00				0.75	0.00	0.75	0.00			
TOTAL		3.30		3.30	39.00	0.00	0.00	0.00%	11.37		11.37	39.00	0.00	0.00	0.00%	7.73		7.73	39.00	0.00	0.00	0.000%	0.75	0.00	0.75	0.00	0.00	0.00	0.000%

NOTE: REFER TO APPENDIX 1.16 FOR ALL NUTRIENT LOADING CALCULATIONS (BMPTRAINS VER 8.6)

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007627

DATE: 10/7/2010
DRAWN BY: TJS
DESIGNED BY: BPM
CHECKED BY: JWC
PROJECT No.: 1329.2
SHEET SCALE: 1" = 100'
VERT. SCALE: _____

SCALE VERIFICATION
1 SQUARE INCH = 1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

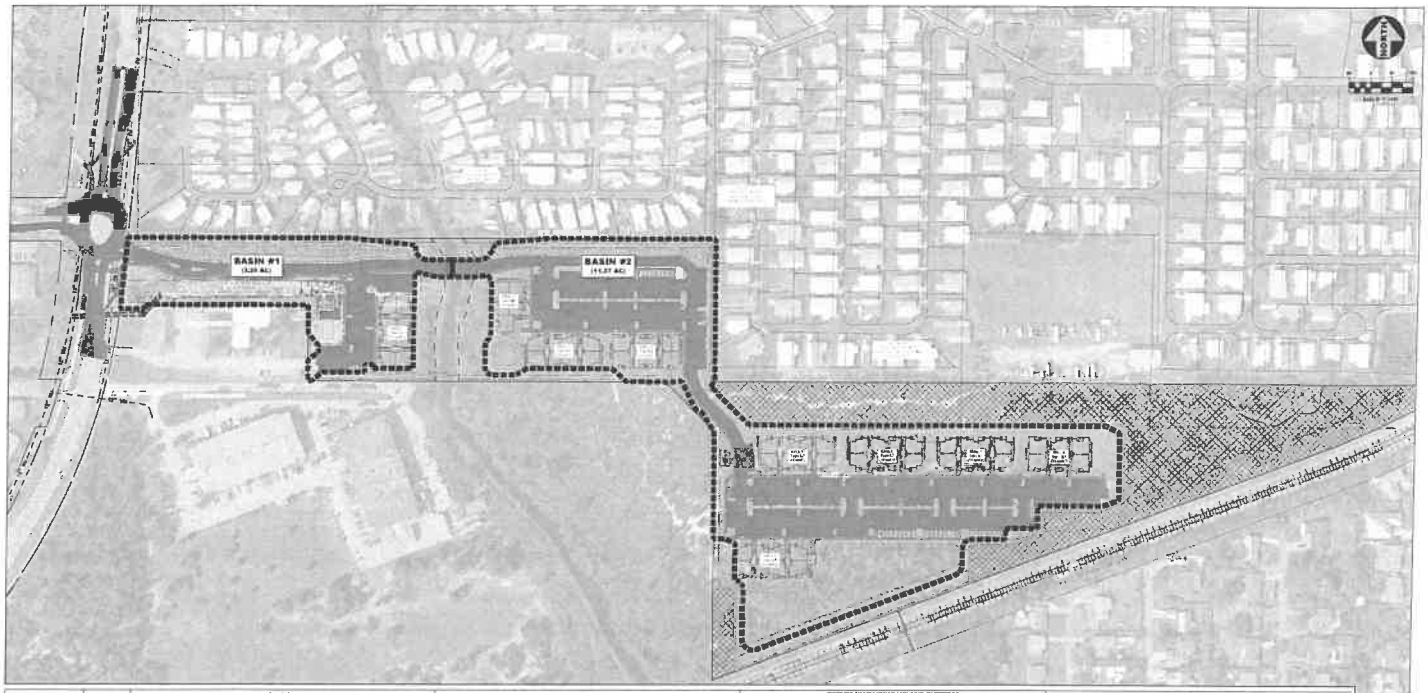
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

PRE-DEVELOPMENT LAND COVERAGE MAP (EXHIBIT #10)

Joseph W. Capta
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 32138

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 1 OF 1



Land Coverage	CN (Land Type)	BASIN 1 Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	BASIN 2 Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	OFFSITE (INCLUDING UPLAND BUFFERS) Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct	OFFSITE (INCLUDING UPLAND BUFFERS) Area (AC)	Eff. CN	Non-DCIA Area	Non-DCIA Eff CN	DCIA Area	DCIA Eff CN	DCIA Pct
Soil Type (A)	39	0.94		0.94	27.77				3.33		3.31	24.45				7.73		7.73	39.00				0.75	0.00	0.75	0.00			
Buildings (Non-DCIA)	98	0.38		0.38	28.21				1.97		1.97	36.56				0.00		0.00	0.00				0.00	0.00	0.00	0.00			
Pavement/ Curb/Sidewalk/Pool	98	1.18				1.18	98.00		4.24				4.24	98.00		0.00		0.00	0.00				0.00	0.00	0.00	0.00			
Dry Retention Area - Extended BMP Area (No Loading from this area)	98	0.81							1.85							0.00							0.00	0.00					
TOTAL		2.50		1.32	55.98	1.18	98.00	47.2000%	9.52		5.28	61.01	4.24	98.00	44.5378%	7.73		7.73	39.00	0.00	0.00	0.00%	0.75	0.00	0.75	0.00	0.00	0.00	0.00%

NOTE: REFER TO APPENDIX 1.15 FOR ALL NUTRIENT LOADING CALCULATIONS (BMPTRAINS VER 8.6)

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinc@gocaptec.com
Engineering Business
No. EB-0007657

DATE: 1/07/2020
DRAWN BY: TJS
DESIGNED BY: SMW
CHECKED BY: JDW
PROJECT NO.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE:

SCALE VERIFICATION
1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

POST DEVELOPMENT LAND COVERAGE MAP (EXHIBIT #11)

Joseph W. Capra
301 N.W. Flagler Ave
Stuart, Florida 34994
P.E. No. 37628

SHEET IDENTIFICATION
JOB NO.: 1329.2
SHEET
SHEET 1 OF 1

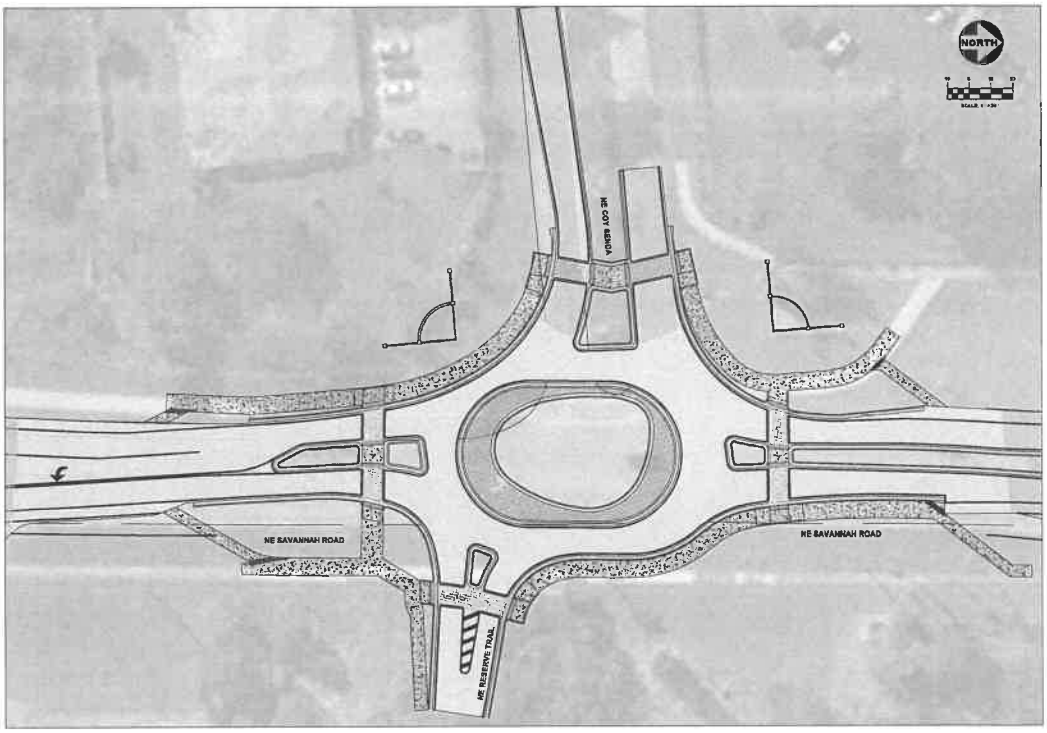
NOTE:

REFER TO APPENDIX 1.2 FOR NE SAVANNAH ROUNDABOUT SITE DATA / WATER QUALITY CALCULATIONS

PROPOSED IMPERVIOUS AREA (ADDITIONAL)
0.298 AC.

EXISTING / REMOVED IMPERVIOUS AREA
0.130 AC.

NET IMPERVIOUS AREA
PROPOSED IMPERVIOUS AREA (ADDITIONAL) - EXISTING / REMOVED ASPHALT
0.168 AC.



CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007867

DATE: 1/07/2010
DRAWN BY: TJS
DESIGNED BY: BPM
CHECKED BY: JRC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 20'
VERT. SCALE: —

SCALE VERIFICATION
1"
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

ROUNDABOUT (OFF-SITE)
(EXHIBIT #12)

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37636

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 1 of 1

EXHIBIT 13

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

April 25, 2018

** Delivered via email*

David Christenson
Davelu LLC
759 South Federal Highway
Stuart, FL 34994

Subject: River's Edge Apartments
Application No. 180410-464
Informal Wetland Determination No. 43-100226-P
Martin County

Dear Mr. Christenson:

The District reviewed your request for an informal determination of the jurisdictional wetland and other surface water boundaries within the subject property, which is located as shown on the attached Exhibit 1. A site inspection was conducted on April 19, 2018.

Based on the information provided and the results of the site inspection, jurisdictional other surface waters as defined in Chapter 62-340, Florida Administrative Code, exist on the property. Exhibit 2, attached, identifies the boundaries of the property inspected and the approximate landward limits of the other surface waters.

This correspondence is an informal jurisdictional wetland determination pursuant to Section 373.421(6), Florida Statutes, and Section 7.3 of Environmental Resource Permit Applicant's Handbook Volume I. It does not bind the District, its agents or employees, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal jurisdictional determination are not entitled to rely upon it for purposes of compliance with provision of law or District rules.

Sincerely,

Barbara Conmy
Section Leader

c: Daniel Saskowsky, Daniel M Saskowsky Environmentalconsultant *
Lucido and Associates *

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 180410-464.

Exhibit 1

Exhibit 2

Exhibit No: 1	Exhibit Created On: 2018-04-20	MARTIN COUNTY, FL

REGULATION DIVISION

Project Name: River's Edge Apartments

0 0.075 0.15 Miles

N

Application

Application Number: 180410-464

South Florida Water Management District

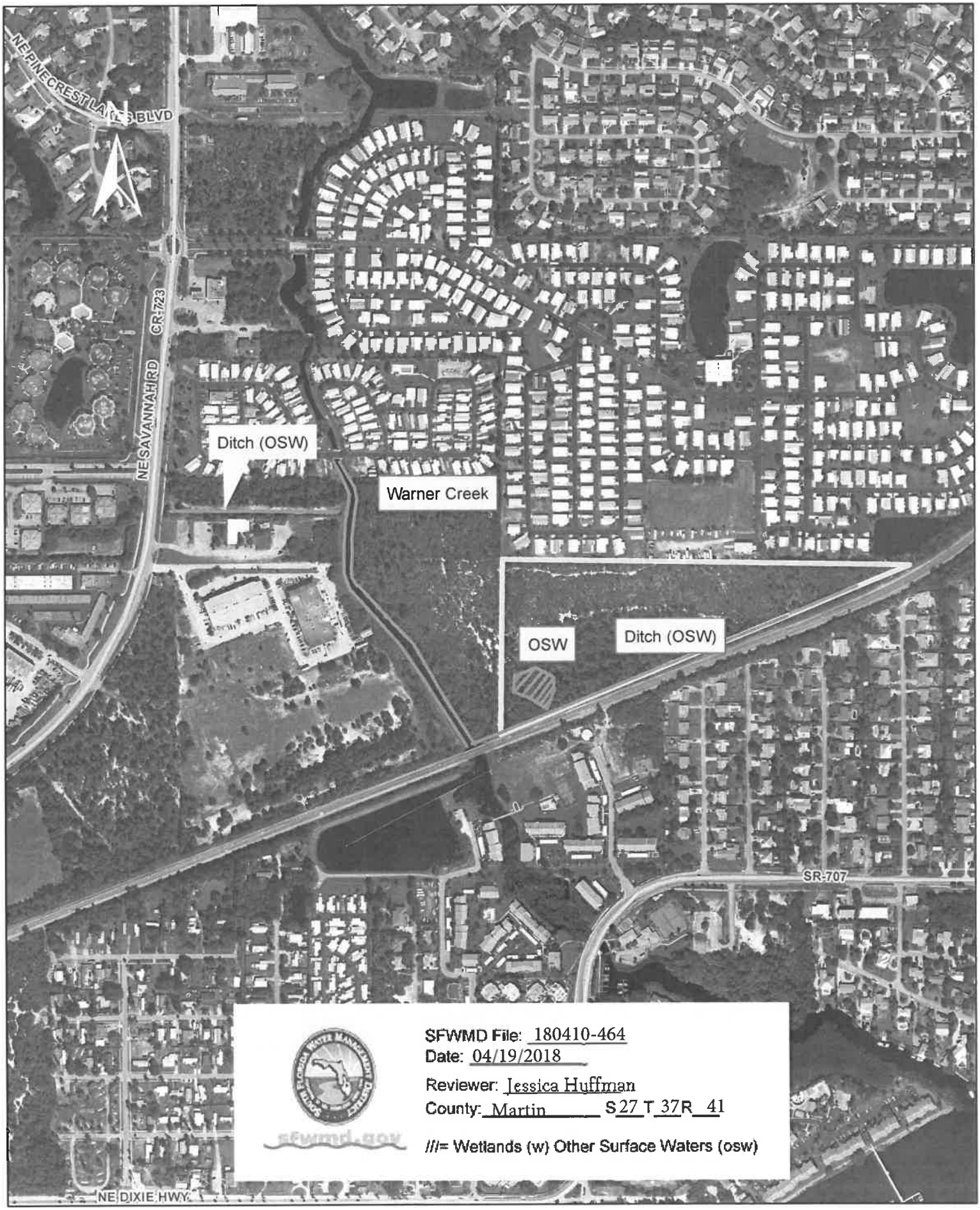

NE PINECREST LAKES BLVD
CR-723
NE SAVANNAH RD
Ditch (OSW)
Warner Creek
OSW
Ditch (OSW)
SR-707
NE DIXIE HWY
SFWMD File: 180410-464
Date: 04/19/2018
Reviewer: Jessica Huffman
County: Martin S 27 T 37 R 41
///= Wetlands (w) Other Surface Waters (osw)

EXHIBIT 14

Last Date For Agency Action: May 2, 2010

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: Warner Creek Storm Water Quality Retrofit

Permit No.: 43-02364-P

Application No.: 090128-6 090218-3 WU Related

Application Type: Environmental Resource (New Construction/Operation)

Location: Martin County, S27/T38S/R41E

Permittee : Martin County Board Of County Commissioners

Operating Entity : Martin County Board Of County Commissioners

FINAL APPROVED BY THE EXECUTIVE DIRECTOR MARCH 29, 2010

Project Area: 10.50 acres

Project Land Use: Other

Drainage Basin: MIDDLE COASTAL **Sub Basin:** WARNER CREEK

Receiving Body: ST. LUCIE RIVER **Class:** CLASS III

Special Drainage District: NA

Total Acres Wetland Onsite:	.45
Total Acres Wetland Preserved Onsite:	.13
Total Acres Impacted Onsite :	.32
Total Acres Presv/Mit Compensation Onsite:	.42

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit to authorize construction and operation of a stormwater treatment area and surface water management system to serve the existing Warner Creek Basin.

dependent endangered/threatened species or species of special concern. Therefore, no adverse impacts to wetland-dependent endangered/threatened species or species of special concern are anticipated as a result of the proposed project. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements in accordance with the Special Conditions.

LEGAL ISSUES:

The applicant is responsible for the successful completion of the mitigation program and the continued preservation and maintenance of the onsite preservation/mitigation areas in perpetuity in accordance with Exhibit 3.1 and the Special Conditions.

CERTIFICATION AND MAINTENANCE OF THE WATER MANAGEMENT SYSTEM:

It is suggested that the permittee retain the services of a Professional Engineer registered in the State of Florida for periodic observation of construction of the surface water management (SWM) system. This will facilitate the completion of construction completion certification Form #0881 which is required pursuant to Section 10 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, and Rule 40E-4.361(2), Florida Administrative Code (F.A.C.).

Pursuant to Chapter 40E-4 F.A.C., this permit may not be converted from the construction phase to the operation phase until certification of the SWM system is submitted to and accepted by this District. Rule 40E-4.321(7) F.A.C. states that failure to complete construction of the SWM system and obtain operation phase approval from the District within the permit duration shall require a new permit authorization unless a permit extension is granted.

For SWM systems permitted with an operating entity who is different from the permittee, it should be noted that until the permit is transferred to the operating entity pursuant to Rule 40E-1.6107, F.A.C., the permittee is liable for compliance with the terms of this permit.

The permittee is advised that the efficiency of a SWM system will normally decrease over time unless the system is periodically maintained. A significant reduction in flow capacity can usually be attributed to partial blockages of the conveyance system. Once flow capacity is compromised, flooding of the project may result. Maintenance of the SWM system is required to protect the public health, safety and the natural resources of the state. Therefore, the permittee must have periodic inspections of the SWM system performed to ensure performance for flood protection and water quality purposes. If deficiencies are found, it is the responsibility of the permittee to correct these deficiencies in a timely manner.

SOVEREIGN/SUBMERGED LANDS:

On February 12, 2009, documentation was received from the Division of State Lands Title and Land Records Section (DSL) indicating that DSL staff was unable to determine whether or not the submerged lands of Warner Creek within the vicinity of the proposed activity are State-owned. Therefore, DSL staff recommends that proprietary requirements normally applied to State-owned lands not apply to this project. Please refer to Exhibit 4.

02 / 11 / 2009
16:49.54

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TITLE AND LAND RECORDS SECTION
BOARD OF TRUSTEES LAND DATABASE SYSTEM
WORKSHEET SHORT FORM (FOR INTERNAL DEP USE ONLY)

FILE NUMBER:	090128-6
WORKSHEET ID:	86566
COUNTY:	MARTIN
APPLICANT:	JOSEPH CAPRA, PE, AGENT
COMPANY:	BOARD OF COUNTY COMM, MARTIN COUNTY
SITE:	BEACON 21 CONDO PHASE II SEWER PLANT (14 NE 14TH CT, STUART LOCATED @ S SIDE OF RR RWY, WEST OF WARNER CREEK)
TYPE OF ACTIVITY:	STORMWATER MGMT IMPROVEMENTS

PROJECT LOCATION:	SECTION	TOWNSHIP	RANGE
	27	37S	41E

AQUATIC PRESERVE:	N/A
WATER BODY:	WARNER CREEK

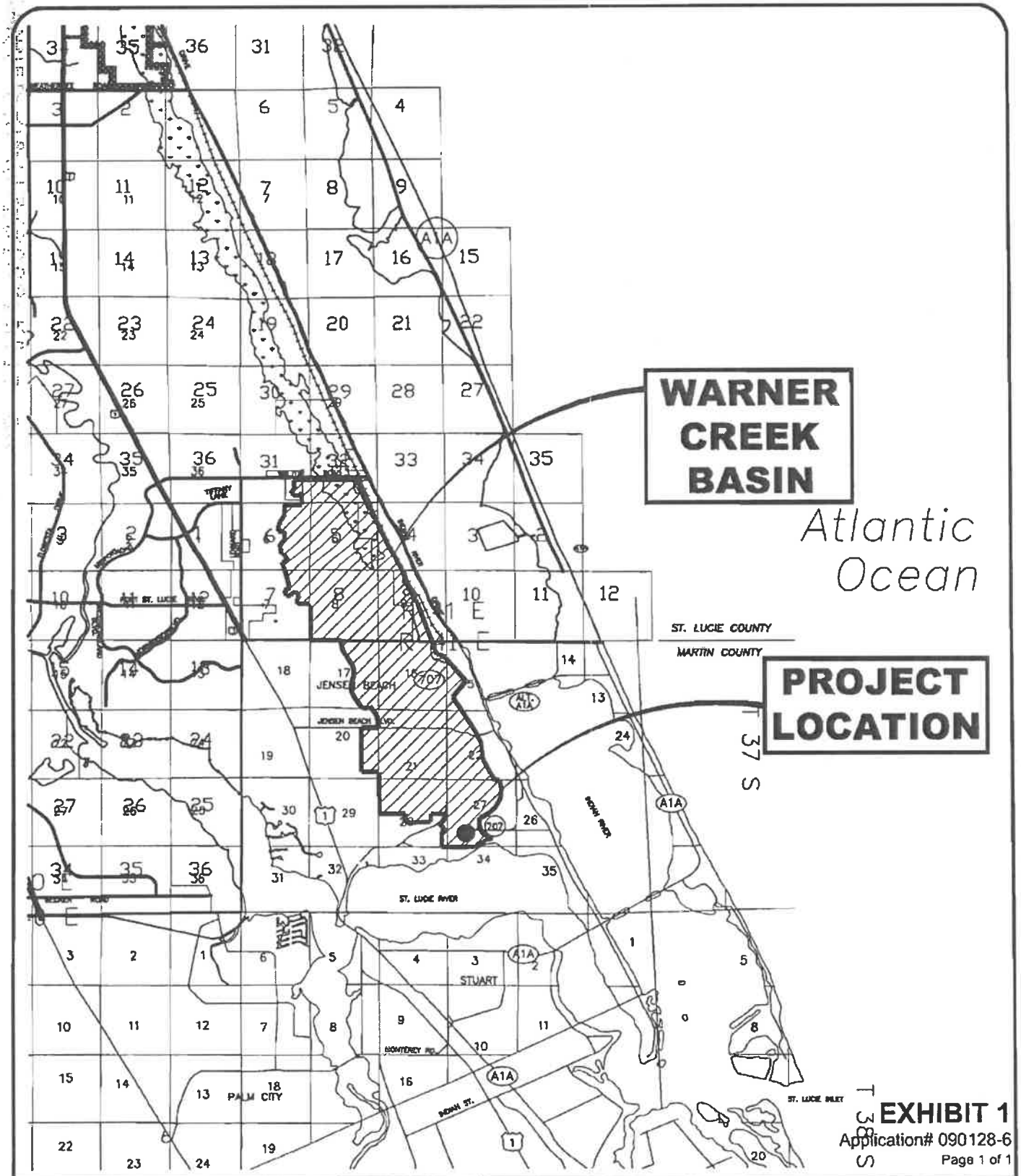
COMMENTS: RECORDS INDICATE THAT THE SUBMERGED LANDS LYING BELOW THE MEAN HIGH WATER LINE OF WARNER CREEK PRIOR TO ALTERATIONS OF THE NATURAL SHORELINE ARE STATE OWNED AND ARE SUBJECT TO EXISTING ESMT NOS. 00209(4048-43), 29057(4401-43), AND 29463(4714-43). HOWEVER, BASED ON AVAILABLE INFORMATION WE ARE UNABLE TO DETERMINE WHETHER THE SUBMERGED LANDS OF THE CREEK WITHIN THE VICINITY OF THE PROPOSED ACTIVITY ARE STATE OWNED. THEREFORE, WE RECOMMEND THAT PROPRIETARY REQUIREMENTS NORMALLY APPLIED TO STATE OWNED LANDS NOT APPLY TO THIS PROJECT.

PREPARER:
DATE PREPARED: 02 / 11 / 2009

****

NOTICE: THE CONCLUSIONS AND DETERMINATIONS SET FORTH IN THIS TITLE WORKSHEET ARE BASED ON A REVIEW OF THE RECORDS CURRENTLY AVAILABLE WITHIN THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AS SUPPLEMENTED, IN SOME CASES, BY INFORMATION FURNISHED BY THE REQUESTING PARTY. SINCE THE ACCURACY AND COMPLETENESS OF THE TITLE INFORMATION REVIEWED MAY VARY, THE CONCLUSIONS AND DETERMINATIONS SET FORTH HEREIN DO NOT CONSTITUTE A LEGAL OPINION OF TITLE AND SHOULD NOT BE RELIED ON AS SUCH.

****



CAPTEC Civil Engineering Professionals

Joseph W. Capra
381 N.W. Flagler Ave
Stuart, Florida 34994
P.E. No. 37638
Phone: (772) 692-4344
Fax: (772) 692-4341

Engineering Business No. EB-0007657

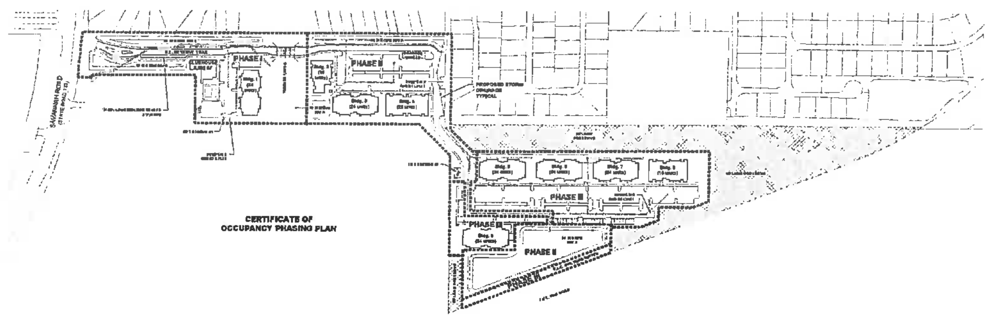
DATE:	07-19-07
DRAWN BY:	DHR
DESIGNED BY:	
CHECKED BY:	JWC
PROJECT No.:	530.8
HORZ. SCALE:	N.T.S.
VERT. SCALE:	N.T.S.
CADD FILE:	

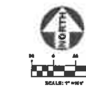
WARNER CREEK
STORMWATER QUALITY RETROFIT
MARTIN COUNTY, FLORIDA

EXHIBIT 1
LOCATION MAP

SCALE VERIFICATION
SOLID BAR IS EQUAL TO HALF AN INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

Sheet No. 1 of 1





CERTIFICATE OF OCCUPANCY SEQUENCE

GENERAL NOTES: (applies to all Phases of Project)

1. The Clubhouse & Pool (including all related foundation plantings and the sidewalk along the eastern Clubhouse & Pool boundary) will be completed prior to Building 2 Certificate of Occupancy (CO) issuance.
2. The preserve area exotic removal required by the PAMP shall be completed prior to any CO.
3. Apartment building construction sequence shall be Building No. 1, 2, 3, 4, 5, 9, 6, 7, and 8.
4. Paving shall be installed in two lifts of asphalt. Sequence of 1st Lift Paving shall be completed in three (3) separate mobilization/phases. Temporary Striping shall be installed on 1st Lift to provide ample parking per MC LDR requirements for Certificate of Occupancy (CO) issuance purposes. The 2nd Lift of asphalt and Final Striping will be installed prior to the Building 8 CO.
5. The Pinelake Village watermain extension will be completed prior to the Building 8 CO.
6. All buffers within a phase shall be installed prior to any Building CO within the phase.
7. With the exception of the adjacent foundation plantings around each building which can be phased by building, all parking lot landscaping shall be installed and certified with the development of the associated phase parking lot infrastructure and prior to CO of any building within the phase. Landscaping within the entire phase must be inspected and approved by Martin County prior to the first CO issuance of the phase.
8. Foundation landscaping and irrigation shall be installed on a building by building basis for each respective Building CO. As each building is constructed, landscaping and irrigation will be installed in the surrounding area after the fine grading, paving and sidewalks are completed. The foundation landscaping and irrigation will be completed in the sequence listed above in General Note #3 for the nine (9) apartment buildings.
9. The 7 ft. opaque perimeter fence within Phase I and II shall be installed 10 ft. off the property line prior to the issuance of any building permits.

PHASE 1 – CORE INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

1. Construct stabilized access and turn around area for emergency vehicles along NE Reserve Trail to temporary trailer location and to Warner Creek
2. Install temporary bridge across Warner Creek to provide full site access for protected species work, erosion & sediment control BMP installation, exotic vegetation removal, and Timber Bridge construction
3. Construct Warner Creek Timber Bridge, Abutments, and Wingwalls
4. Construct By-Pass drainage pipe system from Savannah Road to Warner Creek, consisting of Structures SD-1 through SD-5, HW-1, and Control Structure CS-1
5. Install stabilized access for emergency vehicles on NE Reserve Trail to Dry Retention Area 5
6. Perform mass grading of entire site, including perimeter berms
7. Construct Dry Detention Areas 1 - 5 and Warner Creek expansion, sod and plant vegetation areas per construction plan details and regulatory requirements (MC, SFWMD & NPDES)
8. Construct infrastructure within the Phase 1 boundary limits:
   a. Construct drainage pipe systems consisting of Structures SD-6 through SD-13
   b. Construct Lift Station #1, force main, and sewer services to Clubhouse & Building 1
   c. Construct water main, fire hydrants and water services to Clubhouse & Building 1
   d. Install horizontal directional drill utilities under Warner Creek on north side of Timber Bridge
   e. Construct dry utilities, FPL, cable, phone, internet to Clubhouse & Building 1

PHASE 1 – CO INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

1. Construct curb, sidewalks, roadway and parking lots between Savannah Road and the Timber Bridge
2. Construct Clubhouse, Pool, Building 1, Dumpster Enclosure and Emergency Access with Knox Box
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections, (electrical, phone, cable TV & Internet)
3. Install First Lift of Asphalt with temporary striping & signage for Phase 1 area
4. Complete Warner Creek grading, access turnouts, sodding, Rip Rap, guardrail, curbing, sidewalks, paving, and remove Warner Creek Construction temporary BMP/erosion control measures
5. Install landscaping for Building 1 & Clubhouse / Pool areas
6. Install Common Area Sidewalks and Bike Racks serving Phase 1
7. Install Street Lighting for main roadway and parking lot
8. Install perimeter fence and landscape buffers for Phase 1 & Phase 2
9. Install United States Postal Service mailboxes
10. Certification from SFWMD / FDEP / Martin County Health Department
11. Martin County Certificate of Occupancy for Building 1 & Clubhouse / Pool
12. Demobilization of Temporary Leasing Trailer within 30 days after receipt of Clubhouse CO

PHASE 2 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

1. Construct infrastructure within the Phase 2 boundary limits
   a. Construct drainage pipe systems, consisting of Structures SD-14 through SD-31 and Control Structure CS-2 (Structure SD-27 may be delayed to Phase 3)
   b. Construct force main, Lift Station #2 and sewer services to Buildings 2, 3 & 4
   c. Construct water main, fire hydrants and water services to Buildings 2, 3 & 4
   d. Construct dry utilities, FPL, cable, phone, internet services to Buildings 2, 3 & 4

PHASE 2 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

1. Construct curb, sidewalks, roadway and parking lots to STA 29+60
2. Construct Buildings 2, 3 & 4
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections, (electrical, phone, cable TV & Internet)
3. Construct Parking Garages and Dumpster Enclosure
4. Install First Lift of Asphalt with temporary striping & signage
5. Install landscaping serving each Building in Phase 2
6. Install Common Area Sidewalks and Bike Racks serving Phase 2
7. Install Street Lighting serving main roadway and parking lots
8. Install United States Postal Service mailboxes
9. Certification from FDEP / Martin County Health Department
10. Martin County Certificates of Occupancy (Building by Building) for Bldgs. 2, 3 & 4

PHASE 3 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

1. Construct stabilized access for emergency vehicles to STA 37+70
2. Construct infrastructure within the Phase 3 boundary limits:
   a. Construct drainage pipe systems consisting of Structures SD-32 through SD-37
   b. Construct gravity sewers and sewer services to Buildings 5 thru 9
   c. Construct water main, fire hydrants and water services to Buildings 5 thru 9
   d. Construct dry utilities, FPL, cable, phone, internet to Buildings 5 thru 9

PHASE 3 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

1. Construct Retaining Wall behind Buildings 8 and 9
2. Construct Pinelake Village watermain extension
3. Construct curb, sidewalks, and parking lots serving Buildings 5 thru 9 (phased building by building)
4. Construct Buildings, in the following order 5, 9, 6, 7 and 8
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections, (electrical, phone, cable TV & Internet)
5. Construct Parking Garages, Dumpster Enclosures, & Entry Features
6. Install First Lift of Asphalt with temporary striping & signage (phased building by building)
7. Install landscaping serving each Building in Phase 3 (phased building by building)
8. Install Common Area Sidewalks and Bike Racks serving Phase 3 building by building
9. Install Street Lighting serving main roadway and parking lots building by building
10. Install perimeter fence and landscape buffers serving Phase 3.
11. Install the railroad landscape buffer (area between the retention pond and the property line/FEC ROW)
12. Install United States Postal Service mailboxes
13. Certification from FDEP / Martin County Health Department
14. Martin County Certificates of Occupancy (Building by Building) for Bldgs. 5, 9, 6 & 7

FINAL CLOSE-OUT

1. Demobilization of Construction Trailer
2. Final Lift of Asphalt on NE Reserve Trail and project areas prior to Building 8 CO)
3. Final Lift of Asphalt on all parking lots (prior to Building 8 CO)
4. Final signage and striping on all parking lots (prior to Building 8 CO)
5. Pinelake Village watermain completion and certification
6. Final Project close-out per Martin County requirements
7. Certificate of Occupancy from Martin County for Bldg 8

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CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007667

DATE: 10-21-19
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE:

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS
PERMIT PLANS

THE RESERVE AT JENSEN BEACH

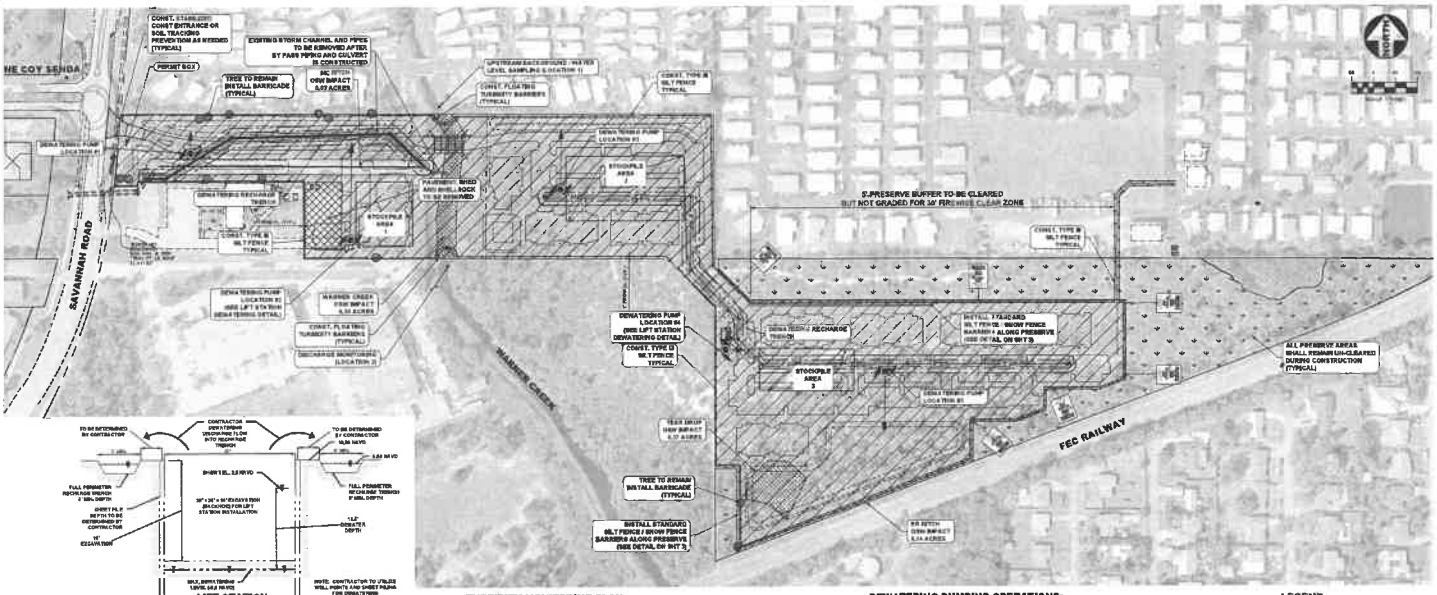
MARTIN COUNTY, FLORIDA

CERTIFICATE OF OCCUPANCY PHASING PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37636

CADD FILE: [illegible]

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 4 OF 28



GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, SFWMD, FDEP AND FDOT STANDARD SPECIFICATIONS AND REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
2. ELEVATIONS SHOWN HEREON REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). PER MARTIN COUNTY BENCHMARKS "B1406", ELEVATION = 13.34 FEET (NGVD 29) AND "D-89", ELEVATION = 9.271 FEET (NGVD 29) CONVERTED TO NAVD 88 BY ADDING 1.2 FEET TO NGVD 29.
3. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE MARTIN COUNTY ENGINEERING DEPT PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
4. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ONSITE IN THE PERMIT BOX, ITS LOCATION IS SHOWN IN THE PLAN VIEW ON THIS PAGE AT THE PROJECT ENTRANCE ON SAVANNAH ROAD.
5. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
6. CLEARING LIMITS ARE APPROXIMATE AND WILL BE ADJUSTED ON SITE TO PRESERVE EXISTING PROTECTED TREES.
7. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND SHALL BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
8. SOIL STABILIZATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES CAUSING VEGETATION REMOVAL. TEMPORARY SOD AND MULCH AND/OR SOD SHALL BE APPLIED TO ALL CLEARED AREAS.
9. THE PROPOSED LAND CLEARING DEBRIS METHOD SHALL BE CHIPPED ON SITE FOR OFF-SITE DISPOSAL.
10. CONTRACTOR WILL MAKE EVERY EFFORT TO UTILIZE EXISTING DISTURBED AND OR CLEARED AREAS ON SITE.
11. ANY PROTECTED TREES WILL BE IDENTIFIED AND MITIGATED PER ON THE LANDSCAPE PLANS PREPARED BY LUCIDO & ASSOCIATES.
12. ALL EXISTING VEGETATION SHALL BE REMOVED FROM THE SITE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR SAGEPARK.
13. PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
14. CONTRACTOR SHALL OBTAIN A MARTIN COUNTY RIGHT-OF-WAY USE PERMIT FOR ALL WORK PERFORMED WITHIN NE SAVANNAH ROAD RIGHT-OF-WAY.

CLEARING AND GRUBBING

THE CONTRACTOR WILL NOT CLEAR AND GRUB ANY SITE WITHOUT PRIOR CONFIRMATION OF WETLAND AND UPLAND PRESERVATION REQUIREMENTS. ALL PRESERVATION AREAS WILL BE FENCED TO AVOID ENCROACHMENT AND WILL BE STRICTLY ENFORCED. CAPTEC ENGINEERING INC. WILL NOT BE RESPONSIBLE FOR ENCROACHMENT BY CONTRACTOR WITHIN UPLAND PRESERVE AREAS. CONTRACTOR IS CAUTIONED TO REVIEW ALL PERMITS AND CONSTRUCTION DOCUMENTS PRIOR TO THE CLEARING/GRUBBING PHASE.

TURBIDITY MONITORING PLAN:

1. TURBIDITY SHALL BE EXPRESSED IN NEPHELOMETRIC TURBIDITY UNITS (NTUS). BACKGROUND SAMPLES SHALL BE TAKEN AT LEAST 100 FEET UPSTREAM OF ANY CONSTRUCTION ACTIVITY WITHIN THE ADJACENT WARNER CREEK. COMPLIANCE SAMPLES SHALL BE TAKEN IN THE LOCATIONS SHOWN. SAMPLES SHALL BE TAKEN TWICE DAILY, WITH AT LEAST A FOUR-HOUR INTERVAL, DURING ALL WORK AUTHORIZED BY THE SFWMD DEWATERING PERMIT.
3. MONITORING SHALL BEGIN ON THE FIRST DAY OF DEWATERING ACTIVITIES FOR ALL DRAINAGE AND UTILITIES INSTALLATION WITHIN THE PROJECT LIMITS. MONITORING SHALL CEASE WHEN ALL DEWATERING ACTIVITIES ARE COMPLETED. THE MONITORING DATA MUST DEMONSTRATE THAT TURBIDITY NO MORE THAN 150 FEET DOWNSTREAM OF ALL PROPOSED ACTIVITIES IS LESS THAN OR EQUAL TO 29 NTU'S ABOVE NATURAL BACKGROUND TURBIDITY AND 50 FEET UPSTREAM OF EACH PROPOSED ACTIVITY DURING CONSTRUCTION AND FOR A PERIOD OF 7 CONSECUTIVE DAYS AFTER COMPLETION OF CONSTRUCTION. IF MONITORING SHOWS SUCH LEVELS TO BE EXCEEDED, CONSTRUCTION SHALL CEASE AND DISTRICT COMPLIANCE STAFF SHALL BE NOTIFIED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL DISTRICT STAFF IS SATISFIED THAT ADEQUATE CORRECTIVE MEASURES HAVE BEEN TAKEN AND TURBIDITY HAS RETURNED TO ACCEPTABLE LEVELS.
3. ALL MONITORING DATA SHALL BE MAINTAINED ON SITE AND BE AVAILABLE TO SFWMD STAFF DURING REGULAR BUSINESS HOURS. THE CONTENT FOR THE DATA SHALL INCLUDE:
   A. PERMIT AND APPLICATION NUMBER;
   B. DATES OF SAMPLING AND ANALYSIS;
   C. STATEMENT DESCRIBING THE METHODS USED IN COLLECTION, HANDLING, STORAGE AND ANALYSIS OF THE SAMPLES;
   D. A MAP INDICATING THE SAMPLING LOCATIONS; AND
   E. A STATEMENT BY THE INDIVIDUAL RESPONSIBLE FOR IMPLEMENTATION OF THE SAMPLING PROGRAM CONCERNING THE AUTHENTICITY, PRECISION, LIMITS OF DETECTION AND ACCURACY OF THE DATA.
4. MONITORING REPORTS SHALL ALSO INCLUDE THE FOLLOWING INFORMATION FOR EACH SAMPLE THAT IS TAKEN
   A. TIME OF DAY SAMPLES TAKEN;
   B. DEPTH OF WATER BODY;
   C. DEPTH OF SAMPLES;
   D. ANTECEDENT WEATHER CONDITIONS;
   E. WIND DIRECTION AND VELOCITY.

DEWATERING PUMPING OPERATIONS:

AVERAGE DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 6" DISCHARGE PUMP OPERATING AT 40% MAXIMUM CAPACITY FOR AN AVERAGE PUMPING RATE OF 2,500 GPM X 40% X 1 PUMP = 1,000 GPM
TOTAL AVERAGE DAILY PUMPING RATE = 1,000 GPM = 1,440,000 GPD

MAXIMUM DAILY PUMPAGE
SINGLE (1) 2,500 GPM, 6" DISCHARGE PUMP OPERATING AT 90% MAXIMUM CAPACITY FOR A MAXIMUM PUMPING RATE OF 2,500 GPM X 90% X 1 PUMP = 2,250 GPM
TOTAL MAXIMUM DAILY PUMPING RATE = 2,250 GPM = 3,240,000 GPD

TOTAL PUMPAGE = AVG DAILY X 180 DAYS
= 1,440,000 X 180 DAYS
= 259,200,000 GALLONS

DEWATERING NOTES:

1. PRIOR TO DEWATERING ALL SILT FENCE/TURBIDITY BARRIERS, ORANGE SAFETY FENCE SHALL BE CONSTRUCTED. CONTACT MARC REYES/SATCHEL BRY SCHOLAR @ (561) 624-3141 ext. 24 (1) PRIOR TO TURNING ON PUMPS.
2. IN THE EVENT OF A SIGNIFICANT STORM, ALL DEWATERING ACTIVITIES SHALL CEASE AND ALL PIPE PLUGS/MUTCH BLOCKS SHALL BE REMOVED.
3. DISCHARGE DEWATERING INTO ADJACENT DITCH/DRY RETENTION AREAS TO THE MAXIMUM EXTENT FEASIBLE PRIOR TO DISCHARGING OFF-SITE. FOR UP TO TURBIDITY MONITORING NOTES AND SAMPLING LOCATIONS PLAN ON THIS SHEET.

ORDER OF EXCAVATION

1. INSTALL SILT FENCES AND ORANGE SAFETY FENCES AFTER THE PRE-CONSTRUCTION MEETING.
2. BEGIN CLEARING AND GRUBBING, MASS GRADING & INSTALL BRIDGE.
3. CONSTRUCT RETENTION AREAS AND CONTROL STRUCTURES AND SOD ALL SIDE SLOPES.
4. INSTALL WELL POINTS OR UNDERGROUND SOCK DRAINS AS NEEDED.
5. SET DEWATERING PUMPS AS NEEDED FOR UTILITY AND DRAINAGE SYSTEM TRENCH EXCAVATION AND INSTALLATION.

LEGEND

- AREA OF CLEARING
- UPLAND PRESERVE
- OSW (OTHER SURFACE WATERS)
- PROPOSED SILT FENCE
- PROPOSED FLOATING TURBIDITY BARRIERS
- PROPOSED SNOW FENCE PRESERVE BARRICADE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PRESERVE SIGN LOCATIONS
- TREE TO REMAIN INSTALL BARRICADE

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CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@capteclec.com
Engineering Business No. EB-0007467

DATE: 03/17/2016
DRAWN BY: HDR
DESIGNED BY: BPM
CHECKED BY: JWC
PROJECT No.: 1329.2
MODEL SCALE: 1" = 50'
PLOT SCALE: 1"

SCALE VERIFICATION
1" BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY.

REVISIONS			
1	06/16	PERMIT PLANS	
NO.	BY	DESCRIPTION	DATE

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

EROSION CONTROL, CLEARING & DEWATERING PLAN

Joseph W. Capro
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 32138
TOTAL CLEARING SERVICE
CLASS "A" E.

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 1 of 1

Construction Plans and Specifications
Of
THE RESERVE AT JENSEN BEACH

MULTI-FAMILY APARTMENTS

Lying In
Section 27, Township 37 South,
Range 41 East
Martin County, Florida

Location Map

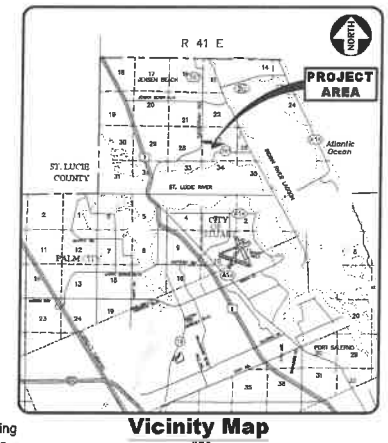
NOTES:
THESE PLANS ARE IN ENGLISH UNITS
ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM. ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

DEVELOPER

STEPHEN COHEN
JENSEN CAP INVESTMENTS, LLC
1054 GATEWAY BLVD, STE 107
BOYNTON BEACH, FLORIDA 33426
PHONE: (561) 789-5558

ENGINEER

JOSEPH W. CAPRA, P.E. #37638
CAPTEC ENGINEERING, INC.
301 N.W. FLAGLER AVENUE
STUART, FLORIDA 34994
PHONE: (772)-692-4344
FAX: (772)-692-4341



Vicinity Map
N.T.S.

Site Map
N.T.S.

SHEET INDEX

NUMBER - TITLE

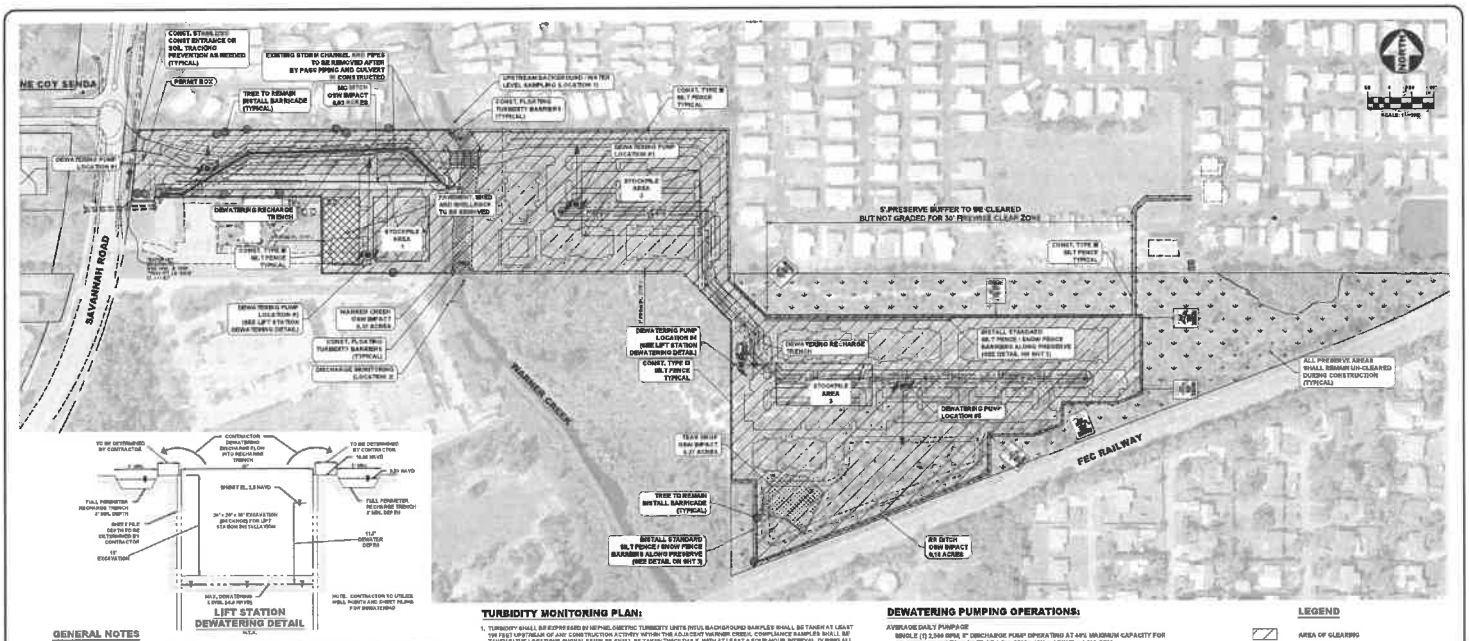
1 - COVER
2 - EROSION CONTROL, CLEARING & DEWATERING PLAN
3 - EROSION CONTROL DETAILS
4 - CERTIFICATE OF OCCUPANCY PHASING PLAN
5 - HORIZONTAL CONTROL AND MARKING
6 - OVERALL DRAINAGE AND UTILITY
7 - PAVING, GRADING AND DRAINAGE PLAN
8 - PAVING, GRADING AND DRAINAGE PLAN
9 - PAVING, GRADING AND DRAINAGE PLAN
10 - BRIDGE PLAN VIEW
11 - SECTIONS
12 - TYPICAL SECTIONS AND CONTROL STRUCTURES
13 - UTILITY - PLAN VIEW
14 - UTILITY - PLAN VIEW
15 - UTILITY - PLAN VIEW
16 - PINELAKE VILLAGE WATER MAIN CONNECTION
17 - WARNER CREEK UTILITY CROSSING
18 - UTILITY PROFILE
19 - UTILITY PROFILE
20 - LIFT STATION NO. 1
21 - LIFT STATION NO. 2
22 - PAVING AND GRADING DETAILS
23 - PAVING AND GRADING DETAILS
24 - GENERAL NOTES
25 - WATER STANDARD DETAILS
26 - SANITARY STANDARD DETAILS
27 - SANITARY STANDARD DETAILS 2
28 - NOTES

CAPTEC Engineering, Inc.
Civil Engineering Professionals
Engineering Business No. EB-0007657
Civil Engineering Professionals
301 N.W. Flagler Avenue
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341

PERMIT PLANS
03-27-2020

Project No. 1329.2 THE RESERVE AT JENSEN BEACH

Project No. 1329.2 THE RESERVE AT JENSEN BEACH



LIFT STATION DEWATERING DETAIL

NTS

GENERAL NOTES

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7. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND SHALL BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
8. SOIL STABILIZATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES EXCEPT VEGETATION REMOVAL. TEMPORARY SEED AND MULCH AND/OR SOD SHALL BE APPLIED TO ALL CLEARED AREAS.
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12. ALL EXOTIC VEGETATION SHALL BE REMOVED PRIOR THE SITE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR EACH PHASE.
13. PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED BY BY THE CONTRACTOR.
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TURBIDITY MONITORING PLAN:

1. TURBIDITY SHALL BE EXPRESSED BY NEPHELOMETRIC TURBIDITY UNITS (NTU). BACKGROUND SAMPLES SHALL BE TAKEN AT LEAST 100 FEET UPSTREAM OF ANY CONSTRUCTION ACTIVITY WITHIN THE AQUATIC MARKER CREEK. COMPLIANCE SAMPLES SHALL BE TAKEN IN THE LOCATIONS SHOWN. SAMPLES SHALL BE TAKEN TWICE DAILY, WITH AT LEAST A FOUR-HOUR INTERVAL, DURING ALL WORK AUTHORIZED BY THE SFWMD DEWATERING PERMIT.
2. MONITORING SHALL BEGIN ON THE FIRST DAY OF DEWATERING ACTIVITIES FOR ALL DRAINAGE AND UTILITIES INSTALLATION WITHIN THE PROJECT LIMITS. MONITORING SHALL CEASE WHEN ALL DEWATERING ACTIVITIES ARE COMPLETED. THE MONITORING DATA MUST DEMONSTRATE THAT TURBIDITY NO MORE THAN 150 FEET DOWNSTREAM OF ALL PROPOSED ACTIVITIES IS LESS THAN OR EQUAL TO 29 NTU'S ABOVE NATURAL BACKGROUND TURBIDITY AND 50 FEET UPSTREAM OF EACH PROPOSED ACTIVITY DURING CONSTRUCTION AND FOR A PERIOD OF 2 CONSECUTIVE DAYS AFTER COMPLETION OF CONSTRUCTION. IF MONITORING SHOWS SUCH LEVELS TO BE EXCEEDED, CONSTRUCTION ANALL CEASE AND DISTRICT COMPLIANCE STAFF SHALL BE NOTIFIED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL DISTRICT STAFF IS SATISFIED THAT ADEQUATE CORRECTIVE MEASURES HAVE BEEN TAKEN AND TURBIDITY HAS RETURNED TO ACCEPTABLE LEVELS.
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4. MONITORING REPORTS SHALL ALSO INCLUDE THE FOLLOWING INFORMATION FOR EACH SAMPLE THAT IS TAKEN.
   A. TIME OF DAY SAMPLES TAKEN;
   B. DEPTH OF WATER BODY;
   C. DEPTH OF SAMPLES;
   D. ANTECEDENT WEATHER CONDITIONS;
   E. WIND DIRECTION AND VELOCITY.

DEWATERING PUMPING OPERATIONS:

AVERAGE DAILY PUMPAGE
SINGLE (1) 2,500 GPM 8" DISCHARGE PUMP OPERATING AT 44% MAXIMUM CAPACITY FOR AN AVERAGE PUMPING RATE OF 2,500 GPM X 44% X 1 PUMP = 1,100 GPM
TOTAL AVERAGE DAILY PUMPING RATE = 1,100 GPM = 1,584,000 GPD

MAXIMUM DAILY PUMPAGE
SINGLE (1) 2,500 GPM 8" DISCHARGE PUMP OPERATING AT 88% MAXIMUM CAPACITY FOR A MAXIMUM PUMPING RATE OF 2,500 GPM X 88% X 1 PUMP = 2,200 GPM
TOTAL MAXIMUM DAILY PUMPING RATE = 2,200 GPM = 2,880,000 GPD

TOTAL PUMPAGE = AVG DAILY X 180 DAYS
= 1,584,000 X 180 DAYS
= 284,390,000 GALLONS

DEWATERING NOTES:

1. PRIOR TO DEWATERING ALL SILT FENCE/TURBIDITY BARRIERS, ORANGE SAFETY FENCE SHALL BE CONSTRUCTED. CONTACT SFWMD REPRESENTATIVE (561) 686-8800 OR (561) 682-6085 OR (561) 682-6032 PRIOR TO TURNING ON PUMPS.
2. IN THE EVENT OF A SIGNIFICANT STORM, ALL DEWATERING ACTIVITIES SHALL CEASE AND ALL PIPE PLUGS/DITCH BLOCKS SHALL BE REMOVED.
3. DISCHARGE DEWATERING INTO EQUIPMENT DITCH/DRY RETENTION AREAS TO THE MAXIMUM EXTENT FEASIBLE PRIOR TO DISCHARGING OFF-SITE. REFER TO TURBIDITY MONITORING NOTES AND SAMPLING LOCATIONS PLAN ON THIS SHEET.

ORDER OF EXCAVATION

1. INSTALL SILT FENCES AND ORANGE SAFETY FENCES AFTER THE PRE-CONSTRUCTION MEETING.
2. BEGIN CLEARING AND GRUBBING, BASIC GRADING & INSTALL BRIDGE.
3. CONSTRUCT RETENTION AREAS AND CONTROL STRUCTURES AND SOD ALL SIDE SLOPES.
4. INSTALL WELL POINTS OR UNDERGROUND DOCK DRAINS AS NEEDED.
5. SET DEWATERING PUMPS AS NEEDED FOR UTILITY AND DRAINAGE SYSTEM TRENCH EXCAVATION AND INSTALLATION.

LEGEND

- AREA OF CLEARING
- UPLAND PRESERVE
- OSW (OTHER SURFACE WATERS)
- PROPOSED SILT FENCE
- PROPOSED FLOATING TURBIDITY BARRIERS
- PROPOSED SNOW FENCE PRESERVE BARRICADE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PRESERVE SIGN LOCATIONS
- TREE TO REMAIN INSTALL BARRICADE

811 KNOW WHAT'S BELOW. CALL 811 TWO FULL DAYS BEFORE YOU DIG.

CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@capteclnc.com
Engineering Business No. EB-0007467

DATE: 03-07-2019
DRAWN BY: MGB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 100'
VERT. SCALE: ____

SCALE VERIFICATION
1" SQUARE
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	MGB	PERMIT PLANS	03-07-2019

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

EROSION CONTROL, CLEARING & DEWATERING PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37338
DIGITALLY SIGNED BY JOSEPH W. CAPRA

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 2 OF 26

GENERAL NOTES EROSION CONTROL

THE FOLLOWING NARRATIVE OF THE STORMWATER POLLUTION PREVENTION PLAN CONTAINS REFERENCES TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE STANDARD PLANS, AND OTHER SHEETS OF THESE CONTRACTOR PLANS. (THE COVER SHEET CONTAINS AN INDEX TO THE OTHER SHEETS.) THE COMPLETE STORMWATER POLLUTION PREVENTION PLAN INCLUDES SEVERAL ITEMS: THIS NARRATIVE DESCRIPTION, THE DOCUMENTS REFERENCED IN THE NOTICE OF INTENT, THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN REQUIRED BY SPECIFICATION SECTION 104, AND REPORTS OF INSPECTIONS MADE DURING CONSTRUCTION.

1.A SITE DESCRIPTION

1.A. NATURE OF CONSTRUCTION ACTIVITY

CONSTRUCTION ACTIVITIES CONSIST OF THE CONSTRUCTION OF NINE (9) MULTI-FAMILY RESIDENTIAL APARTMENT BUILDINGS ALONG WITH ASSOCIATED PAVEMENT, SIDEWALKS, UTILITIES, LANDSCAPING, ETC. ON 23.61 ACRES WITHIN MARTIN COUNTY, FLORIDA.

1.B. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

THE FOLLOWING SEQUENCES OF MAJOR ACTIVITIES SHALL BE FOLLOWED UNLESS THE CONTRACTOR CAN PROPOSE AN ALTERNATIVE THAT IS EQUAL OR EXCEEDS THE EROSION AND SEDIMENT CONTROL PRACTICES DESCRIBED IN THIS DOCUMENT AND APPROVED BY THE ENGINEER. THE DETAILED SEQUENCE FOR THE ENTIRE PROJECT CAN VARY DEPENDING UPON CONTRACTOR TO CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A DETAILED SEQUENCE OF CONSTRUCTION FOR ALL CONSTRUCTION ACTIVITIES.

1. PLACEMENT OF ALL EROSION CONTROL DEVICES
2. CLEARING AND GRUBBING, EXCAVATION AND EXCAVATION OF PONDS
3. ROUGH GRADE, INSTALLATION OF UTILITIES AND DRAINAGE. THIS SHALL BE CONSTRUCTED IN THE UPSTREAM DIRECTION.
4. EXTENSION OF ASSOCIATED TEMPORARY SILTATION BASINS, AS NEEDED.
5. FINAL GRADING OF THE COMPLETED PROJECT AREAS NOTED ON THE PLANS

1.C. AREA ESTIMATED

TOTAL SITE AREA: 23.61 ± ACRES
TOTAL AREA TO BE DISTURBED: 16.06 ± ACRES

1.D. RUNOFF DATA:

RUNOFF COEFFICIENTS: BEFORE: C .57
DURING: C .64-.69
AFTER: C .57

SOILS DATA:
THE SOILS ARE FINE SAND TO CLEAN SAND. THE SOILS AND PARTICLE SIZE WILL MAKE THE POTENTIAL FOR EROSION HIGH.

DRAINAGE AREAS FOR EACH OUTFALL:
THE PROJECT SITE OUTFALLS INTO WARNER CREEK

1.E. SITE MAP:

THE CONSTRUCTION PLANS WILL SUBSTITUTE AS SITE MAPS, LOCATIONS OF THE REQUIRED INFORMATION ARE DESCRIBED BELOW.

DRAINAGE PATTERNS:
THE DRAINAGE FLOW DIRECTIONS ARE SHOWN ON THE OVERALL DRAINAGE PLAN AND PAVING GRADING & DRAINAGE PLAN SHEETS.

APPROXIMATE SLOPES:
THE SLOPES OF THE SITE CAN BE SEEN IN THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

AREAS OF SOIL DISTURBANCE:
THE AREA TO BE DISTURBED ARE INDICATED ON THE TIME IN SMALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

AREAS NOT TO BE DISTURBED:
PRESERVE AREAS AND PROPERTY BUFFERS, SALES REQUIRED FOR FIRE WITH (A)

LOCATIONS OF WATER:
THESE ARE SHOWN ON THE HORIZONTAL CONTROL PLAN SHEETS.

AREAS TO BE STABILIZED:
TEMPORARY STABILIZATION PRACTICES ARE ALSO SHOWN ON THE PLANS, IF APPLICABLE, AREAS OF REVEGETATION ARE SHOWN ON THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS.

SURFACE WATERS:
SURFACE WATER GEOGRAPHIC IS SHOWN ON THE OVERALL DRAINAGE PLAN, PAVING GRADING & DRAINAGE PLAN SHEETS AND SECTIONS. THE SURFACE WATER OF THE PROJECT WILL DISCHARGE TO THE ON-SITE DETENTION AREAS DURING CONSTRUCTION, AND WILL DISCHARGE TO WARNER CREEK FOLLOWING CONSTRUCTION COMPLETION.

1.F. RECEIVING WATERS:

THE SURFACE WATERS OF THE PROJECT WILL DISCHARGE DIRECTLY INTO WARNER CREEK FOLLOWING CONSTRUCTION. WARNER CREEK OUTFALLS INTO THE ST. LUCIE RIVER.

2.A CONTROLS:

2.A. EROSION AND SEDIMENT CONTROLS:

THE FOLLOWING DEFINES GENERAL GUIDELINES FOR THE SEQUENCE OF CONSTRUCTION AND THE STABILIZATION AND STRUCTURAL PRACTICES. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP. THE CONSTRUCTION OF THIS PROJECT IS EXPECTED TO LAST EIGHTEEN TO TWENTY FOUR MONTHS.

INITIAL STABILIZED CONSTRUCTION ENTRANCES AT ALL AREAS WHERE CONSTRUCTION VEHICLES WILL BE ENTERING AND EXITING THE CONSTRUCTION SITE.

INSTALL SILT FENCE, TYPE III, AROUND FULL DITCH BOTTOMS PRIOR TO THE PROJECT, AND THE PROJECT PERIMETER. FILTER CLOTH UNDER THE GRATES ON CATCH BASINS MAY BE USED IN LIEU OF SILT FENCE AROUND INLETS.

2.A.1 ESTABLISHING PRACTICES.

TEMPORARY:
SEED AND MULCH, AND SODDING IN ACCORDANCE WITH POST STANDARD SPECIFICATIONS SECTION 104.

PERMANENT:
ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE SHALL MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.A.2 STRUCTURAL PRACTICES:

TEMPORARY:
SILT FENCE PER DETAIL
STAKED TURBIDITY BARRIER PER DETAIL SOIL TRACKING PREVENTION DEVICE PER DETAIL, A STABILIZED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PER DETAIL. ALL SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO ANY SOIL DISTURBING ACTIVITY UPSTREAM OF THE CONTROL.

2.B STORMWATER MANAGEMENT:

STORMWATER WILL BE CONVEYED IN STORM SEWER SYSTEMS, CROSS DRAINS, AND SWALES TO STORMWATER RETENTION/DETENTION PONDS.

2.C OTHER CONTROLS:

2.C.1 WASTE DISPOSAL:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.C.2 OFF-SITE VEHICLE TRACKING

THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.C.3 STATE AND LOCAL REGULATION FOR WASTE DISPOSAL, MAINTAIN SEWER, OR SEPTIC TANK REGULATIONS:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP.

2.D STATE AND LOCAL PERMIT

THIS PROJECT REQUIRES A SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) SURFACE WATER MANAGEMENT ENVIRONMENTAL RESOURCE PERMIT.

3.A MAINTENANCE:

SILT FENCE	REPAIR OR REPLACE WITH POST SPECIFICATION SECTION 104	3 MONTHS
PONDS	REMOVE SEDIMENT WHEN IT BECOMES 0.5 FEET (6") DEEP.	
SYNTHETIC BALES	REMOVE SEDIMENT WHEN IT REACHES TO HEIGHT OF BALES.	3 MONTHS

THE CONTRACTOR SHALL MAINTAIN RAIN GAUGES ONSITE AND RECORD DAILY RAINFALL. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE POST STANDARD SPECIFICATIONS SECTION 104 EROSION CONTROL PLAN.

4.A INSPECTIONS:

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN CALENDAR DATE AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE PER MONTH. INSPECTION LOCATIONS INCLUDE (BUT NOT LIMITED):

POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.

POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM SEWER SYSTEMS.

DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.

AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.

STRUCTURAL CONTROLS.

STORMWATER MANAGEMENT SYSTEMS.

LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

5.A NON-STORMWATER DISCHARGES

THE CONTRACTOR IS REQUIRED TO SUBMIT A DRAFT TERMINATION PLAN TO SFWMD FOR APPROVAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES THAT REQUIRE DEWATERING. THIS PLAN SHALL INCLUDE ANY STOCKPILE AREAS AND EXCAVATION AREAS. SEE SFWMD RULE 40 E-20 WHICH GOVERNS USE OF WATER. RULE 40 E-20 REGULATION WELLS SPECIFYING REQUIREMENTS FOR DEWATERING AND ERP APPLICATION SECTION E. SUBSECTION 3 CONSTRUCTION SCHEDULE AND TECHNIQUES.

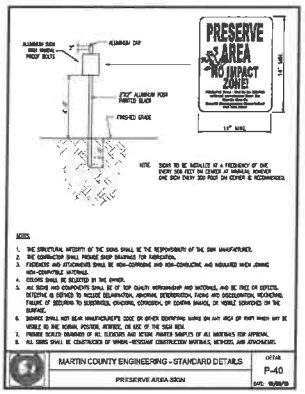
THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPP. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE DISTRICT WASTE HOTLINE AND TERRELL CONSULTANT.

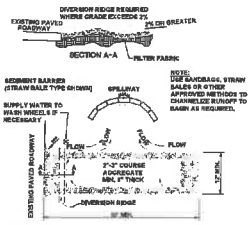
6.A RESPONSIBLE ENTITIES

THE SWPP MUST CLEARLY DENOTE, FOR EACH MEASURE IDENTIFIED WITHIN THE SWPP, THE CONTRACTOR (S) OR SUBCONTRACTOR (S) THAT WILL IMPLEMENT SUCH MEASURE. ALL CONTRACTORS AND SUBCONTRACTORS (S) THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE MEASURES IDENTIFIED IN THE SWPP MUST SIGN THE FOLLOWING CERTIFICATION.

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THE STORMWATER POLLUTION PREVENTION PLAN PERMITTED THERE UNDER."

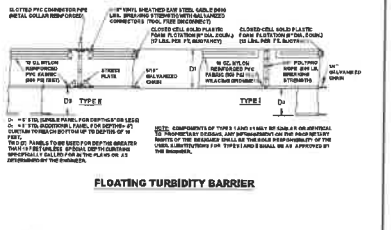
NAME AND TITLE	COMPANY NAME, ADDRESS, AND PHONE NUMBER	RESPONSIBLE ITEMS	DATE



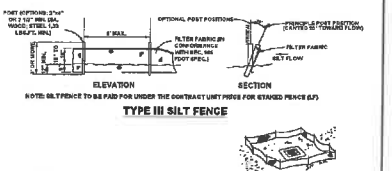


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE

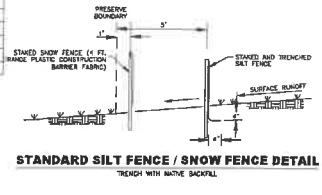


FLOATING TURBIDITY BARRIER



NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED FENCE (LF)

TYPE III SILT FENCE



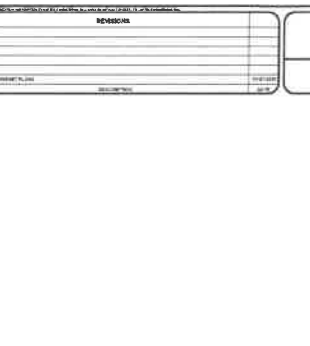
STANDARD SILT FENCE / SNOW FENCE DETAIL

TRENCH WITH NATIVE BACKFILL

NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF - SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART 1, SHEET 1 OF 2 AND DESCRIBED LOCATIONS AT DRAINAGE STRUCTURES SHEET 3 OF 3.

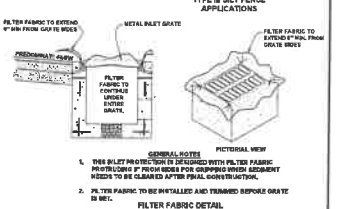
TYPE III SILT FENCE APPLICATIONS



TREE PROTECTION BARRICADE

NOT TO SCALE

NOTES:
1. SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
2. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



GENERAL NOTES

1. THIS INLET PROTECTION IS DESIGNED WITH FILTER FABRIC PROTRUDING 6" FROM SIDES FOR GRIPPING WHEN SEDIMENT NEEDS TO BE CLEANED AFTER FINAL CONSTRUCTION.
2. FILTER FABRIC TO BE INSTALLED AND TRIMMED BEFORE GRATE IS SET.

FILTER FABRIC DETAIL

INLET PROTECTION

811 KNOW WHAT'S BELOW CALL BEFORE YOU DIG

CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@captec.net
Engineering Business No. EB-0007557

DATE: 05-07-2009
DRAWN BY: MDB
REVIEWED BY: SPM
CHECKED BY: JMC
PROJECT No.: 1329.2
HORIZ. SCALE: NA
VERT. SCALE:

SCALE VERIFICATION
1 INCH BAR IS EQUAL TO UNDERCOD OF ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

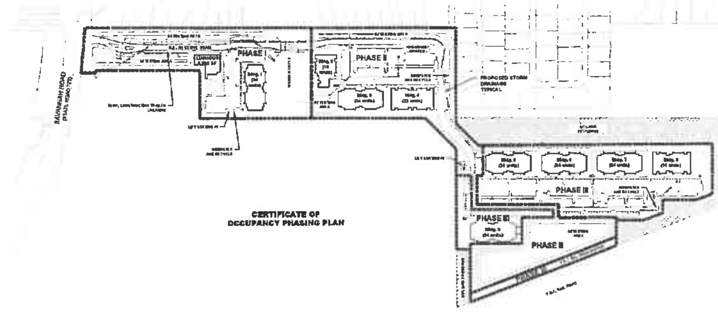
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

EROSION CONTROL DETAILS

Joseph M. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37858
CIVIL ENGINEERING SUPP. CAPTEC

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 3 OF 28



CERTIFICATE OF OCCUPANCY PHASING PLAN

CERTIFICATE OF OCCUPANCY SEQUENCE

GENERAL NOTES: (applies to all Phases of Project)

1. The Clubhouse & Pool (including all related foundation plantings and the sidewalk along the eastern Clubhouse & Pool boundary) will be completed prior to Building 2 Certificate of Occupancy (CO) issuance.
2. The preserve area exotic removal required by the PAMP shall be completed prior to any CO.
3. Apartment building construction sequence shall be Building No. 1, 2, 3, 4, 5, 9, 6, 7, and 8.
4. Paving shall be installed in two lifts of asphalt. Sequence of 1st Lift Paving shall be completed in three (3) separate mobilizations/phases. Temporary Striping shall be installed on 1st Lift to provide ample parking per MC LDR requirements for Certificate of Occupancy (CO) issuance purposes. The 2nd Lift of asphalt and Final Striping will be installed prior to the Building 8 CO.
5. The Pinelake Village watermain extension will be completed prior to the Building 8 CO.
6. All buffers within a phase shall be installed prior to any Building CO within the phase.
7. With the exception of the adjacent foundation plantings around each building which can be phased by building, all parking lot landscaping shall be installed and certified with the development of the associated phase parking lot infrastructure and prior to CO of any building within the phase. Landscaping within the entire phase must be inspected and approved by Martin County prior to the first CO issuance of the phase.
8. Foundation landscaping and irrigation shall be installed on a building by building basis for each respective Building CO. As each building is constructed, landscaping and irrigation will be installed in the surrounding area after the fine grading, paving and sidewalks are completed. The foundation landscaping and irrigation will be completed in the sequence listed above in General Note #3 for the nine (9) apartment buildings.
9. The 7 ft. opaque perimeter fence within Phase I and II shall be installed 10 ft. off the property line prior to the issuance of any building permits.

PHASE 1 – CORE INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

1. Construct stabilized access and turn around area for emergency vehicles along NE Reserve Trail to temporary trailer location and to Warner Creek.
2. Install temporary bridge across Warner Creek to provide full site access for protected species work, erosion & sediment control BMP installation, exotic vegetation removal, and Timber Bridge construction.
3. Construct Warner Creek Timber Bridge, Abutments, and Wingwalls.
4. Construct By-Pass drainage pipe system from Savannah Road to Warner Creek, consisting of Structures SD-1 through SD-5, HW-1, and Control Structure CS-1
5. Install stabilized access for emergency vehicles on NE Reserve Trail to Dry Retention Area 5
6. Perform mass grading of entire site, including perimeter berms
7. Construct Dry Detention Areas 1 - 5 and Warner Creek expansion, sod and plant vegetation areas per construction plan details and regulatory requirements (MC, SFWMD & NPDES)
8. Construct infrastructure within the Phase 1 boundary limits
   a. Construct drainage pipe systems consisting of Structures SD-6 through SD-13
   b. Construct Lift Station #1, force main, and sewer services to Clubhouse & Building 1
   c. Construct water main, fire hydrants and water services to Clubhouse & Building 1
   d. Install horizontal directional drill utilities under Warner Creek on north side of Timber Bridge
   e. Construct dry utilities: FPL, cable, phone, Internet to Clubhouse & Building 1

PHASE 1 – CO INFRASTRUCTURE REQUIREMENTS FOR CLUBHOUSE, POOL & BLDG 1

1. Construct curb, sidewalks, roadway and parking lots between Savannah Road and the Timber Bridge
2. Construct Clubhouse, Pool, Building 1, Dumpster Enclosure and Emergency Access with Knox Box
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections (electrical, phone, cable TV & Internet)
3. Install First Lift of Asphalt with temporary striping & signage for Phase 1 area
4. Complete Warner Creek grading, stress turnouts, sodding, Rip Rap, guardrail, curbing, sidewalk, paving, and remove Warner Creek Construction temporary BMP/erosion control measures
5. Install landscaping for Building 1 & Clubhouse / Pool areas
6. Install Common Area Sidewalks and Bike Racks serving Phase 1
7. Install Street Lighting for main roadway and parking lot
8. Install perimeter fence and landscape buffers for Phase 1 & Phase 2
9. Install United States Postal Service mailboxes
10. Certification from SFWMD / FDEP / Martin County Health Department
11. Martin County Certificate of Occupancy for Building 1 & Clubhouse / Pool
12. Demobilization of Temporary Leasing Trailer within 30 days after receipt of Clubhouse CO

PHASE 2 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

1. Construct infrastructure within the Phase 2 boundary limits
   a. Construct drainage pipe systems, consisting of Structures SD-14 through SD-31 and Control Structure CS-2 (Structure SD-77 may be delayed to Phase 3)
   b. Construct force main, Lift Station #2 and sewer services to Buildings 2, 3 & 4
   c. Construct water main, fire hydrants and water services to Buildings 2, 3 & 4
   d. Construct dry utilities, FPL, cable, phone, internet services to Buildings 2, 3 & 4

PHASE 2 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 2, 3 & 4

1. Construct curb, sidewalks, roadway and parking lots to STA 26+90
2. Construct Buildings 2, 3 & 4
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections, (electrical, phone, cable TV & Internet)
3. Construct Parking Garages and Dumpster Enclosure
4. Install First Lift of Asphalt with temporary striping & signage
5. Install landscaping serving each Building in Phase 2
6. Install Common Area Sidewalks and Bike Racks serving Phase 2
7. Install Street Lighting serving main roadway and parking lots
8. Install United States Postal Service mailboxes
9. Certification from FDEP / Martin County Health Department
10. Martin County Certificates of Occupancy (Building by Building) for Bldgs. 2, 3 & 4

PHASE 3 – CORE INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

1. Construct stabilized access for emergency vehicles to STA 37+70
2. Construct infrastructure within the Phase 3 boundary limits
   a. Construct drainage pipe systems consisting of Structures SD-32 through SD-37
   b. Construct gravity sewers and sewer services to Buildings 5 thru 9
   c. Construct water main, fire hydrants and water services to Buildings 5 thru 9
   d. Construct dry utilities, FPL, cable, phone, internet to Buildings 5 thru 9

PHASE 3 – CO INFRASTRUCTURE REQUIREMENTS FOR BUILDINGS 5 – 9

1. Construct Retaining Wall behind Buildings 5 and 6
2. Construct Pinelake Village watermain extension
3. Construct curb, sidewalks, and parking lots serving Buildings 5 thru 9 (phased building by building)
4. Construct Buildings, in the following order 5, 9, 6, 7 and 8
   a. Life safety / fire suppression system
   b. Structural / electrical / mechanical / plumbing / gas (if applicable) / lighting and ventilation
   c. Water / sewer / lift station connections
   d. Dry utility connections, (electrical, phone, cable TV & Internet)
5. Construct Parking Garages, Dumpster Enclosures, & Entry Features
6. Install First Lift of Asphalt with temporary striping & signage (phased building by building)
7. Install landscaping serving each Building in Phase 3 (phased building by building)
8. Install Common Area Sidewalks and Bike Racks serving Phase 3 building by building
9. Install Street Lighting serving main roadway and parking lots building by building
10. Install perimeter fence and landscape buffers serving Phase 3.
11. Install the railroad landscape buffer (area between the retention pond and the property line/FEC ROW)
12. Install United States Postal Service mailboxes
13. Certification from FDEP / Martin County Health Department
14. Martin County Certificates of Occupancy (Building by Building) for Bldgs. 5, 9, 6 & 7

FINAL CLOSE-OUT

1. Demobilization of Construction Trailer
2. Final Lift of Asphalt on NE Reserve Trail (all project areas prior to Building 8 CO)
3. Final Lift of Asphalt on all parking lots (prior to Building 8 CO)
4. Final signage and striping on all parking lots (prior to Building 8 CO)
5. Pinelake Village watermain completion and certification
6. Final Project close-out per Martin County requirements
7. Certificate of Occupancy from Martin County for Bldg. 8

KNOW WHAT'S BELOW. ALWAYS CALL 811 BEFORE YOU DIG

CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

DATE:	10-01-13
DRAWN BY:	MDS
DESIGNED BY:	SPM
CHECKED BY:	JWC
PROJECT No.:	1329.2
HORZ. SCALE:	1" = 100'
VERT. SCALE:	

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

NO.	BY	DESCRIPTION	DATE
1			

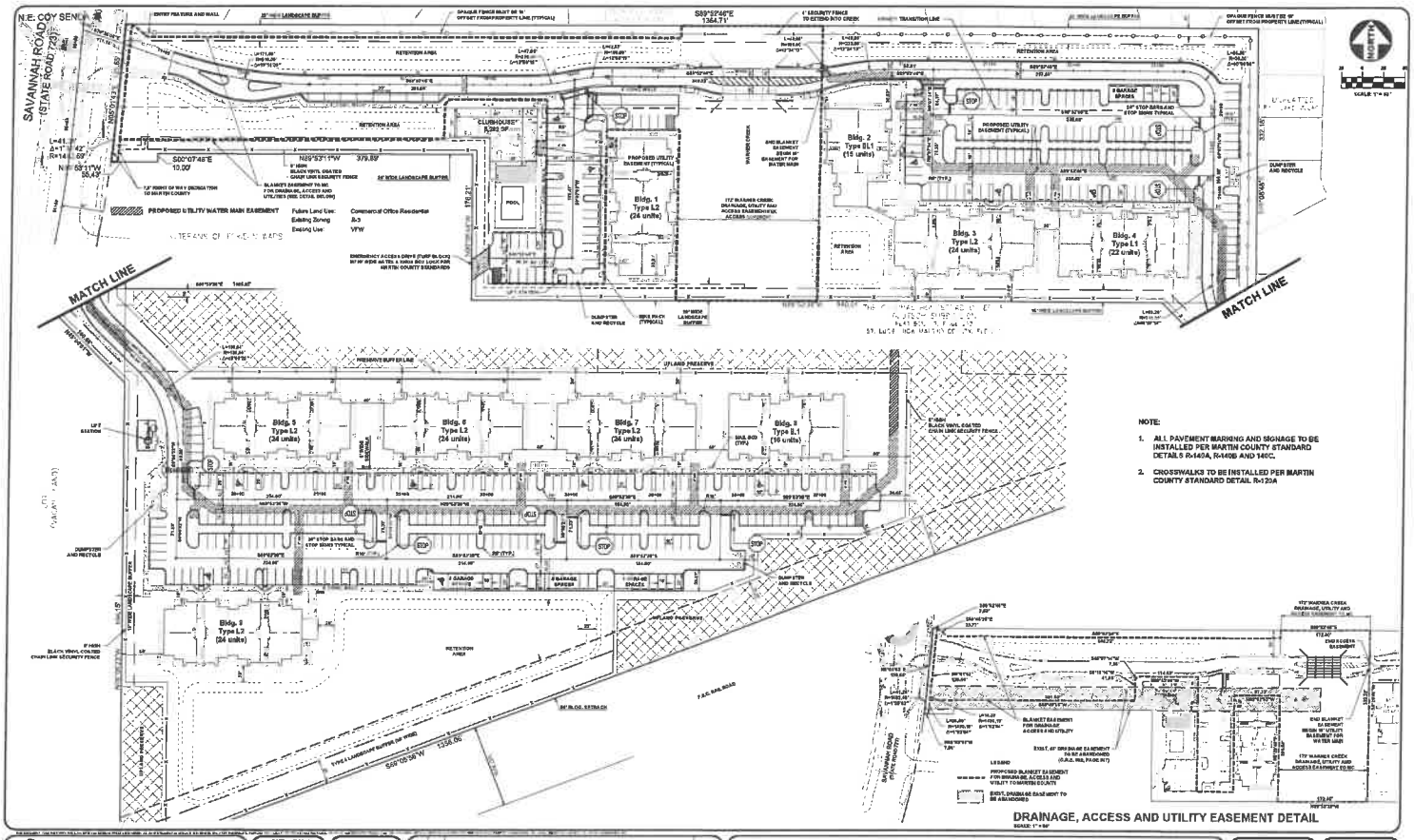
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

CERTIFICATE OF OCCUPANCY PHASING PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37930

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 4 of 28



NOTE:

1. ALL PAVEMENT MARKING AND SIGNAGE TO BE INSTALLED PER MARTIN COUNTY STANDARD DETAILS R-140A, R-140B AND 140C.
2. CROSSWALKS TO BE INSTALLED PER MARTIN COUNTY STANDARD DETAIL R-120A

DRAINAGE, ACCESS AND UTILITY EASEMENT DETAIL

SCALE: 1" = 50'

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocapteo.com
Engineering Business No. EB-0007857

DATE: 10/21/05
DRAWN BY: MCB
DESIGNED BY: EPM
CHECKED BY: JPC
PROJECT No.: 1328.2
HORZ. SCALE: 1" = 60'
VERT. SCALE:

SCALE VERIFICATION
1 INCH BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

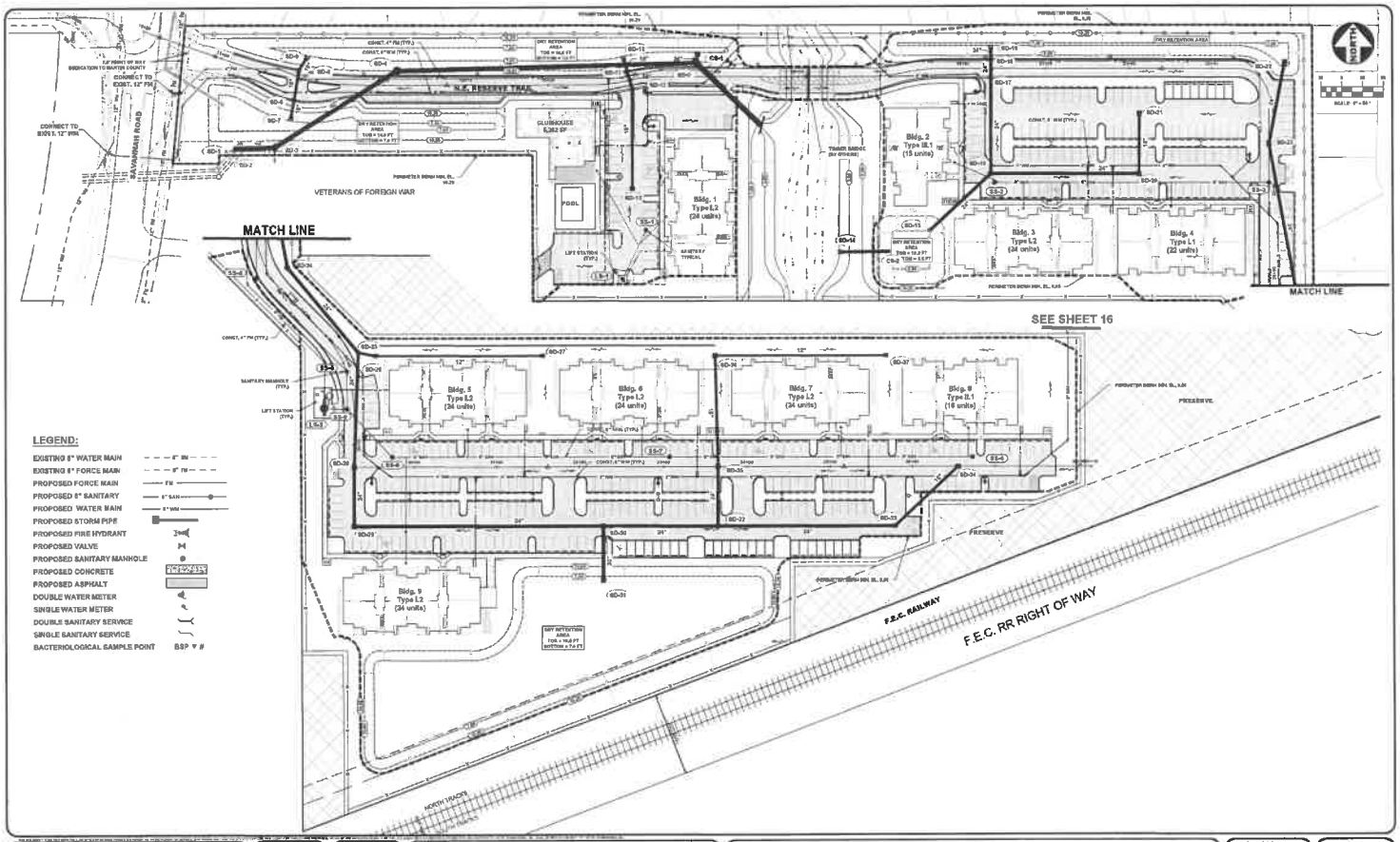
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

HORIZONTAL CONTROL AND MARKING

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37838

SHEET IDENTIFICATION
JOB No.: 1328.2
SHEET
SHEET 5 OF 26



CAPTEC
Civil Engineering Professionals

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Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
Email: captecinfo@gocaptec.com
Engineering Business No. EB-0007867

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

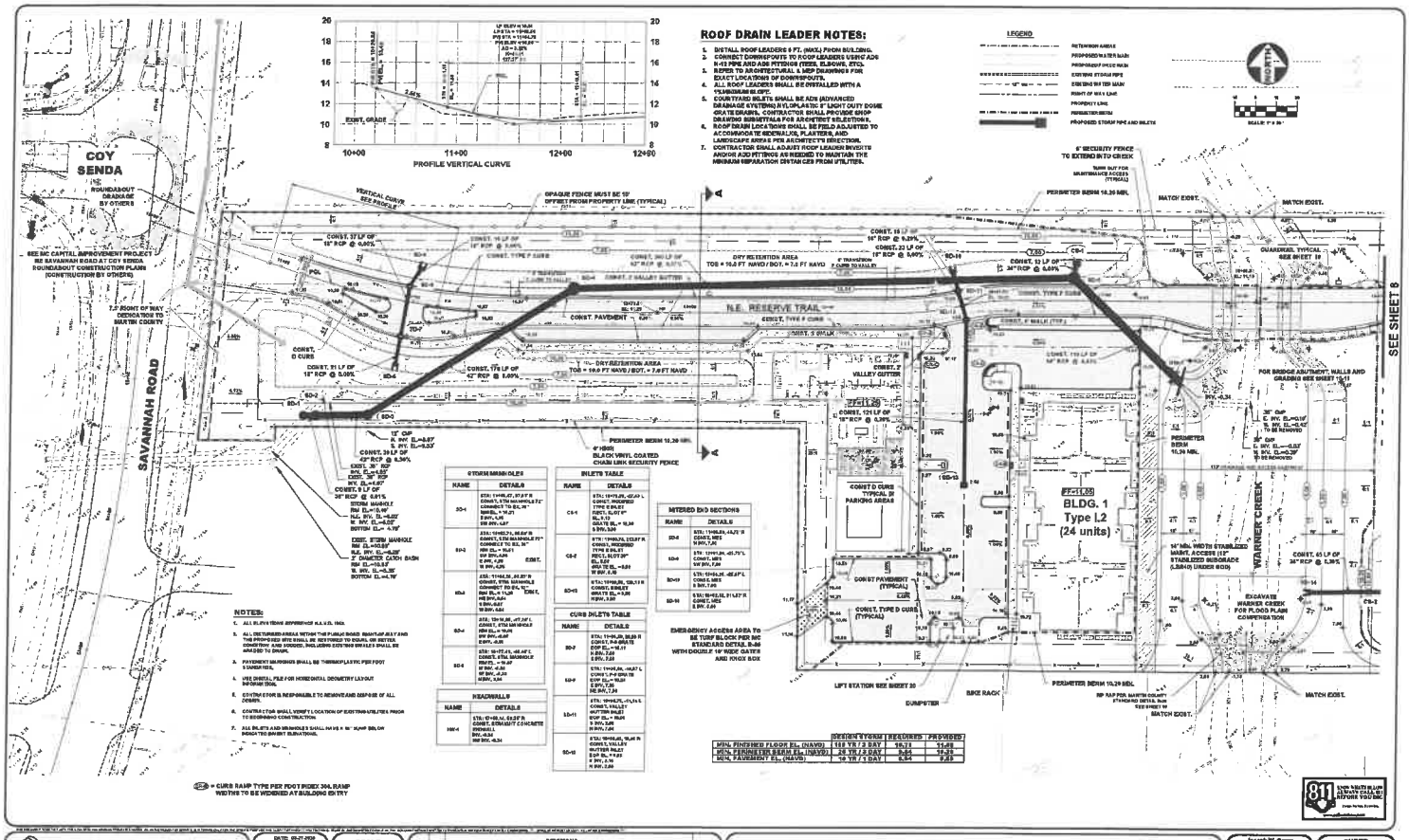
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

OVERALL DRAINAGE AND UTILITY

Joseph M. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37434

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 6 of 28



ROOF DRAIN LEADER NOTES:

1. INSTALL ROOF LEADERS 6 FT. (MAX.) FROM BUILDING.
2. CONNECT DOWNSPOUTS TO ROOF LEADERS USING ADS N-12 PIPE AND ADS FITTINGS (TEES, ELBOWS, ETC).
3. REFER TO ARCHITECTURAL & MEP DRAWINGS FOR EXACT LOCATIONS OF DOWNSPOUTS.
4. ALL ROOF LEADERS SHALL BE INSTALLED WITH A 1% MINIMUM SLOPE.
5. COURTYARD INLETS SHALL BE ADS ADVANCED DRAINAGE SYSTEMS N-12, OPEN ASTM, 9" LIGHT DUTY DOME GRATE DRAINS. CONTRACTOR SHALL PROVIDE SHOP DRAWING SUBMITTALS FOR ARCHITECT SELECTION.
6. ROOF DRAIN LOCATIONS SHALL BE FIELD ADJUSTED TO ACCOMMODATE SIDEWALKS, PLANTERS, AND LANDSCAPE AREAS PER ARCHITECT'S DIRECTION.
7. CONTRACTOR SHALL ADJUST ROOF LEADER INVERTS AND/OR ADD FITTINGS AS NEEDED TO MAINTAIN THE MINIMUM SEPARATION DISTANCES FROM UTILITIES.

NOTES:

1. ALL SLOPES TO BE APPROVED AS A CL 1 MIN.
2. ALL DISTURBED AREAS WITHIN THE PUBLIC ROAD RIGHT-OF-WAY AND THE PROPOSED SITE SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AND GRADED, INCLUDING EXISTING SWALES SHALL BE MAINTAINED TO DRAIN.
3. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PER FDOT STANDARDS.
4. USE DIGITAL FILE FOR HORIZONTAL GEOMETRY LAYOUT INFORMATION.
5. CONTRACTOR IS RESPONSIBLE TO REMOVE AND DISPOSE OF ALL DEBRIS.
6. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
7. ALL INLETS AND MANHOLES SHALL INCLUDE A 6" ALARM BELOW INDICATED BASINS' ELEVATIONS.

(ADA) = CURB RAMP TYPE PER FDOT INDEX 304, RAMP WIDTHS TO BE WIDENED AT BUILDING ENTRY

STORM MANHOLES	
NAME	DETAILS
SD-1	STA: 11+00.27, 37.07 F R CONST. STM MANHOLE 2' CONNECT TO EX. 36" SWBL, = 7.21 S INV. 4.96 SW INV. -1.07
SD-2	STA: 10+82.71, 46.07 R CONST. STM MANHOLE 72" CONNECT TO EX. 36" RBL EL.= 7.02 RIM EL.= 7.02 SW INV.=1.61 E INV. =1.61 N INV. =1.61
SD-3	STA: 11+64.34, 51.07 R CONST. STM MANHOLE CONNECT TO EX. 36" RBL EL.= 7.128 RIM EL.= 7.128 NW INV.=0.61 W INV. =0.61 SW INV. =0.61
SD-4	STA: 12+36.38, -47.07 L CONST. STM MANHOLE 72" RIM EL.=8.07 E INV. =5.07 S INV. =5.07
SD-5	STA: 10+77.41, -48.07 L CONST. STM MANHOLE 48" EL. = 10.07 W INV. =4.50 N INV. =4.20 S INV. =4.54

INLETS TABLE	
NAME	DETAILS
CS-1	STA: 10+75.26, -57.07 L CONST. MODIFIED TYPE D INLET RIM EL.=8.07 W= 10.10 S INV.=5.10 S INV.=5.10
CS-2	STA: 10+80.26, 12.07 R CONST. MODIFIED TYPE D INLET RIM EL.= 8.07 S INV.=5.07 W INV. =5.07
SD-13	STA: 10+60.26, -120.11 R CONST. INLET GRATE EL.= 9.28 N INV.=3.80

CURB INLETS TABLE	
NAME	DETAILS
SD-2	STA: 11+00.26, 30.00 R CONST. P-GRATE EOF EL.=10.11 N INV. 7.20 S INV. 7.20
SD-7	STA: 11+00.26, -44.07 L CONST. L-P-GRATE EOF EL.= 10.07 E INV. 7.20 W INV. 7.20
SD-11	STA: 10+80.26, -51.11 L CONST. VALLEY GUTTER INLET EOF EL.= 10.01 N INV. 7.20 S INV. 7.20
SD-12	STA: 10+80.26, 10.45 R CONST. VALLEY GUTTER INLET EOF EL. = 9.21 E INV. 6.70 N INV. 6.70 S INV. 6.70

MITERED END SECTIONS	
NAME	DETAILS
SD-8	STA: 11+00.26, -43.21 R CONST. MES S INV. 7.20
SD-9	STA: 11+11.31, -51.73 L CONST. MES NW INV. 7.20
SD-10	STA: 10+64.34, -52.07 L CONST. MES S INV. 7.00
SD-14	STA: 10+62.55, 51.07 R CONST. MES S INV. 3.80

HEADWALLS	
NAME	DETAILS
HW-1	STA: 12+00.34, 63.07 R CONST. 18" CONCRETE CHANNEL EL.= 8.34 INV. -0.34 INV. -0.34

	DESIGN STORM	REQUIRED	PROVIDED
MIN. FINISHED FLOOR EL. (NAVD)	100 YR / 3 DAY	10.73	11.00
MIN. PERIMETER BERM EL. (NAVD)	25 YR / 3 DAY	9.61	10.29
MIN. PAVEMENT EL. (NAVD)	10 YR / 1 DAY	6.54	9.23

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007867

DATE: 03-27-2020
DRAWN BY: MGS
DESIGNED BY: BPS
CHECKED BY: JRC
PROJECT No.: 1329.2
HORZ. SCALE: 1"=20'
VERT. SCALE:

SCALE VERIFICATION
1 SOLID BAR TO BOUNDS TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

1	10-21-20	PERMIT PLANS

THE RESERVE AT JENSEN BEACH

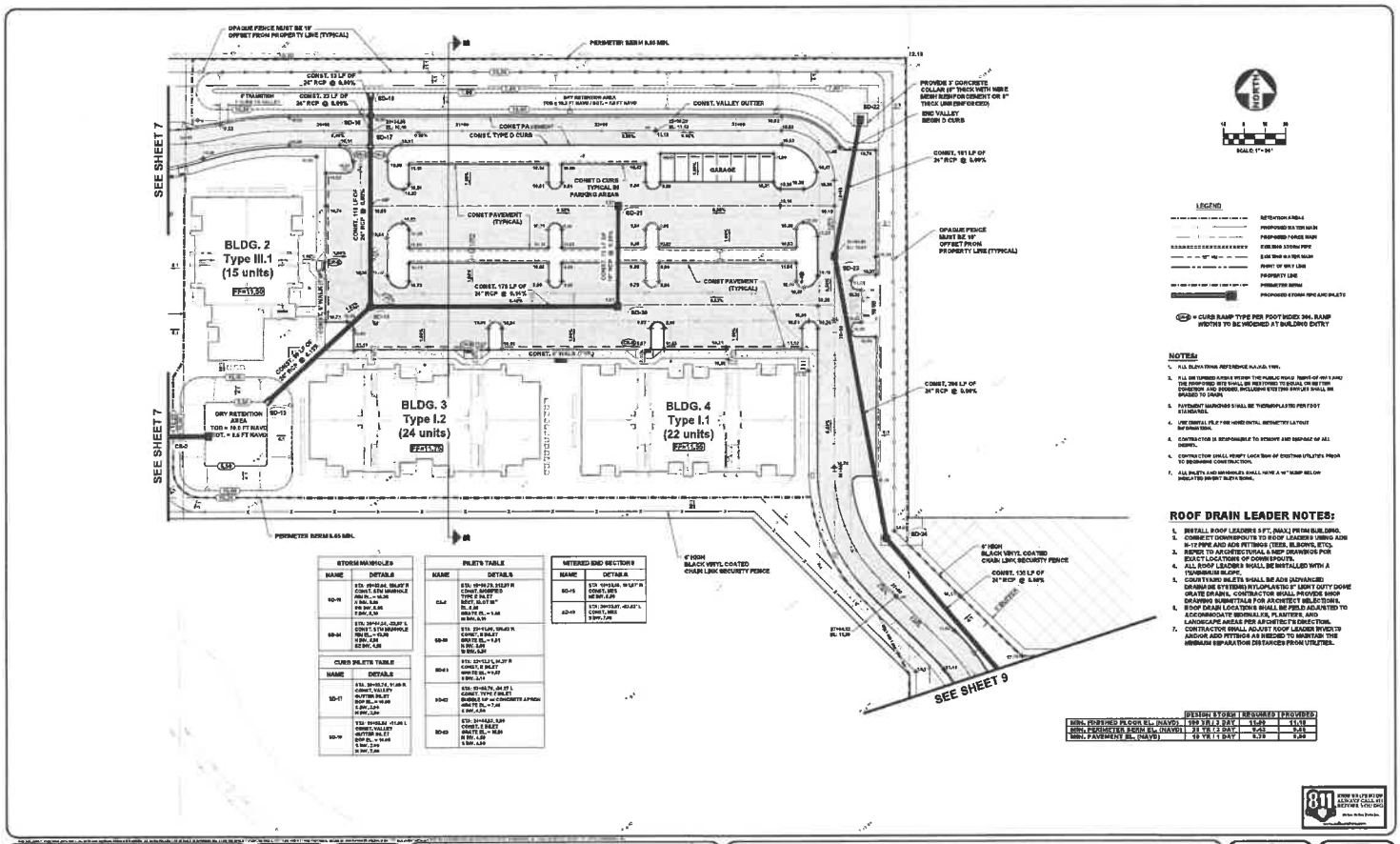
MARTIN COUNTY, FLORIDA

PAVING, GRADING AND DRAINAGE PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 27536

SHEET IDENTIFICATION
Job No.: 1329.2
SHEET
SHEET 7 OF 28

574



STORM MANHOLES	
NAME	DETAILS
SD-15	STA: 10+00.24, 59.67' R CONST. STM MANHOLE RIM EL.= 10.35 A INV. 5.84 PIPE INV. 5.84 T INV. 5.34
SD-24	STA: 10+12.24, 23.67' L CONST. STM MANHOLE RIM EL.= 11.05 A INV. 4.81 PIPE INV. 4.28

CURB INLETS TABLE	
NAME	DETAILS
SD-17	STA: 10+00.74, 11.00 R CONST. VALLEY GUTTER INLET GUTTER EL.= 10.60 E INV. 3.24 W INV. 3.24
SD-19	STA: 11+00.24, 11.00 L CONST. VALLEY GUTTER INLET GUTTER EL.= 10.40 E INV. 3.14 W INV. 7.04

INLETS TABLE	
NAME	DETAILS
SD-21	STA: 10+00.23, 215.07' R CONST. MODIFIED TYPE E INLET GUTT. EL.=7.18' EL. 3.38 GRATE EL.= 1.38 N INV. 4.31
SD-22	STA: 10+00.24, 59.67 R CONST. E INLET. GUTTER EL.= 7.21 N INV. 4.31 S INV. 3.31
SD-23	STA: 10+12.23, 24.37' R CONST. E INLET GUTTER EL.= 7.17 S INV. 3.11
SD-24	STA: 11+00.74, 24.37 L CONST. TYPE E INLET GUTTER EL.= 7.40 S INV. 4.54
SD-25	STA: 11+00.23, 3.00 CONST. E INLET GRATE EL.= 10.30 N INV. 1.30 S INV. 4.54

MITERED END SECTIONS	
NAME	DETAILS
SD-15	STA: 10+00.24, 10.67' R CONST. MES NE INV. 4.29
SD-19	STA: 10+12.07, 43.67' L CONST. MES S INV. 7.49

	DESIGN STORM	REQUIRED	PROVIDED
MIN. FINISHED FLOOR EL. (NAVD)	100 YR	12 DAY	11.50
MIN. PERIMETER BERM EL. (NAVD)	25 YR	12 DAY	9.45
MIN. PAVEMENT EL. (NAVD)	10 YR	1 DAY	8.79

LEGEND

- RETENTION AREA
- PROPOSED 18 PVC MAIN
- PROPOSED 1" WATER MAIN
- EXISTING STORM PIPE
- EXISTING 8 PVC MAIN
- POINT OF INV. LINE
- PROPERTY LINE
- PERIMETER BERM
- PROPOSED STORM PIPE AND INLETS

(CR-9) 9' CURB RAMP TYPE PER FDOT INDEX 304. RAMP WIDTHS TO BE WIDENED AT BUILDING ENTRY

NOTES:

1. ALL ELEVATIONS REFERENCE N.A.V.D. 1988.
2. ALL DISTURBED AREAS WITHIN THE PUBLIC RIGHT RIGHT-OF-WAY AND THE PROPERTY SITE SHALL BE RESTORED TO SOD, OR BOTTOM CONDITION AND GROUND, INCLUDING EXISTING SWALES SHALL BE GRADED TO DRAIN.
3. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PER FDOT STANDARDS.
4. USE DIGITAL FILE FOR HORIZONTAL GEOMETRY LAYOUT INFORMATION.
5. CONTRACTOR IS RESPONSIBLE TO REMOVE AND DISPOSE OF ALL DEBRIS.
6. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
7. ALL INLETS AND MANHOLES SHALL HAVE A 18" SUMP BELOW INDICATED INVERT ELEVATIONS.

ROOF DRAIN LEADER NOTES:

1. INSTALL ROOF LEADERS 5 FT. (MAX.) FROM BUILDING.
2. CONNECT DOWNSPOUTS TO ROOF LEADERS USING ADS 6-12 PIPE AND ADS FITTINGS (TEES, ELBOWS, ETC).
3. REFER TO ARCHITECTURAL & MEP DRAWINGS FOR EXACT LOCATIONS OF DOWNSPOUTS.
4. ALL ROOF LEADERS SHALL BE INSTALLED WITH A MINIMUM 1% SLOPE.
5. COUNTYKIND INLETS SHALL BE ADS (ADVANCED DRAINAGE SYSTEMS) POLYPLASTIC 8" LIGHT DUTY DOME GRATE DRAINS. CONTRACTOR SHALL PROVIDE SHOP DRAWING SUBMITTALS FOR ARCHITECT SELECTIONS.
6. ROOF DRAIN LOCATIONS SHALL BE FIELD ADJUSTED TO ACCOMMODATE SIDEWALKS, PLANTERS, AND LANDSCAPE AREAS PER ARCHITECTS DIRECTION.
7. CONTRACTOR SHALL ADJUST ROOF LEADER INVERTS AND/OR ADD FITTINGS AS NEEDED TO MAINTAIN THE MINIMUM SEPARATION DISTANCES FROM UTILITIES.

811 KNOW WHAT'S BELOW CALL BEFORE YOU DIG

CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007667

DATE: 10-27-2020
DRAWN BY: MRB
DESIGNED BY: BPM
CHECKED BY: JWC
PROJECT No: 1329.2
DWG. SCALE: 1" = 20'
VERT. SCALE: ____

SCALE VERIFICATION
1" SOLID BAR IS EQUAL TO 0.5 INCH. IF NOT, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

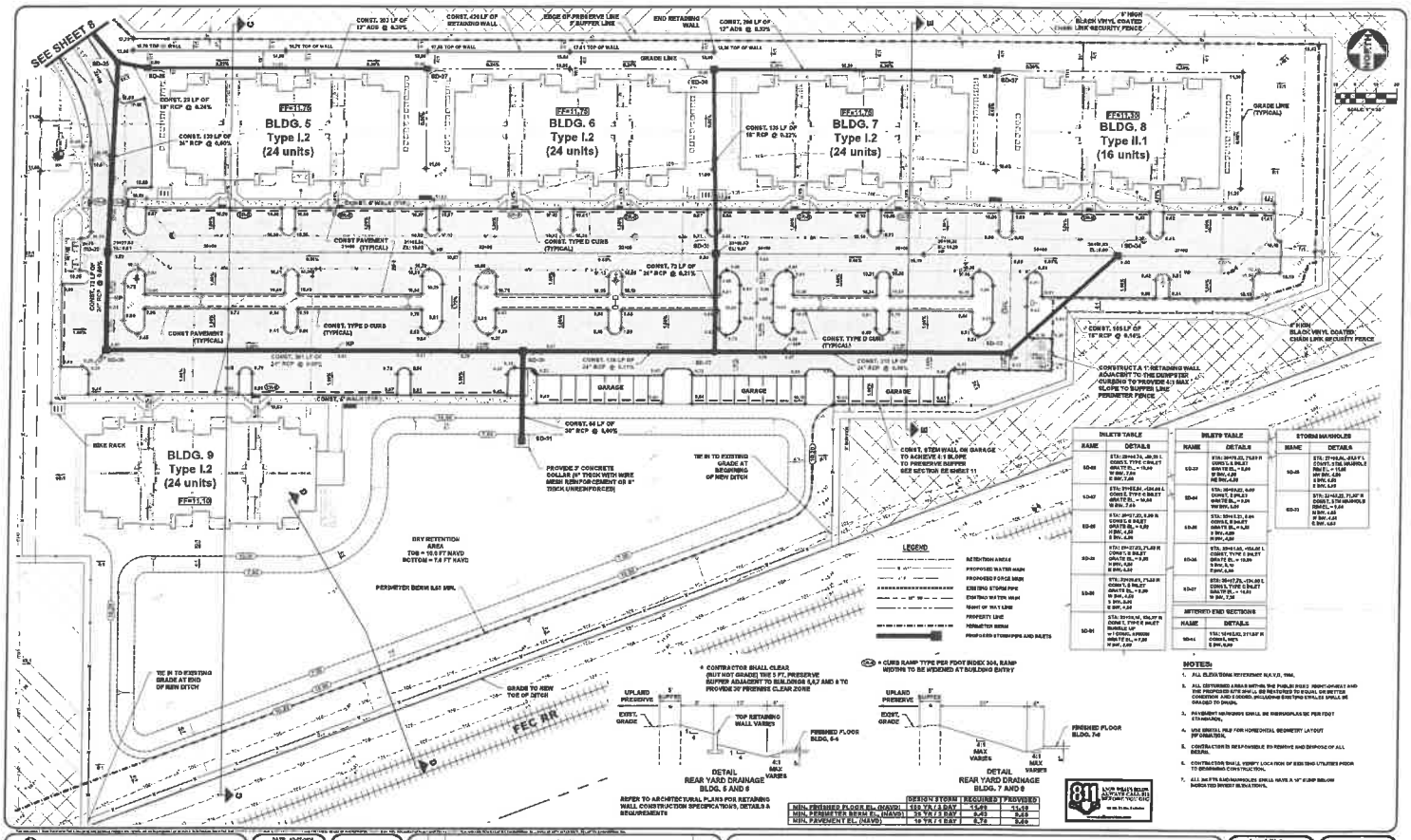
MARTIN COUNTY, FLORIDA

PAVING, GRADING AND DRAINAGE PLAN

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37630

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 8 OF 28

575



MIN. FINISHED FLOOR EL. (NAVD)	15.5 YR / 3 DAY	13.49	13.50
MIN. PERIMETER BERM EL. (NAVD)	34 YR / 3 DAY	8.43	8.49
MIN. PAVEMENT EL. (NAVD)	10 YR / 1 DAY	8.78	8.49

CAPTEC
Civil Engineering Professionals
361 N.W. Flagler Ave
Stuart, Florida 34994
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Fax: (772) 692-4341
E-mail: captec.info@gocaptec.com
Engineering Business
No. EB-0007657

DATE 03-07-2022
DRAWN BY: MDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 20'
VERT. SCALE:

SCALE VERIFICATION
1 INCH BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DISTANCES ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

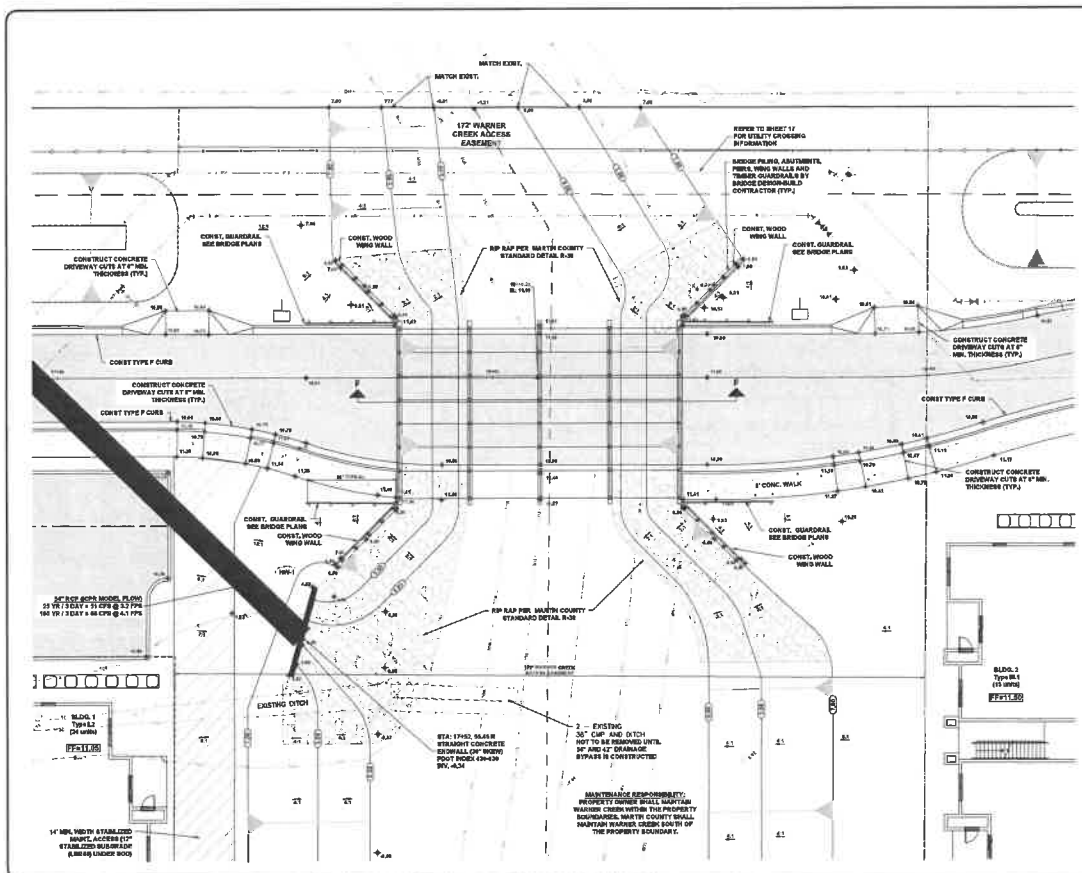
PAVING, GRADING AND DRAINAGE PLAN

Joseph W. Capra
361 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

1329.2 PAVING AND DRAINAGE CP2D.FILE

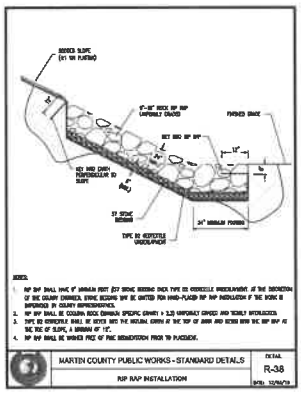
SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 9 OF 28

576



NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT WARNER CREEK BASEFLOWS AND STORMWATER FLOWS THROUGH THE THE PROJECT SITE ARE MAINTAINED AT ALL TIMES. WARNER CREEK SERVES A BASIN AREA IN EXCESS OF 1,000 ACRES, AND GENERATES STORM WATER FLOWS GREATER THAN 600 CFS FOR THE 25 YEAR, 3 DAY STORM EVENT AT THE PROPOSED BRIDGE.
2. EXISTING DRAINAGE CAPACITY IS TO BE MAINTAINED AT ALL TIMES VIA OPEN CHANNEL AND OR PUMPS. A SINGLE PUMP WILL NOT BE PERMITTED TO MAINTAIN HIGH STORM FLOWS BY itself. A HIGH WATER OVER FLOW MUST BE PROVIDED AT ALL TIMES.
3. IN CASE OF HEAVY RAINS, ALL DEWATERING SMALL GRASS AND DITCH BLOCKS SHALL BE REMOVED.
4. PRIOR TO DEWATERING CONSTRUCTION, ALL SILT FENCES AND TURBIDITY BARRIERS SHALL BE CONSTRUCTED.
5. CONTRACTOR MAY ALSO UTILIZE DEWATERING BAGS, GEOTEXTILE TUBES, SEDIMENT BAGS, OR PROPERLY CONSTRUCTED ABOVE GROUND IMPOUNDMENTS, AS NECESSARY, TO MAINTAIN DEWATERING EFFLUENT ON-SITE.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL DEWATERING OPERATIONS AND SEQUENCE WILL BE SUITABLE TO CONSTRUCT THE PROPOSED IMPROVEMENTS. IF TIMING OF CONSTRUCTION, WEATHER, GROUNDWATER, OR CONSTRUCTION SCHEDULE REQUIRES ADJUSTMENT TO THE PLAN, THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MODIFYING THE APPROVED DEWATERING PERMIT AND IMPLEMENTATION OF ALTERNATIVE PLANS.
7. TIMBER BRIDGE, PILING, ABUTMENTS, BRIDGE BARRIERS & TIMBER GUARDRAILS, WING WALLS AND BRIDGE PIERS BY YORK BRIDGE CONCEPTS, INC. (YBCI). (PLEASE REFER TO T.B.C. PLANS AND SPECS)



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Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

DATE: 03-07-2020
CAD DWG BY: MAB
REVIEWED BY: GPM
DESIGNED BY: JWC
PROJECT No.: 1329.2
HORIZ. SCALE: 1" = 10'
VERT. SCALE: ———

SCALE VERIFICATION
1 SQUARE INCH = 1 SOLID BAR IN EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	MDB	PERMIT PLAN RE.	10-17-2019

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

BRIDGE PLAN VIEW

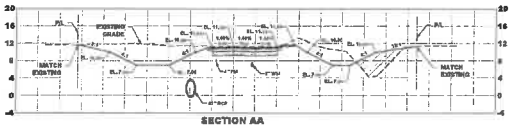
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37626

FIELD FIGURE and Notebook: CADD FILE:

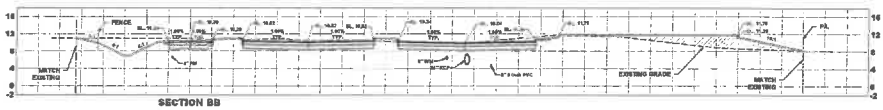
SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
SHEET 18 OF 28

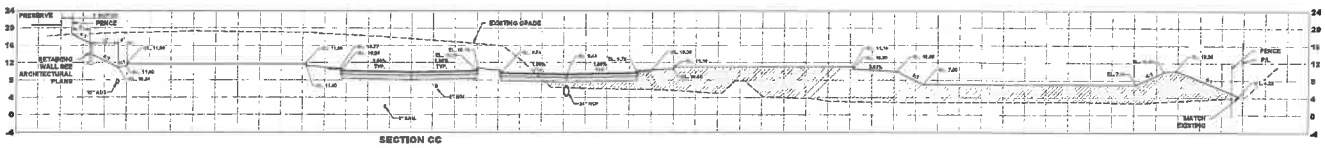
577



SECTION AA

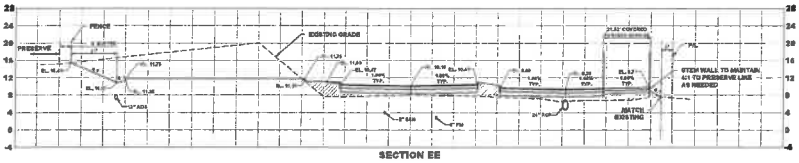


SECTION BB

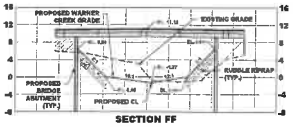


SECTION CC

SECTION DD



SECTION EE



SECTION FF

SCALE: HORZ. 1" = 20'
VERT. 1" = 10'

CAPTEC
Civil Engineering Professionals
501 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business
No. EB-0007867

DATE: 03/07/2014
DRAWN BY: MDS
DESIGNED BY: EPW
CHECKED BY: JPC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 10'

SCALE VERIFICATION
1" SCALE BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

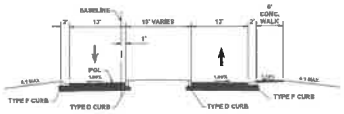
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

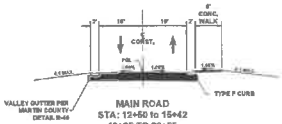
SECTIONS

Joseph W. Capra
501 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37630

SHEET IDENTIFICATION
JOB No.: 1329_2
SHEET
SHEET 11 OF 28



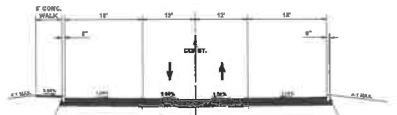
ENTRANCE MAIN ROAD
STA: 11+50 to12+50



MAIN ROAD
STA: 12+50 to 15+42
19+25 TO 20+55

MAIN ROAD
STA: 15+42 TO 19+25

MAIN ROAD
STA: 20+55 TO 23+70

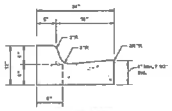


PARKING AREAS
BEGIN STA. 23+31

TYPICAL SECTIONS

LOCAL RESIDENTIAL (SH-3.0 MIN.)
MIN. E.O.P. ELEVATION = PEAK STAGE OF 10-YR/24HR STORM EVENT
- SURFACE COURSE: 1.5" TYPE SP-9.5 ASPHALTIC CONCRETE
- BASE COURSE: OPTIONAL BASE GROUP 9 PER FDOT FLEXIBLE PAVEMENT DESIGN MANUAL TABLE 3.4
- SUBGRADE: 12" COMPACTED OR STABILIZED SUBGRADE (LBR=40)

PER MARTIN COUNTY ENGINEERING STANDARD DETAIL R-10 SEE SHEET 22

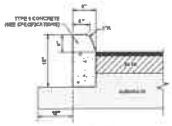


SECTION VIEW

NOTES:
1. SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX, WITHIN 48 HOURS AFTER POURING CURB.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT PAVEMENT & TRAFFIC DESIGN STANDARDS
3. WHEN USED ON HIGH SIDE OF ROAD, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 1". UNLESS OTHERWISE SHOWN ON PLANS.

TYPE F CURB & GUTTER

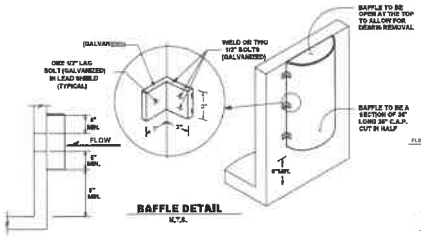
N.T.S.



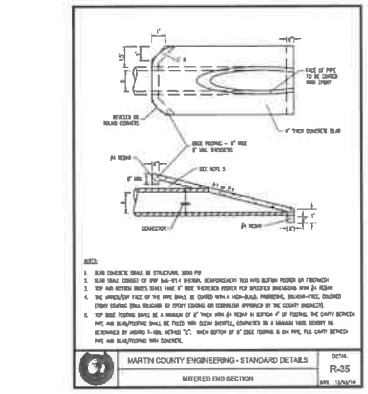
SECTION VIEW

NOTES:
1. SAW CUT CONTRACTION JOINTS ON 10' CENTERS MAX, WITHIN 48 HOURS AFTER POURING CURB.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 520 AND FDOT PAVEMENT & TRAFFIC DESIGN STANDARDS

TYPE "D" CURB

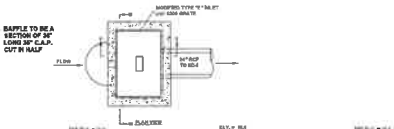


BAFFLE DETAIL
N.T.S.

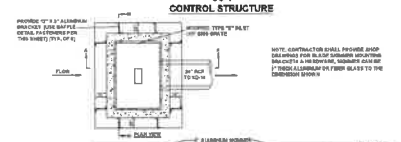


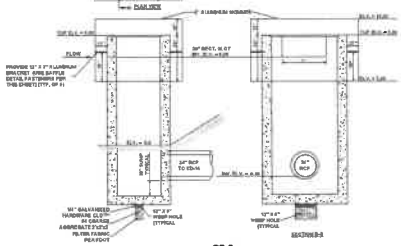
NOTE:
1. SLAB CONCRETE SHALL BE STRUCTURAL 3000 PSI
2. SLAB SHALL CONSIST OF WWF 6x6-W1.4 FABRIC, REINFORCEMENT TIED AND SUPPORTED ON CHAIRS
3. TOP AND BOTTOM EDGES SHALL HAVE 6" RISE TAPERED EDGES PER SPECIFIED DIMENSIONS WITH #4 REBAR
4. THE APRON/TOP FACE OF THE PIPE SHALL BE COATED WITH A HIGH-BUILD, PAINTERLY, SOLVENT-FREE, COLORED (FROM STANDARD RAL COLORS) EPOXY COATING OR EQUIVALENT APPROVED BY THE COUNTY ENGINEER.
5. TOP EDGE FORMS SHALL BE A MINIMUM OF 6" THICK WITH #4 REBAR IN BOTTOM 4" OF FORMS. THE CAVITY BETWEEN PIPE AND SLAB/FORMS SHALL BE FILLED WITH SLEEK SHOTCRETE, COMPACTED IN A MANNER THAT DOESNT NEED BE DESTABILIZED BY ASTM D-698, METHOD "A". WITH BOTTOM OF 6" EDGE FORMS IS ON PIPE, FILL CAVITY BETWEEN PIPE AND SLAB/FORMS WITH CONCRETE.

MARTIN COUNTY ENGINEERING - STANDARD DETAILS
MITERED END SECTION
DETAIL R-35
DATE: 12/18/12



CS-1
CONTROL STRUCTURE





CS-2
CONTROL STRUCTURE

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
Email: captecinfo@gocaptec.com
Engineering Business No. EB-0007887

DATE: 03/07/2018
DRAWN BY: MDS
DESIGNED BY: LMM
CHECKED BY: JRC
PROJECT No.: 1329.2
HORZ. SCALE: 1"=40'
VERT. SCALE: ---

SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALES DIMENSIONS ACCORDINGLY

REVISIONS

REV.	DATE	DESCRIPTION	BY
1	09/18	PERMIT PLANS	JRC

THE RESERVE AT JENSEN BEACH

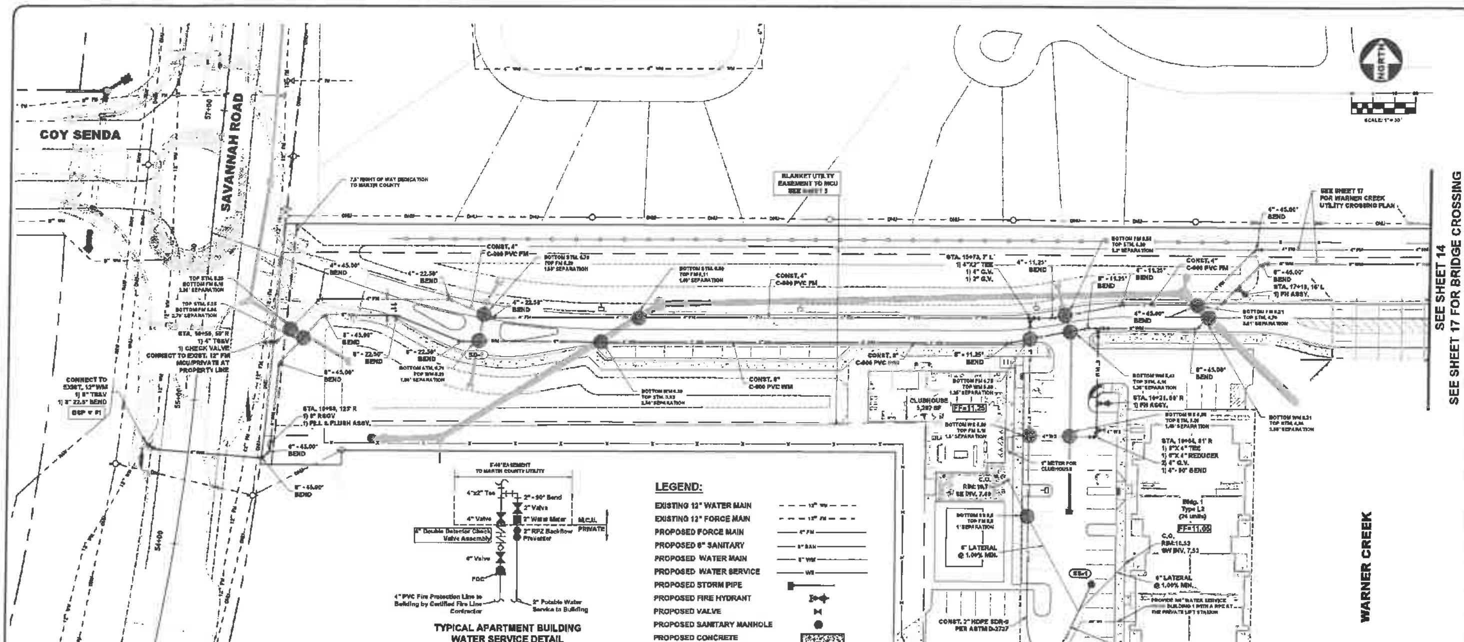
MARTIN COUNTY, FLORIDA

TYPICAL SECTIONS AND CONTROL STRUCTURES

Joseph W. Capes
301 N.W. Flagler Ave.
Stuart, Florida 34994
F.B. No. 37639

CSI NOTES - DETAILS
CADD FILE

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 12 OF 28



NOTES:

1. USE DIGITAL CADD FILES FOR HORIZONTAL GEOMETRY LAYOUT PURPOSES.
2. COORDINATE ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL / MEP PLANS.
3. ALL WATER & SEWER UTILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO THE MARTIN COUNTY UTILITY DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION, AUG. 2016) AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.
4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. EASEMENT DOCUMENTS SHALL BE PREPARED TO MARTIN COUNTY UTILITY STANDARDS AND MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO REQUESTING WATER OR SEWER SERVICE.
6. THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM, ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

SANITARY MANHOLES

NAME	DETAILS
LS-1	CONST. PRIVATE LIFT STATION RIM EL. = 10.74 INV EL. 6.47
SS-1	CONST. SANITARY MH RIM EL. = 9.91 NW INV. 5.73

WATER USE CALCULATIONS

PROPOSED USE	PROJECT SIZE	FLOW BASIS	ESTIMATED FLOW GPD	ESTIMATED FLOW Calculation Basis	ERC 250 GPD	WATER METER SIZE
Apartments	197 Units	per Unit	[illegible] GPD	125 GPD Each	[illegible] ERC	9 @ 2"
Office & Clubhouse	3,232 SF	100 SF	786 GPD	15 GPD	3.1 ERC	1 @ 1"
Pool	35 Persons	Each	350 GPD	10 GPD	1.4 ERC	Included in Clubhouse
				TOTAL FLOW = 103.8 ERC		

CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

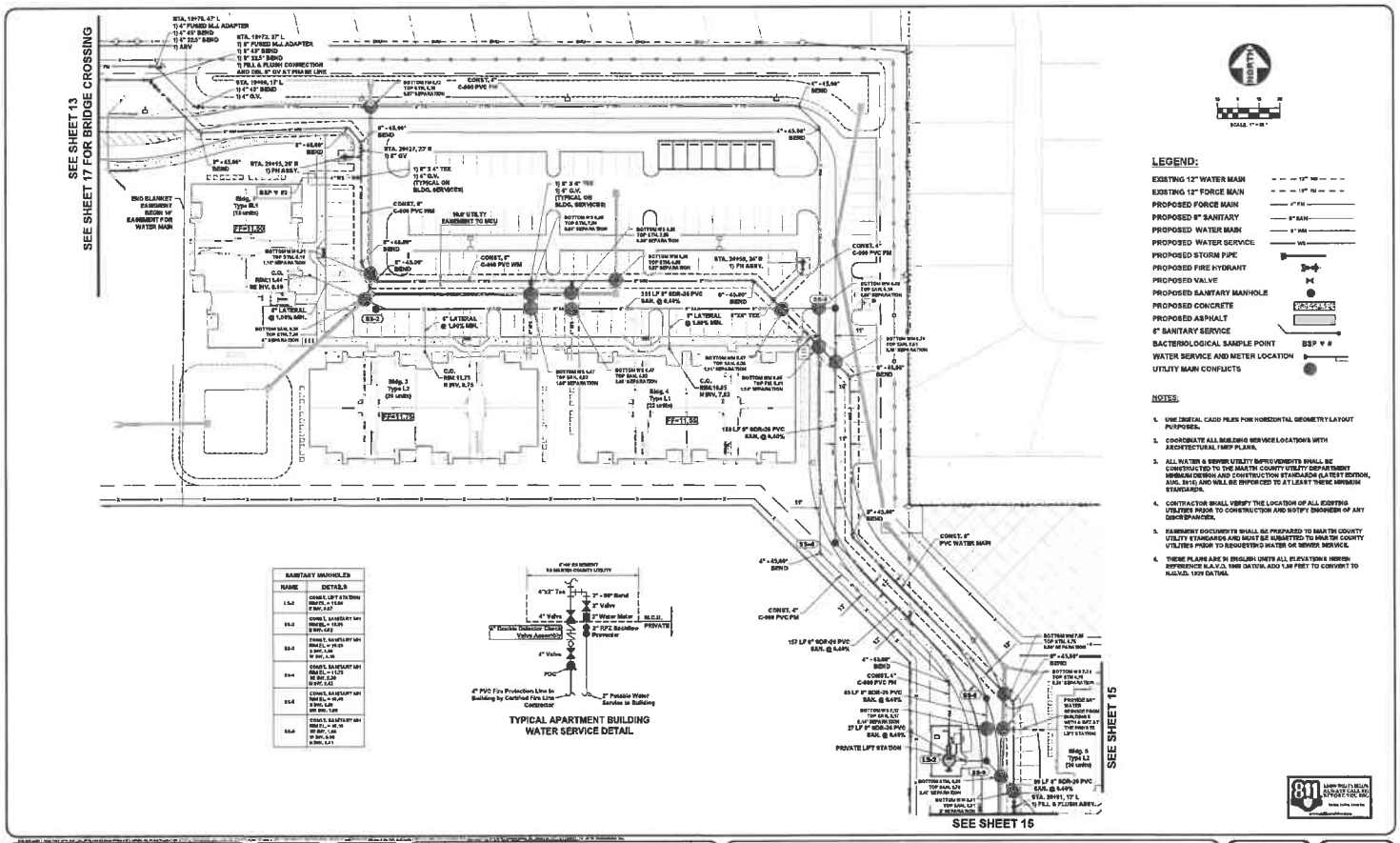
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37639

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 13 of 28



CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 693-4344
Fax: (772) 693-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007997

DATE: 09/14/09
DRAWN BY: MDB
DESIGNED BY: GPH
CHECKED BY: JMC
PROJECT No.: 1329.2
HORIZ. SCALE: 1" = 20'
VERT. SCALE:

SCALE VERIFICATION
1" HORIZONTAL
VOID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

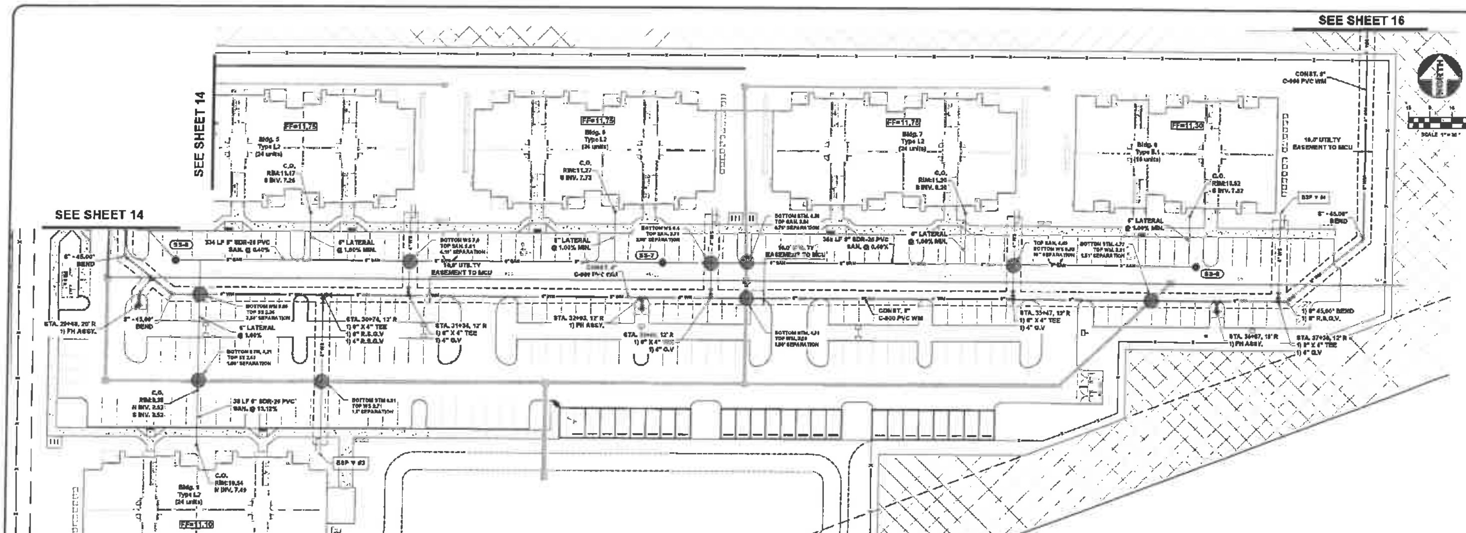
THE RESERVE AT JENSEN BEACH

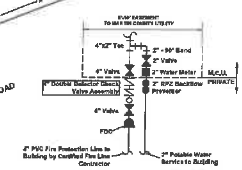
MARTIN COUNTY, FLORIDA

UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37936

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 14 of 28





TYPICAL APARTMENT BUILDING WATER SERVICE DETAIL

SANITARY MANHOLES	
NAME	DETAILS
S3-6	CONST. SANITARY MH RIM EL.= 5.37 W INV. 4.20
S3-7	CONST. SANITARY MH RIM EL.= 5.56 E INV. 2.33 W INV. 2.33
S3-8	CONST. SANITARY MH RIM EL.= 4.95 E INV. 1.44 NW INV. 1.38

NOTES:

1. USE DIGITAL CADD FILES FOR HORIZONTAL GEOMETRY LAYOUT PURPOSES.
2. COORDINATE ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL / MEP PLANS.
3. ALL WATER & SEWER UTILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO THE MARTIN COUNTY UTILITY DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION, AUG. 2018) AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.
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5. EASEMENT DOCUMENTS SHALL BE PREPARED TO MARTIN COUNTY UTILITY STANDARDS AND MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO REQUESTING WATER OR SEWER SERVICE.
6. THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM, ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

LEGEND:

- EXISTING 12" WATER MAIN
- EXISTING 12" FORCE MAIN
- PROPOSED FORCE MAIN
- PROPOSED 8" SANITARY
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED STORM PIPE
- PROPOSED FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- 6" SANITARY SERVICE
- BACTERIOLOGICAL SAMPLE POINT — BSP ▼ #
- WATER SERVICE AND METER LOCATION
- UTILITY MAIN CONFLICTS

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@goceptec.com
Engineering Business No. EB-0007667

DATE: 05-27-2020
DRAWN BY: NDB
DESIGNED BY: SPM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 30'
VERT. SCALE:

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

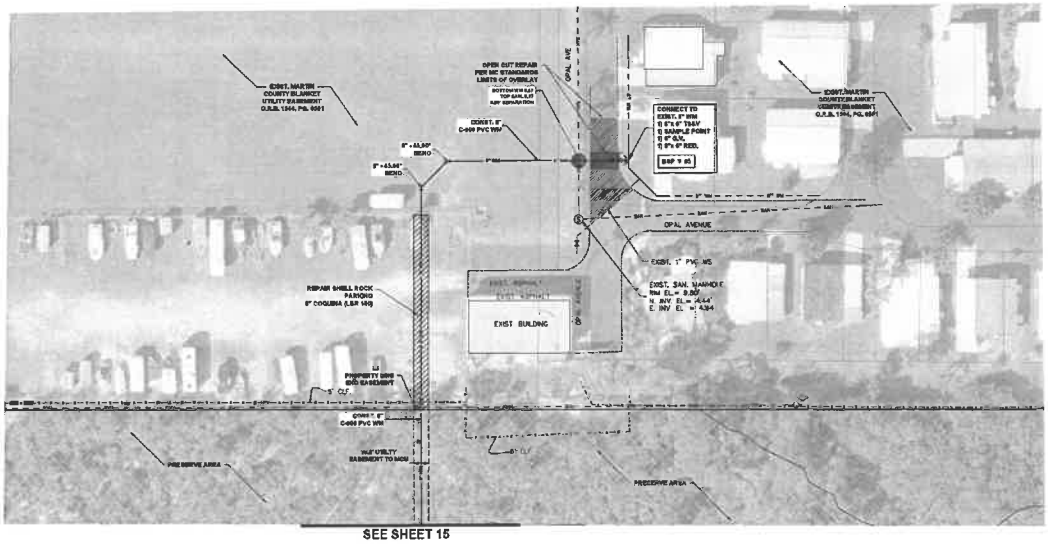
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

UTILITY - PLAN VIEW

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 15 of 26



SEE SHEET 15

NORTH

SCALE: 1" = 20'

LEGEND:

EXISTING 12" WATER MAIN	12" WM
EXISTING 12" FORCE MAIN	12" FM
PROPOSED FORCE MAIN	4" FM
PROPOSED 6" SANITARY	6" SAN
PROPOSED WATER MAIN	8" WM
PROPOSED WATER SERVICE	WS
PROPOSED STORM PIPE	
PROPOSED FIRE HYDRANT	
PROPOSED VALVE	
PROPOSED SANITARY MANHOLE	
PROPOSED CONCRETE	
PROPOSED ASPHALT	
6" SANITARY SERVICE	
BACTERIOLOGICAL SAMPLE POINT	BSP # #
WATER SERVICE AND METER LOCATION	
UTILITY MAIN CONFLICTS	

NOTES:

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811 LOW VOLTAGE ALWAYS CALL 811 BEFORE YOU DIG

CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007857

DATE: 10-07-2014
DRAWN BY: MDB
DESIGNED BY: SRM
CHECKED BY: JWC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 20'
VERT. SCALE:

SCALE VERIFICATION
1 INCH BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

NO.	DATE	DESCRIPTION	BY
1	10/07/14	PERMIT PLANS	

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

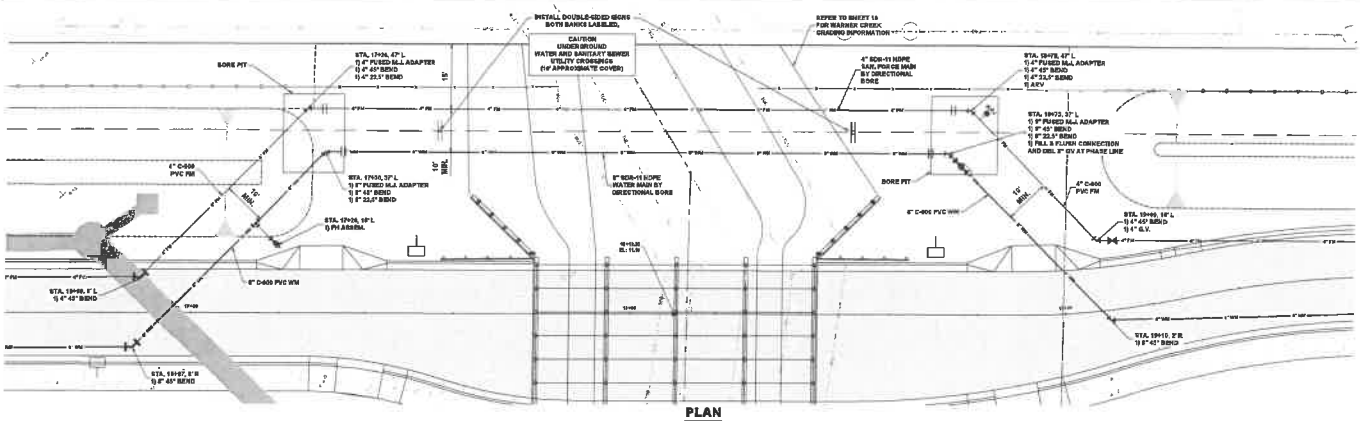
PINELAKE VILLAGE WATER MAIN CONNECTION

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 57636
10/07/2014
CADD FILE

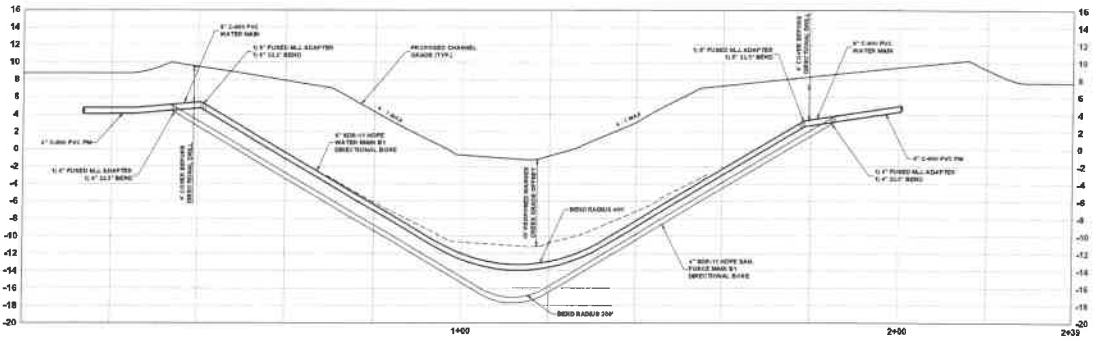
SHEET IDENTIFICATION
JOB No.: 1329_2

SHEET
SHEET 16 OF 28

583



PLAN
1" = 10'



PROFILE
HORIZONTAL 1" = 10'
VERTICAL 1" = 5'

811 Know what's below. Call before you dig.

CAPTEC Civil Engineering Professionals

301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

DATE: 02-07-2019
DRAWN BY: BCG
DESIGNED BY: SPM
CHECKED BY: JHC
PROJECT No.: 1329.2
HORZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 5'

SCALE VERIFICATION
1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

THE RESERVE AT JENSEN BEACH
MARTIN COUNTY, FLORIDA

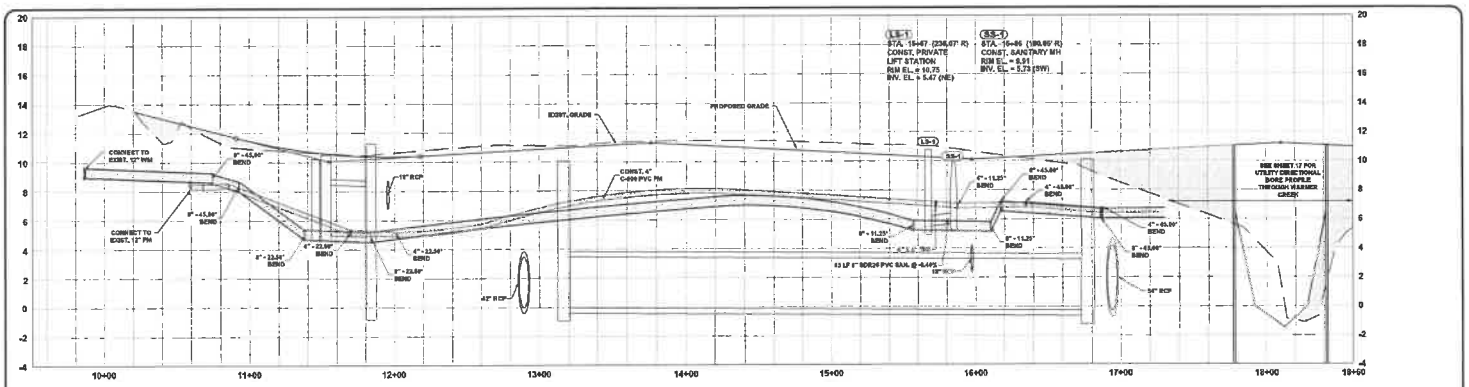
WARNER CREEK UTILITY CROSSING PLAN & PROFILE

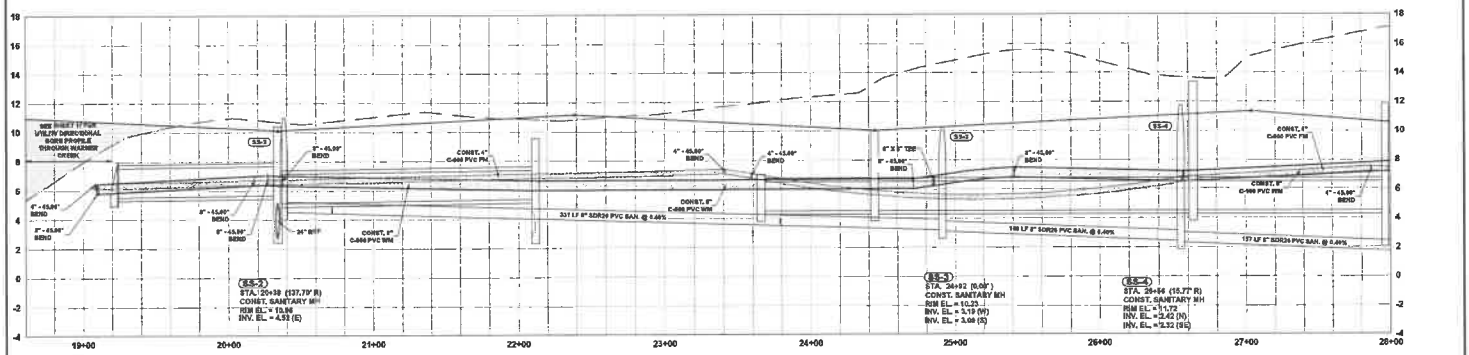
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37838

SOLD BY/CO-VYNT CHETTLE

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 17 OF 28

584





NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, AFWWA, FDEP AND FDOT STANDARD SPECS AND REQUIREMENTS WHICH EVER IS MORE STRINGENT.

2. ALL WATER AND SEWER CONSTRUCTION SHALL COMPLY WITH MARTIN COUNTY STANDARDS.

3. THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HEREIN REFERENCE N.A.V.D. 1988 DATUM. ADD 1.50 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

811 KNOW WHAT'S BELOW CALL BEFORE YOU DIG

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: capteckinfo@gocaptec.com
Engineering Business
No. EB-0007867

DATE: 03-07-2019
DRAWN BY: MDS
DESIGNED BY: BPM
CHECKED BY: JWC
PROJECT No.: 1329.2
PANEL FOLD: 17 x 24
PRINT SCALE: 1" = 2'

SCALE VERIFICATION
1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REV.	BY	REVISIONS	DATE
1	MDS	REVISED PER CGS	04-01-2019

THE RESERVE AT JENSEN BEACH

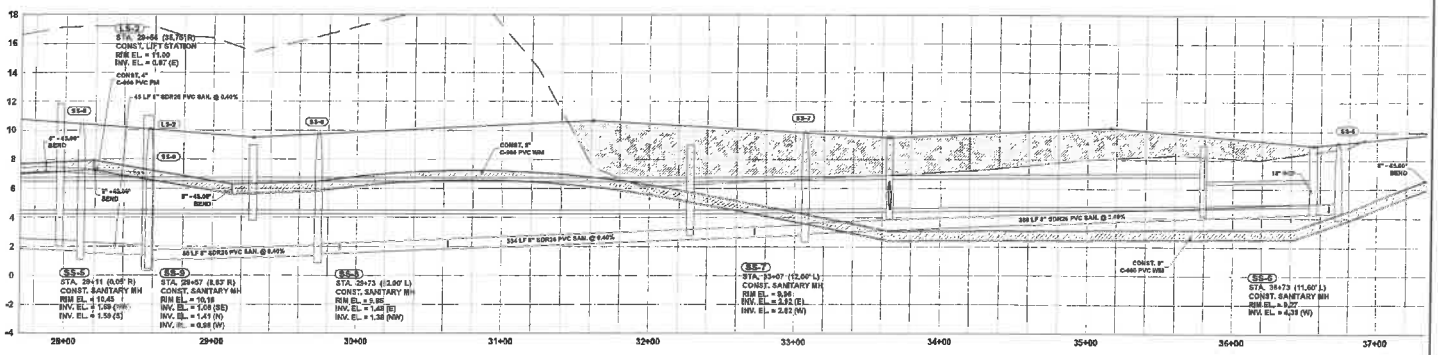
MARTIN COUNTY, FLORIDA

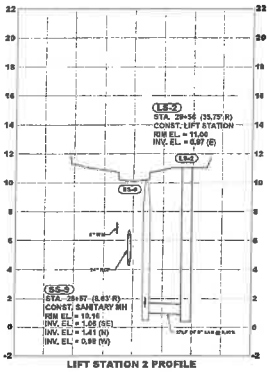
UTILITY PROFILE

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 27835

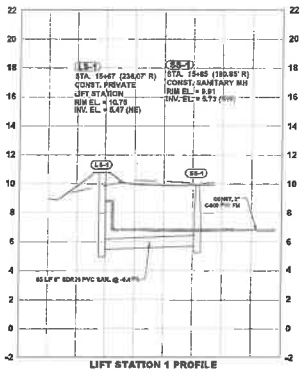
SHEET IDENTIFICATION
JOB No.: 1329.2

SHEET
SHEET 18 OF 28





LIFT STATION 2 PROFILE



LIFT STATION 1 PROFILE

NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, OFWWB, FDEP AND FDOT STANDARD SPECS AND REQUIREMENTS WHICH EVER IS MORE STRINGENT.
2. ALL WATER AND SEWER CONSTRUCTION SHALL COMPLY WITH MARTIN COUNTY STANDARDS.
3. THESE PLANS ARE IN ENGLISH UNITS ALL ELEVATIONS HERIN REFERENCE N.A.V.D. 1988 DATUM, ADD 1.57 FEET TO CONVERT TO N.G.V.D. 1929 DATUM.

811 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.

CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@ycaptec.com
Engineering Business No. EB-0007457

DATE: 03-07-2023
DRAWN BY: MRB
APPROVED BY: JPW
CHECKED BY: JWC
PROJECT No.: 1328.2
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=2'

SCALE VERIFICATION
1" BOLD BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

No.	Date	By	Description
1	03-07-2023	JWC	PERMIT PLANS

THE RESERVE AT JENSEN BEACH

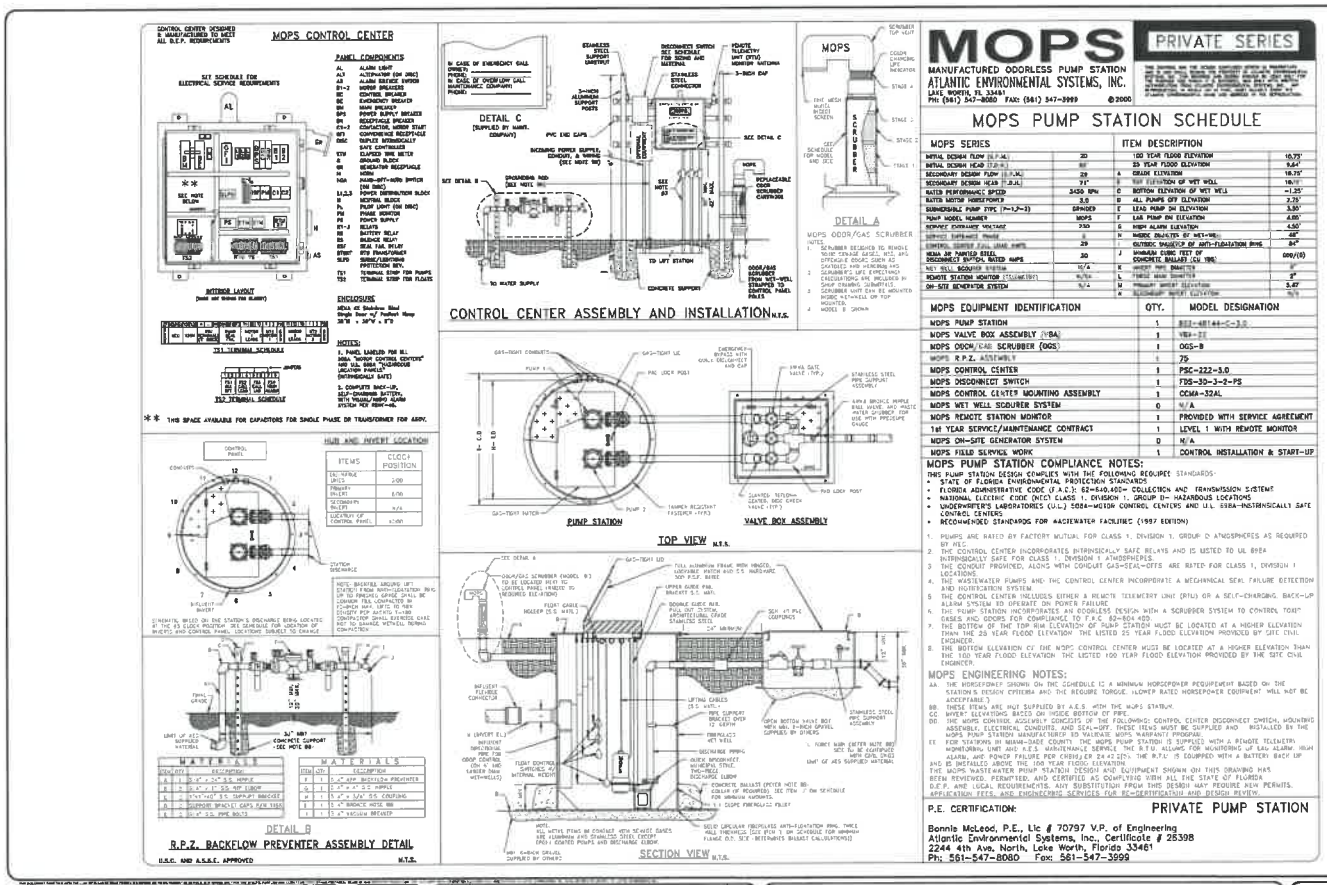
MARTIN COUNTY, FLORIDA

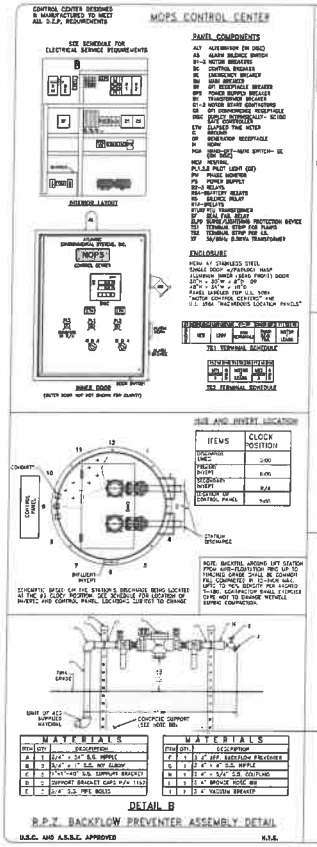
UTILITY PROFILE

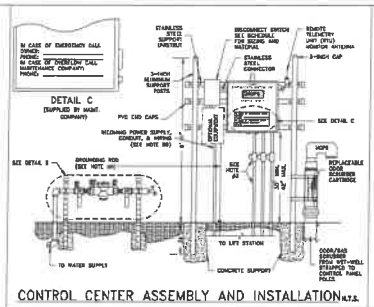
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37828

SOLD PRINT
CADD FILE

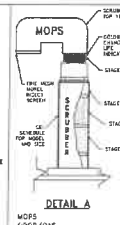
SHEET IDENTIFICATION
JOB No.: 1328.2
SHEET
SHEET 19 OF 28

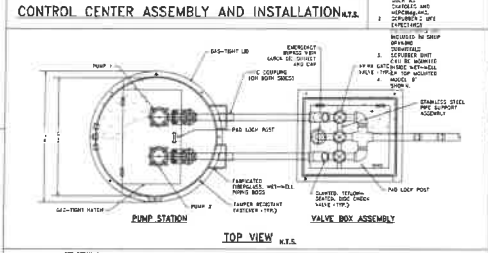

MOPS CONTROL CENTER
CONTROL CENTER DESIGNED & MANUFACTURED TO MEET ALL D.E.P. REQUIREMENTS
SEE SCHEDULE FOR ELECTRICAL SERVICE REQUIREMENTS
PANEL COMPONENTS
INTERIOR LAYOUT
ENCLOSURE
NOTES:
1. PANEL LABELED FOR UL 508A "MOTOR CONTROL CENTERS" AND UL 698A "HAZARDOUS LOCATION PANELS" (INTRINSICALLY SAFE)
2. COMPLETE BACK-UP, SELF-CHARGING BATTERY, WITH VALVE/PUMPS ALARM SYSTEM PER RSMT-08.
** THIS SPACE AVAILABLE FOR CAPACITORS FOR SINGLE PHASE OR TRANSFORMER FOR ASDV.
HUB AND INVERT LOCATION
DETAIL B
R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL
U.S.C. AND A.S.S.E. APPROVED
N.T.S.
DETAIL C
[SUPPLIED BY MANF. COMPANY]
CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.
PUMP STATION
VALVE BOX ASSEMBLY
TOP VIEW N.T.S.
SECTION VIEW N.T.S.
DETAIL A
MOPS ODOR/GAS SCRUBBER
MOPS
PRIVATE SERIES
MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL. 33461
PH: (561) 547-8080 FAX: (561) 547-3999
©2000
MOPS PUMP STATION SCHEDULE
MOPS SERIES
ITEM DESCRIPTION
MOPS EQUIPMENT IDENTIFICATION
MODEL DESIGNATION
MOPS PUMP STATION COMPLIANCE NOTES:
MOPS ENGINEERING NOTES:
P.E. CERTIFICATION:
PRIVATE PUMP STATION
Bonnie McLeod, P.E., Lic # 70797 V.P. of Engineering
Atlantic Environmental Systems, Inc., Certificate # 28398
2244 4th Ave. North, Lake Worth, Florida 33461
Ph: 561-547-8080 Fax: 561-547-3999
CAPTEC
Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. 1560007867
SCALE VERIFICATION
REVISIONS
PERMIT PLANS
THE RESERVE AT JENSEN BEACH
MARTIN COUNTY, FLORIDA
LIFT STATION NO. 1
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37939
SHEET IDENTIFICATION
Job No.: 4329.2
SHEET 20 of 28

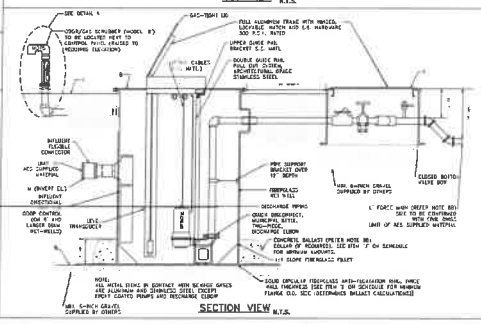




CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.







MOPS

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999

PRIVATE SERIES

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MOPS PUMP STATION SCHEDULE

MOPS SERIES		ITEM DESCRIPTION		
INITIAL DESIGN FLOW (G.P.M.)	118		100 YEAR FLOOD ELEVATION	11.00'
INITIAL DESIGN HEAD (F.D.H.)	113'		25 YEAR FLOOD ELEVATION	8.45'
SECONDARY DESIGN FLOW (G.P.M.)	185	A	GRADE ELEVATION	11.00'
SECONDARY DESIGN HEAD (F.D.H.)	106'	B	TOP ELEVATION OF WET WELL	11.00'
RATED PERFORMANCE SPEED	3450 RPM	C	BOTTOM ELEVATION OF WET WELL	-7.00'
RATED MOTOR HORSEPOWER	20.0	D	ALL PUMPS OFF ELEVATION	-3.50'
SUBMERSIBLE PUMP TYPE (P-1,P-2)	NON-CLOG	E	LEAD PUMP ON ELEVATION	-2.00'
PUMP MODEL NUMBER	MOPS	F	LAG PUMP ON ELEVATION	-1.00'
SERVICE ENTRANCE VOLTAGE	230	G	HIGH ALARM ELEVATION	0.00'
SERVICE ENTRANCE PHASE	3	H	INSIDE DIAMETER OF WET-WELL	10'
CONTROL CENTER FULL LOAD AMPS	131	I	OUTSIDE DIAMETER OF ANTI-FLOTATION RING	14'
MOPS SS PANICLE STEEL DISCONNECT SWITCH, RATED AMPS	200	J	MINIMUM LIQUID FILL OF CONCRETE BALLAST (CU YDS)	351/(13)
WET WELL SCRUBBER SYSTEM	N/A	K	INVERT PIPE DIAMETER	8"
REMOTE STATION MONITOR (TELEMETRY)	N/A	L	FORCE MAIN DIAMETER	4"
ON-SITE GENERATOR SYSTEM	N/A	M	PRIMARY INVERT ELEVATION	8.85'
		N	SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	A24-72118-C-20.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-24
MOPS DOOR/GAS SCRUBBER (DGS)	1	DGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-20.0
MOPS DISCONNECT SWITCH	1	FDS-200-3-2-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCRUBBER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (1997 EDITION).

PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.

2. THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
3. THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
4. THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
5. THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
6. THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
7. THE BOTTOM OF THE TOP ROW ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
8. THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

MOPS ENGINEERING NOTES:

AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE PEAKING TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)

BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.

CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.

DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.

EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24 42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.

THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND DESIGN REVIEW.

P.E. CERTIFICATION: PRIVATE PUMP STATION

Bonnie McLeod, P.E., Lic # 70797 V.P. of Engineering
Atlantic Environmental Systems, Inc., Certificate # 25398
2244 4th Ave. North, Lake Worth, Florida 33461
Ph: 561-547-8080 Fax: 561-547-3999

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@pocaptec.com
Engineering Business No. EB-0007867

DATE: 05/07/2009
DRAWN BY:
DESIGNED BY:
CHECKED BY:
PROJECT NO.:
HORIZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
1 INCH BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

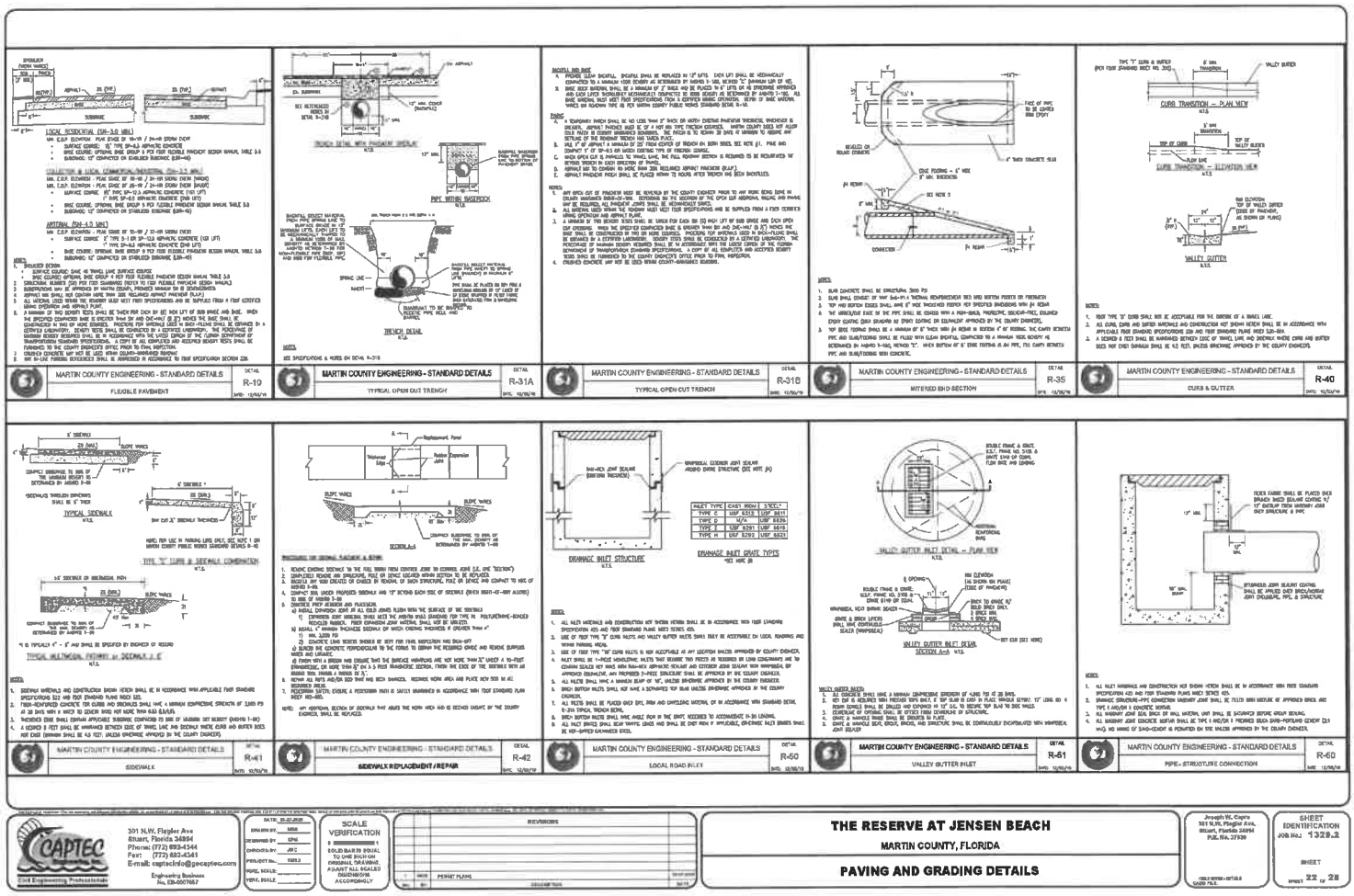
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

LIFT STATION NO. 2

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 27636

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 21 of 28



CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@capteccom
Engineering Business No. EB-0007667

SCALE VERIFICATION
1 SQUARE INCH EQUAL TO ONE INCH ON ORIGINAL DRAWING. PLANIT ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

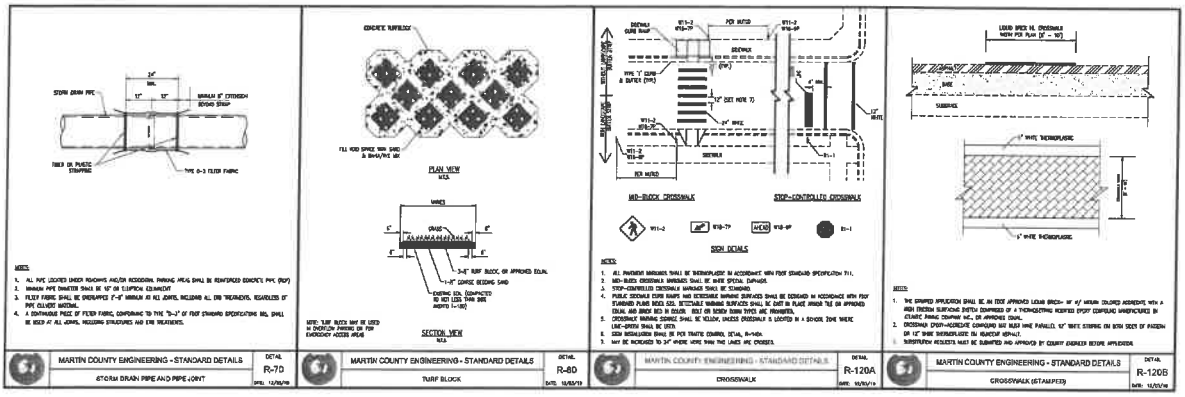
THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

PAVING AND GRADING DETAILS

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
PLE. No. 37939

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 22 OF 28



CAPTEC Engineering, Inc.
Civil Engineering Consultants
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gmcaptec.com
Engineering Business No. EB-0007657

DATE: 03-07-2019
DRAWN BY: MDB
DESIGNED BY: BPM
CHECKED BY: JMC
PROJECT No.: 1329.2
HORZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
1 SOLID BARS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY.

REVISIONS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

PAVING AND GRADING DETAILS

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 57939

1329.2 DETAIL CADD FILE

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 23 OF 28

General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

GENERAL NOTES:

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2018	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1A

GENERAL NOTES (Cont.):

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2018	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1B

GENERAL NOTES (Cont.):

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2018	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1C

GENERAL NOTES (Cont.):

48 HOURS BEFORE DIGGING
1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2018	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1D

STANDARD WATER/SEWER SEPARATION STATEMENT

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2018	GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT	1E

CAPTEC
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Engineering Business

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

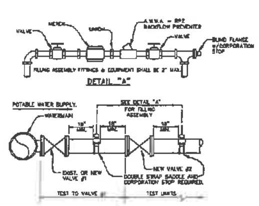
REVISIONS
PERMIT PLANS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

GENERAL NOTES

SHEET IDENTIFICATION
JOB No.: 1328.2
SHEET 24 of 28

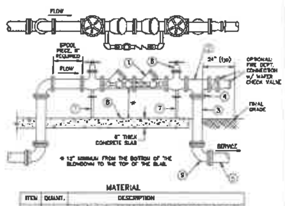


NOTES:

1. BOTH VALVES SHALL BE KEPT CLOSED EXCEPT FOR FILLING, FLUSHING AND BACTERIOLOGICAL TESTING PURPOSES.
2. DEPARTMENT SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING.
3. PRESSURE TEST PUMP CONNECTS TO SERVICE LINE OR BLOWOFF, NO EXTRA TAPS ARE PERMITTED UNLESS PRECEEDING ARE NOT PRESENT IN TEST SECTION.
4. PRESSURE GAUGE TO BE LOCATED IN VICINITY OF TEST PUMP CONNECTION.
5. GAUGE AND RISER TO BE REMOVED AFTER PRESSURE TEST.
6. REMOVE TEMPORARY CONNECTION AT CORPORATION STOPS AFTER FILLING AND FLUSHING HAS BEEN COMPLETED.
7. INJECT CHLORINE ON PROJECT SIDE OF BACKFLOW PREVENTER.
8. CONTRACTOR TO PROVIDE AN RPZ CERTIFICATION (LESS THAN 1 YEAR) PRIOR TO INSTALLATION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	DOUBLE VALVE DETAIL AND FILLING AND FLUSHING CONNECTION	11



MATERIAL

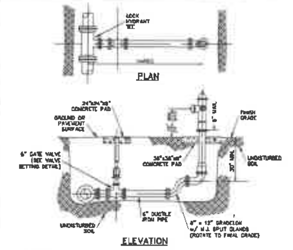
ITEM	QUANT.		DESCRIPTION
1	1	3", 4", 6", 8"	DOUBLE CHECK DETECTOR BACKFLOW PREVENTER
2	[illegible]	3", 4", 6", 8"	TEE (FLANGE-FLANGE)
3	[illegible]	3", 4", 6", 8"	PIPE, DUCTILE IRON (CLASS [illegible])
4	[illegible]	3", 4", 6", 8"	ADAPTER, FLANGE [illegible]
5	[illegible]	3", 4", 6", 8"	PIPE
6	[illegible]	3", 4", 6", 8"	GATE VALVE, [illegible] (FLANGE-FLANGE) [illegible]
7	[illegible]		ADJUSTABLE PIPE SUPPORTS [illegible]
8	[illegible]	8"	CONCRETE SLAB
9	2		BEND – 90° [illegible]

NOTES:

1. FIELD ADJUST AND CUT ITEM 3 TO PROPER LENGTH. THIS TYPE OF CONSTRUCTION IS DESIGNED FOR LIMITED WORKING AREA.
2. ALL EXPOSED DUCTILE IRON PIPES AND FITTINGS SHALL BE PAINTED "RED". PAINT SPECIFICATIONS MUST BE SUBMITTED TO MARTIN COUNTY UTILITIES PRIOR TO APPLICATION.
3. DETECTOR METER SHALL READ IN GALLONS AND SHALL BE 5/8" NEPTUNE MAGNETIC DRIVE, MODEL T-10.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	FIRE LINE DOUBLE CHECK DETECTOR ASSEMBLY	17

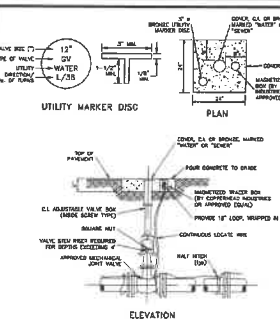


NOTES:

1. HYDRANTS SHALL BE INSTALLED PLUMB AND TRUE.
2. VALVES SHALL BE PLACED ADJACENT TO MAIN, AND TIED TO TEE.
3. ANCHOR TEES ARE REQUIRED.
4. ALL HYDRANTS SHALL BE TEE'D OFF OF MAIN.
5. HYDRANTS SHALL NOT BE PLACED IN SIDEWALK, ROADWAYS OR BIKEPATHS.
6. PIPE FROM VALVE TO HYDRANT SHALL BE RESTRAINED.
7. HYDRANT BARREL AND BONNET COLOR TO BE OSHA YELLOW.
8. THE CONNECTOR PIPE SHALL BE CEMENT LINED DUCTILE IRON, CLASS 350 AND POSITIONED BETWEEN THE FIRE HYDRANT AND GATE VALVE.
9. THE CONNECTOR PIPE SHALL HAVE AN ANCHORING FEATURE AT BOTH ENDS SO THAT WHEN USED WITH M.J. SPLIT GLANDS A RESTRAINED JOINT IS PROVIDED.
10. HYDRANT EXTENSIONS SHALL NOT BE ALLOWED.
11. NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP, DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.
12. A MAXIMUM OF 20 FEET OF HORIZONTAL PIPE SHALL TYPICALLY BE INSTALLED BETWEEN THE 6" GATE VALVE AT THE WATER MAIN AND THE HYDRANT. IF IT IS NECESSARY TO INSTALL MORE THAN 20 FEET OF HORIZONTAL PIPE, AN ADDITIONAL 6" GATE VALVE WILL BE REQUIRED AT THE HYDRANT LOCATION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	FIRE HYDRANT INSTALLATION DETAIL AND NOTES	7

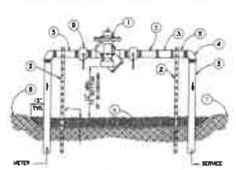


NOTES:

1. A LOCATION BALL (3M EMS BALL MARKERS; WATER/BLUE, MODEL No. 1403–XR; SEWER/GREEN, MODEL No. 1404–XR OR EQUAL) SHALL BE INSTALLED AT EACH FITTING AND/OR EVERY 100 FEET OF SEPARATION.
2. FOR DEEP VALVE INSTALLATIONS, A 6" C-900 PVC EXTENSION MAY BE USED TO BRING VALVE BOX TO GRADE.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	VALVE SETTING DETAIL	18



MATERIALS

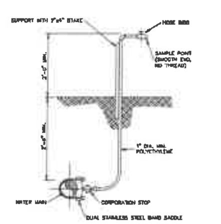
ITEM	QUANT.		DESCRIPTION
1	1	2"	BACKFLOW PREVENTER
2	3	1"	S.S. UNISTRUT W/ S.S. STRAPS
3	1	2"	COUPLING – COMPRESSION
4	2	2" X 90°	ELBOW
5	4	2" X 6"	NIPPLES
6			PEA GRAVEL
7			FILTER FABRIC
8			FINISHED GRADE
9	2		BALL VALVE

NOTES:

1. INSTALLATION SHOWN ABOVE IS FOR A 2" SERVICE. CHANGE PIPING MATERIALS ACCORDINGLY FOR SERVICE SIZE.
2. USE COPPER, BRASS OR STAINLESS STEEL FOR FITTINGS AND PIPE MATERIAL.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	REDUCED PRESSURE BACKFLOW PREVENTER SINGLE SERVICE 3/4" 1" 1-1/2" AND 2"	13

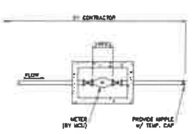


NOTES:

1. SAMPLE POINT SHOULD BE A SERVICE LINE.
2. AFTER SAMPLING IS COMPLETED AND APPROVED, SHUT OFF CORP. STOP, REMOVE TUBING, PLUG WITH BRASS PLUG AND LOCATE FOR RECORD DRAWINGS.
3. MOUNT METAL OR PLASTIC TAG INDICATING "SAMPLE POINT – DO NOT TURN OFF"

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SAMPLE POINT DETAIL	9

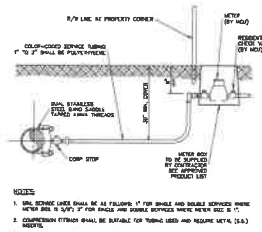


NOTES:

1. ALL VALVES TO BE STRAIGHT 1-1/2" BALL VALVES FOR 1-1/2" METER AND 2" BALL VALVES FOR 2" METER WITH LOCK-WING. (FLANGE AT METER) FORD OR APPROVED EQUAL.
2. SEE TYPICAL SERVICE DETAIL FOR MAIN CONNECTION.
3. METER BOX SHALL BE POLYMER CONCRETE AND FIBER REINFORCED POLYESTER.
4. PIPING SHALL BE 1-1/2" HDPE FOR 1-1/2" METER AND 2" HDPE FOR 2" METER, OR B WITH BRONZE COMPRESSION FITTINGS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	1-1/2" AND 2" METER DETAIL	5



NOTES:

1. MIN. SERVICE LINES SHALL BE AS FOLLOWS: 1" FOR SINGLE AND DOUBLE SERVICES WHERE METER SIZE IS 5/8"; 2" FOR SINGLE AND DOUBLE SERVICES WHERE METER SIZE IS 1".
2. COMPRESSION FITTINGS SHALL BE SUITABLE FOR TUBING USED AND REQUIRE METAL (S.S.) INSERTS.
3. DOUBLE SERVICES REQUIRE "U" BRANCH WITH ANGLE CURB STOPS.
4. POLYETHYLENE SHALL BE AS DEFINED BY A.S.T.M. D2737 SDR9 COPPER TUBE SIZE (CTS) AND A.W.W.A. 901, LATEST EDITION, AND BE PRESSURE RATED FOR 200 PSI AND SHALL BE "ENDOPURE" BY ENDOT INDUSTRIES, INC., ROCKAWAY, N.J. OR APPROVED EQUAL.
5. TUBING SHALL BE MARKED WITH SIZE, MANUFACTURERS NAME, WORKING PRESSURE, NATIONAL SANITATION FOUNDATION APPROVAL, A.S.T.M. SPECIFICATION AND PRODUCTION CODE. TUBING SHALL HAVE AN OUTSIDE DIAMETER EQUIVALENT TO THE OUTER DIAMETER OF COPPER TUBING.
6. SERVICE LOCATOR WIRE SHALL BE LAID IN THE TRENCH WITH ALL SERVICES, CONNECTED TO THE MAIN WIRE AND WRAPPED AROUND THE SERVICE PIPING OR TUBING. WIRE FOR POTABLE WATER SHALL BE BLUE IN COLOR.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SERVICE CONNECTION DETAIL 5/8" OR 1" METER	2

CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

DATE: [illegible]
DRAWN BY: [illegible]
DESIGNED BY: [illegible]
CHECKED BY: JWC
PROJECT No.: [illegible]
HORZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	[illegible]	PERMIT PLANS	[illegible]

THE RESERVE AT JENSEN BEACH

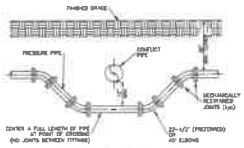
MARTIN COUNTY, FLORIDA

WATER STANDARD DETAILS

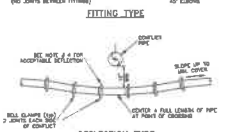
Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37830

CADD FILE: 1329.2 NOTES+DETAILS

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 25 OF 28



FITTING TYPE



DEFLECTION TYPE

NOTES:

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE, WITH 6" VERTICAL SEPARATION AND MAINTAIN REQUIRED COVER TO FINISHED GRADE.
2. FITTINGS SHALL BE RESTRAINED WITH RETAINER GLANDS.
3. THE DEFLECTION TYPE CROSSING IS PREFERRED.
4. DO NOT EXCEED 50% OF MANUFACTURER'S RECOMMENDED MAXIMUM JOINT DEFLECTION.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	PRESSURE PIPE CONFLICT DETAIL	20

MIN. LENGTH (IN FEET) OF PIPE TO BE RESTRAINED

(BASED ON 350 PSI MINIMUM LENGTH CALCULATION PROCEDURE FOR PVC PIPE, VALVE 3.1, AND 50% TRUST BETWEEN PIPE SOCKET AND PIPE, REDUCE 3.2)

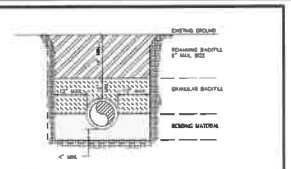
FITTING TYPE		PIPE SIZE 4"	6"	8"	10"	12"	14"	16"	20"	24"
90° HORIZ. BEND		11	20	35	50	55	45	64	82	
45° HORIZ. BEND		6	8	11	13	15	19	23	28	
22.5° HORIZ. BEND		3	4	5	6	7	8	11	13	
11.25° HORIZ. BEND		1	2	2	3	4	4	5	6	
90° VERT. OFFSET	UPPER BEND	26	41	59	84	114	85	115	134	
	LOWER BEND	7	10	13	16	19	23	30	35	
45° VERT. OFFSET	UPPER BEND	12	19	24	29	34	38	46	66	
	LOWER BEND	3	4	6	7	8	10	13	15	
22.5° VERT. OFFSET	UPPER BEND	6	9	12	14	17	19	23	27	
	LOWER BEND	1	2	4	4	4	5	6	7	
11.25° VERT. OFFSET	UPPER BEND	3	4	6	7	8	9	11	13	
	LOWER BEND	1	1	1	2	2	2	3	3	
PLUG (DEAD END)		23	46	80	113	150	187	229	320	
MINIMUM WALL		33	45	45	45	45	55	65	85	
TEE (BRANCH RESTRAINT)	4" x 4"	21	—	—	—	—	—	—	—	
	6" x 6"	35	50	—	—	—	—	—	—	
	8" x 8"	48	34	47	—	—	—	—	—	
	10" x 10"	59	40	55	68	—	—	—	—	
	12" x 12"	70	46	63	77	89	—	—	—	
	14" x 14"	—	52	70	86	101	115	—	—	
	16" x 16"	—	58	77	95	112	127	142	—	
	20" x 20"	—	71	95	117	138	158	178	220	
	24" x 24"	—	83	112	138	163	187	210	261	311
	12" x 4"	—	1	12	22	46	71	102	172	
	16" x 6"	—	—	—	21	41	61	87	151	
	20" x 8"	—	—	—	—	37	54	77	135	
	24" x 8"	36	—	—	—	—	—	—	—	
REDUCER (UPPER PIPE RESTRAINT)	6" x 4"	11	23	—	—	—	—	—	—	
	8" x 6"	21	11	23	34	—	—	—	—	
	10" x 8"	29	16	32	47	61	—	—	—	
	12" x 10"	36	20	40	58	75	91	—	—	
	14" x 12"	42	23	47	68	88	107	126	—	
	16" x 14"	48	26	53	77	100	121	142	182	
	20" x 16"	60	33	67	97	126	154	181	233	
	24" x 20"	72	39	80	116	151	185	217	280	341

NOTES:

1. THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
   SOIL TYPE=SAND TEST PRESSURE=150 PSI DEPTH OF BURY=3'
   TRENCH TYPE=3 SAFETY FACTOR=1.5 VERTICAL OFFSET=2'
   MINIMUM PIPE LENGTH ALONG TEE RUN=3'
2. THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON AND PVC PIPE.
3. ALL JOINTS BETWEEN UPPER AND LOWER BENDS SHALL BE RESTRAINED.
4. THE LENGTHS ARE BASED ON THE USE OF 90° BENDS, 45° BENDS, 22.5° BENDS AND FITTINGS.
5. DESIGN ENGINEER SHALL BE RESPONSIBLE FOR PROPERLY SIZING THE LENGTH OF PIPE TO BE RESTRAINED.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	MECHANICAL JOINT ANCHORING REQUIREMENTS	21

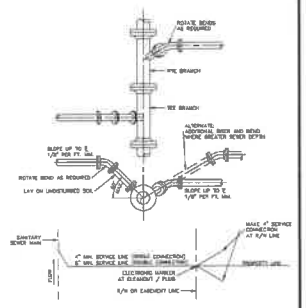


NOTES:

1. BEDDING MATERIAL SHALL BE HAND PLACED IN 6" LIFTS AND SHALL CONSIST OF NO-SALT GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK, 3/8"-1/2" BEDDING. UNSUITABLE NON-SITE MATERIALS SUCH AS ROCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE DONE WITH APPROVED MATERIAL. CLEAN AND FREE OF ROCKS, MUCK AND OTHER DELETERIOUS MATTER AND COMPACTED BENEATH THE HAUNCHES OF THE PIPE USING MECHANICAL TAMPERS TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
5. BACKFILL TO BE COMPACTED ALONG THE SIDES OF THE PIPE AND TO A POINT ONE FOOT ABOVE THE TOP OF THE PIPE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
6. A. WHERE PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTED IN 6 INCH LAYERS AND COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
   B. WHERE NO PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTED IN 6 INCH LAYERS TO A DENSITY 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
7. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL WORKER SAFETY REGULATIONS

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL TRENCH DETAIL	23

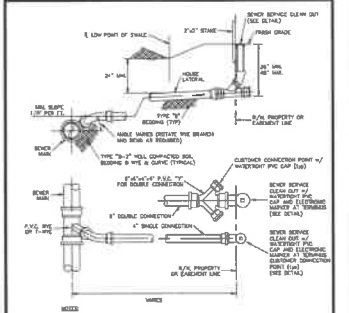


NOTES:

1. SERVICE MATERIALS SHALL TERMINATE WITH A CLEANOUT AT ℄.
2. LATERAL DEPTH AT ℄ SHALL BE 60 FEET MIN., PLUGGED WATERTIGHT AND MARKED WITH 3" x 3" TREATED STAKE AND ELECTRONIC MARKER.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	TYPICAL SEWER SERVICE CONNECTION	31

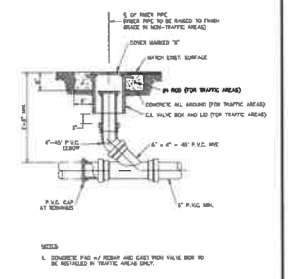


NOTES:

1. DEPTH OF MATERIAL TO BE 24" FROM FINISHED GRADE EXCEPT ON A WATER LINE SIDE, 4" OF SWALE R/W WHERE IT SHALL DROP TO 48" AS SHOWN AS DEPTH OF SEWER MAIN PERMITS.
2. THIS DETAIL TO BE USED WHEN TOP OF SEWER MAIN IS LESS THAN 9'-0" DEEP.
3. INSTALL MAGNETIC MARKERS AT THE END OF EACH SERVICE LINE OR OPPOSITE WYES AND RECORD LOCATION.
4. SERVICE LATERALS SHALL TERMINATE WITH A CLEANOUT AT ℄.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SANITARY SEWER LATERAL DETAIL	32



NOTES:

1. CONCRETE PAD w/ REBAR AND CAST IRON VALVE BOX TO BE INSTALLED IN TRAFFIC AREAS ONLY.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SEWER SERVICE CLEANOUT	33

811 KNOW WHAT'S BELOW CALL BEFORE YOU DIG

CAPTEC
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007987

DATE: 08-07-08
DRAWN BY: MRB
DESIGNED BY: BPM
CHECKED BY: JBG
PROJECT No.: 1329.2
HORZ. SCALE:
VERT. SCALE:

SCALE VERIFICATION
1 SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

REV.	DATE	REVISIONS	
1	08-08	REVISE TO CMC	AB-07-08-08

THE RESERVE AT JENSEN BEACH

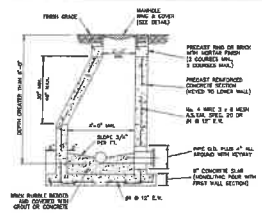
MARTIN COUNTY, FLORIDA

SANITARY STANDARD DETAILS

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 57638

CIVIL/REVISED-DETAILS
CA300 PE.E.

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 26 OF 28

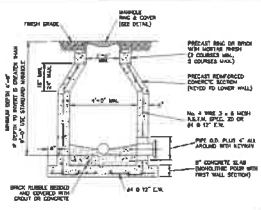


NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMNEK" OR EQUAL AT ALL PIPER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, i.e. THE LAST MANHOLE PRIOR TO THE DISCHARGE INTO THE RIVER, SHALL RECEIVE COATING OF 120 MILS OF RECOAT E-1339 AR OR SIMILAR ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL) THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF RECOAT E-1339 AR OR SIMILAR, 1/2" SEWPER COAT OR ET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 3-10 MILS FINISH COAT) OR MIN. 1/2" REPRATYN MAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	STANDARD MANHOLE	34

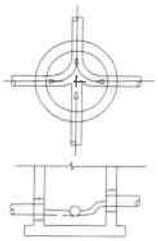


NOTES:

1. PROVIDE 0.1' DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I
3. "RAMNEK" OR EQUAL AT ALL PIPER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL)
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, i.e. THE LAST MANHOLE PRIOR TO THE DISCHARGE INTO THE RIVER, SHALL RECEIVE COATING OF 120 MILS OF RECOAT E-1339 AR OR SIMILAR ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL) THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF RECOAT E-1339 AR OR SIMILAR, 1/2" SEWPER COAT OR ET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 3-10 MILS FINISH COAT) OR MIN. 1/2" REPRATYN MAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SHALLOW MANHOLE	35

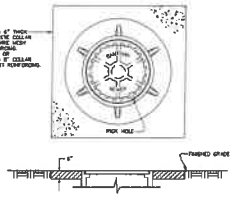


NOTES:

1. ALL INVERT CHANNELS ARE TO BE CONSTRUCTED FOR SMOOTH FLOW WITHOUT OBSTRUCTION.
2. PROPERLY SHAPED SPLASHAVE SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS TO PROVIDE FOR SMOOTH FLOWS.
3. BRICK AND CONCRETE RUBBLE PERMITTED AS FLOW CHANNEL BUILDUP.
4. SIDEWALLS OF FLOW CHANNEL SHALL BE AT LEAST HALF OF PIPE HEIGHT AT ALL POINTS.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	INVERT FLOW CHANNEL DETAIL	37

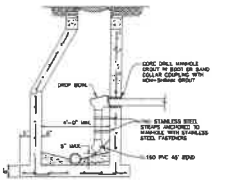


NOTES:

1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.
2. MINIMUM WEIGHTS: COVER – 160 LBS., FRAME – 240 LBS.
3. RING AND COVER SHALL BE U.S. FOUNDRY 535-2, VULCAN FOUNDRY V-10 OR APPROVED EQUAL.
4. MANHOLE COVER SHALL HAVE THE WORDS "SANITARY SEWER" CAST IN METAL.
5. MANHOLE COVER SHALL MEET H-20 TRAFFIC LOADING.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	SANITARY SEWER MANHOLE RING AND COVER	38



NOTES:

1. ALL DETAILS AND SPECIFICATIONS FOR STANDARD MANHOLES ARE ACCEPTABLE EXCEPT FOR REFERENCES TO DROP ASSEMBLY AND COATINGS.
2. THE PRECAST BASE SHALL EXTEND FULLY UNDER THE DROP ASSEMBLY.
3. MASONRY CONSTRUCTION ABOVE THE EXTENDED PRECAST BASE IS PERMISSIBLE IF FILLED WITH CONCRETE.
4. BRICK AND CONCRETE RUBBLE ARE PERMITTED AS FILLER IN DROP ENCASEMENTS.
5. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT INVERT IS LOCATED 2.5 FEET OR MORE ABOVE THE MAIN INVERT CHANNEL. DROP CONNECTIONS SHOULD NOT BE OBTAINED FOR LESS THAN A 24-INCH DROP.
6. SOLVENT TYPE JOINT P.V.C. FITTINGS MAY BE UTILIZED IN THE DROP ASSEMBLY ONLY.
7. THE EXTENDED SHALL RECEIVE 2 COATS OF WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF RECOAT E-1339 AR OR MIN. 1/2" SEWPER COAT OR ET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 3-10 MILS FINISH COAT) OR MIN. 1/2" REPRATYN MAC 100.

MARTIN COUNTY CONSTRUCTION STANDARDS & DETAILS

REVISION		DWG No.
AUGUST 2016	DROP MANHOLE AND SERVICE DROP	39

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CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: capteciofo@gmcapitec.com
Engineering Business No. EB-0007657

DATE: 4-27-2012
DRAWN BY: MDS
DESIGNED BY: RPM
CHECKED BY: JRC
PROJECT No.: 1329.2
NORE. SCALE: _____
VERT. SCALE: _____

SCALE VERIFICATION
1 SOLID BARS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY.

REVISIONS

#	DATE	DESCRIPTION	APPROVED
1	8/1	PERMIT PLANS	

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

SANITARY STANDARD DETAILS 2

Joseph W. Capes
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 57659

1329.2 SITE - DETAILS
CADD FILE

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET
SHEET 27 OF 28

GENERAL NOTES:

1. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR TO UTILIZE "APPROVED FOR CONSTRUCTION PLANS" ONLY.

2. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES 14 DAYS PRIOR TO CONSTRUCTION OPERATIONS ADJACENT TO THEIR FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

3. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. ALL BELL SOUTH, FPL, LOCAL CABLE, AND ALL LOCAL UTILITY COMPANY (CITY, COUNTY, WATER AND SEWER) LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR TO EXPOSE ALL CROSSINGS WITH SOUTHERN BELL, CABLE/CATV AND FLORIDA POWER AND LIGHT CONDUITS PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVES PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THESE FACILITIES. A PROFILE OF THE PRIVATE UTILITY FACILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE APPROXIMATE LOCATION OF THESE FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

4. CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, LANDSCAPE FEATURES, TREES AND UTILITIES NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION.

5. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE- CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER REQUESTING ATTENDANCE AT THE PRE-CONSTRUCTION MEETING. THE SUPERINTENDENT FOR THIS PROJECT SHALL SUBMIT A FORMAL RESUME SHOWING QUALIFICATIONS PRIOR TO THE PRE-CONSTRUCTION MEETING. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.

7. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.

8. AS-BUILT RECORD DRAWINGS: UPON COMPLETION OF THE WORK, BUT PRIOR TO SUBMITTAL OF REQUEST FOR FINAL PAYMENT OR FINAL ACCEPTANCE, THE CONTRACTOR OR DEVELOPER'S ENGINEER SHALL OBTAIN AND SUBMIT RECORD INFORMATION CERTIFIED BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER PREPARED IN ACCORDANCE WITH MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT MINIMUM CONSTRUCTION STANDARDS - SECTION 7 - RECORD DRAWINGS. TWO (2) PAPER PRINTS OF THE PLAN SHEETS, PROFILES, DETAILS AND LIFT STATION SHALL BE PROVIDED. THE PRINT SHALL BE SIGNED AND SEALED BY THE FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND THE FLORIDA PROFESSIONAL ENGINEER RESPONSIBLE FOR CERTIFYING THE PROJECT. ALL SHEETS MUST INCLUDE THE VERTICAL DATUM AND HORIZONTAL DATUM USED IN EASILY READABLE PRINT.

   THREE (3) ELECTRONIC RECORD DRAWING FILES SHALL ALSO BE PROVIDED AS FOLLOWS: ONE (1) DIGITAL RECORD DRAWING CAD FILE SAVED IN THE ORIGINAL FORMAT AS DESIGNED, BUT BEING AUTOCAD VERSION 2004 OR NEWER. ONE (1) DIGITAL RECORD DRAWING SAVED IN DWF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI). ONE (1) DIGITAL RECORD DRAWING SAVED IN PDF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI).

   ALL RECORD DRAWING INFORMATION SHALL ACCURATELY DEPICT ALL SURVEYED INFORMATION WITH ALL HORIZONTAL VECTOR INFORMATION BEING SHOWN IN THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND IN THE FLORIDA EAST ZONE STATE PLANE COORDINATE SYSTEM OR THE LATEST NGS ADOPTED DATUM USING U.S. SURVEY FEET AS THE UNIT OF MEASUREMENT.

   CAD FILES: THE DIGITAL RECORD DRAWING CAD FILE SHALL FOLLOW THESE GENERAL STANDARDS FOR INCLUSION IN THE UTILITY'S GEOGRAPHIC INFORMATION SYSTEM (GIS): ALL RECORD DRAWING PIPING INFORMATION SHALL BE PLACED ON SEPARATE LAYERS BY PIPING TYPE, DIAMETER AND MATERIAL. ALL RECORD DRAWING FIXTURE INFORMATION (FIRE HYDRANTS, VALVES, METERS, REDUCERS, TEES, WYES, CROSSES, CAPS, ETC.) SHALL BE PLACED ON SEPARATE LAYERS BY THE PIPING TYPE THEY ARE ATTACHED TO. ALL PIPING SHALL BE DRAFTED AS POLYLINES; SEPARATED ONLY AT JUNCTIONS OR CHANGES IN PIPE DIAMETER. ALL PIPING POLYLINES SHALL SNAP TO ONE ANOTHER AT EVERY JUNCTION AND CHANGE IN PIPE DIAMETER. A TEMPLATE FILE SHALL BE PROVIDED TO THE UTILITY DEPARTMENT WHICH CLEARLY DEPICTS RECORD DRAWING LAYERS AND BLOCKS TO BE USED IN FINAL RECORD DRAWING SUBMITTALS. ALL RECORD DRAWING CAD FILES SHALL ADHERE TO THE LAYER AND BLOCK STRUCTURE SUBMITTED IN THE TEMPLATE FILE.

9. THE CONTRACTOR WILL SUBMIT FOR APPROVAL BY OWNER A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION WHICH WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND COUNTY RULES AND REGULATIONS GOVERNING THE USE OF STREETS FOR PROTECTION OF THE WORK AND PUBLIC SAFETY. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - LATEST EDITION AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

10. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS (2016), THE REQUIREMENTS OF MARTIN COUNTY CODES AND REGULATIONS AND MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT SPECIFICATIONS AND STANDARDS (AUGUST 2016), IN ADDITION ALL ACTIVITIES ARE TO BE IN ACCORDANCE WITH F.D.E.P. STANDARDS AND ITEMS DESCRIBED IN THE TECHNICAL PROVISIONS OF THE CONSTRUCTION CONTRACT.

GENERAL NOTES (CONT.):

11. ANY MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY,

    GEODETIC INFORMATION CENTER
    ATTN: CHARLIE NOVICE
    ATTN: MCG - 162
    6001 EXECUTIVE BOULEVARD
    ROCKVILLE, MARYLAND 20852
    TELEPHONE: (301) 443-8319

12. BENCH MARK DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88).

13. SHOP DRAWING SUBMITTAL APPROVALS ARE REQUIRED FOR ALL STRUCTURES AND SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING. THE ENGINEER REQUIRES FIVE (5) BUSINESS DAYS TO REVIEW SHOP DRAWINGS AFTER RECEIPT. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

14. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M 145, FOUND SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12 INCH LIFTS COMPACTED TO NOT LESS THAN 98% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-180. THICKNESS OF LAYERS MAY BE INCREASED, PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.

15. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS CLEARING AND GRUBBING SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE (1) FOOT. ITEMS DESIGNATED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE DESIGNATED ON THE DRAWINGS.

16. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145. FILL SHOULD BE FREE FROM DEBRIS; VEGETATION, ORGANIC OR OTHER DELETERIOUS MATTER, AND SHOULD CONSIST OF CLEAN GRANULAR MATERIAL. IT SHOULD CONTAIN NOT MORE THAN 10 PERCENT PASSING THE U.S. STANDARD NUMBER 200 SIEVE, AND HAVE AN ORGANIC CONTENT LESS THAN ONE PERCENT. FILL SHOULD BE PLACED IN APPROXIMATELY LEVEL LIFTS OF LESS THAN 12 INCHES IN UNCOMPACTED THICKNESS, BE MOISTURE CONDITIONED AS NECESSARY, AND UNIFORMLY COMPACTED TO AT LEAST 98 PERCENT RELATIVE COMPACTION AS DETERMINED BY THE MODIFIED PROCTOR PROCEDURE (ASTM D1557). THE EXCAVATED SURFACE AND EACH LAYER OF BACKFILL SHOULD BE COMPACTED WITH A SELF-PROPELLED STEEL DRUM VIBRATORY ROLLER HAVING A MINIMUM TOTAL APPLIED FORCE OF 10 TONS. CONTRACTOR TO OVER EXCAVATE ALL DRY DETENTION AREAS TO FULLY REMOVE ANY SOILS THAT MAY LIMIT THE INFILTRATION OF STORM WATER LOCATED WITHIN 24" OF THE HARD PAN LAYER.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO: DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC. DENSITY TESTS SHALL BE PERFORMED AT THREE (3) LOCATIONS AROUND AND WITHIN 2' OF ALL STRUCTURES. TEST SHALL BE TAKEN IN THE FIRST FOOT ABOVE THE BOTTOM OF THE STRUCTURE AND THEN EVERY TWO FEET UP TO WITHIN TWO FEET OF THE FINISH GRADE.

18. ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF GRADING TO AVOID EROSION AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE WATER QUALITY MANAGEMENT SYSTEM.

19. TRENCHES AND EXCAVATIONS SHOULD BE KEPT DRY WHILE WORK IS IN PROGRESS. EXCAVATED MATERIALS, SUCH AS BOULDERS AND LOGS THAT ARE NOT SUITABLE FOR BACKFILL, SHOULD BE REMOVED FROM SITE. THE PIPE BARREL SHALL BE UNIFORMLY SUPPORTED ALONG ITS ENTIRE LENGTH ON UNDISTURBED SOIL OR BEDDING MATERIAL. PROPER BEDDING SHALL BE SUPPLIED IF THE EXISTING MATERIAL INCLUDES ROCK, ORGANIC MATTER OR OTHER SHARP OR UNSTABLE MATERIAL.

20. THE CONTRACTOR SHALL CONSTRUCT THE IMPROVEMENTS IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES AND WATER QUALITY ON OR OFF-SITE. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS. ALL WORK WITHIN THIS PROJECT WILL BE COMPLETED IN STRICT COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).

21. ALL EXISTING LINES THAT ARE ABANDONED SHALL BE CUT, PLUGGED AND GROUTED, OR REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AND OWNER. SINCE EXISTING LINES WITHIN THE PROJECT ARE ASBESTOS CONCRETE PIPE THEY SHALL BE HANDLED BY F.D.E.P. RULES AND REGULATIONS.

CLEAN-UP:

1. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A NEAT CONDITION AT ALL TIMES AND SHALL RESTORE/REPAIR ALL DRIVEWAYS, SIDEWALKS, UTILITIES, LANDSCAPING, IRRIGATION SYSTEMS, ETC., AFFECTED BY CONSTRUCTION ACTIVITIES.

2. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIALS, DEBRIS, EQUIPMENT, ETC., FROM THE JOB SITE IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION OPERATIONS.

3. UNLESS OTHERWISE SPECIFIED OR NOTED; ALL DISTURBED AREAS SHALL BE RESTORED BY CONTRACTOR TO PRE-CONSTRUCTION CONDITION OR BETTER PRIOR TO ACCEPTANCE BY THE OWNER AND LOCAL REGULATOR

4. ALL DISTURBED AREAS WILL BE SODDED UPON COMPLETION FOR STABILIZATION.

EROSION AND SEDIMENT CONTROL / ENVIRONMENTAL PROTECTION

1. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE LATEST LOCAL WATER MANAGEMENT DISTRICT SURFACE WATER PERMIT, COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITIONS AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY DISTRICT REPRESENTATIVES. THE CONTRACTOR SHALL REVIEW THE COMPLETE PERMIT PRIOR TO COMMENCEMENT OF THE ACTIVITY AUTHORIZED BY THE PERMIT. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ALONG WITH AN APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND THESE DOCUMENTS MUST REMAIN ON THE PROJECT SITE AT ALL TIMES, THROUGHOUT THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR COULD BE REQUIRED TO ENHANCE UPON THE SWPPP PLANS TO COMPLY WITH THE NPDES PERMIT AND THE STATE WATER QUALITY GUIDELINES. THESE ENHANCEMENTS ARE CONSIDERED INCIDENTAL TO THE COST OF EROSION AND SEDIMENT CONTROL.

2. ALL ACTIVITIES SHALL BE IMPLEMENTED AS SET FORTH IN THE PLANS, SPECIFICATIONS, AND PERFORMANCE CRITERIA AS APPROVED BY LOCAL SURFACE WATER PERMIT. ANY DEVIATION FROM THE PERMITTED ACTIVITY AND THE CONDITIONS FOR UNDERTAKING THAT ACTIVITY SHALL BE CONSIDERED A VIOLATION OF THE PERMIT. PRIOR TO ANY WORK, A NOTICE OF PENDING CONSTRUCTION NEEDS TO BE SUBMITTED TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

3. THE LOCAL WATER MANAGEMENT DISTRICT AUTHORIZED STAFF, UPON PROPER IDENTIFICATION, MUST BE GRANTED PERMISSION TO ENTER, INSPECT, AND OBSERVE THE SYSTEM TO INSURE CONFORMITY WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE PERMIT.

4. PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. ALL PRACTICES MUST BE IN ACCORDANCE WITH THE GUIDELINES AND SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL, A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATIONS 1988), WHICH ARE HEREBY INCORPORATED BY REFERENCE, UNLESS A PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN IS APPROVED AS PART OF THE SFWMD PERMIT, IN WHICH CASE THE PRACTICES MUST BE IN ACCORDANCE WITH THE PLAN. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 1988). THE CONTRACTOR SHALL CORRECT ANY EROSION OR SHOALING THAT CAUSES ADVERSE IMPACTS TO THE WATER RESOURCES.

5. STABILIZATION MEASURES UTILIZING SOD OR SEED AND MULCH SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. ALL WORK ON THIS PROJECT WILL BE CONSTRUCTED IN COMPLIANCE WITH THE APPROVED NPDES PERMIT.

6. THE STORMWATER MANAGEMENT SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO THE INITIATION OF THE PERMITTED USE OF SITE INFRASTRUCTURE. THE SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO TRANSFER AND RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM TO A RESPONSIBLE ENTITY. THE OWNER WILL NOT RELEASE FINAL PAYMENTS AND ALLOW REDUCTION OF RETAINAGE UNTIL ALL ITEMS ARE COMPLETED AND ACCEPTED BY THE OWNER.

7. NPDES PERMIT MONITORING MUST BE COMPLETED BY CONTRACTOR IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND MARTIN COUNTY.

GEOTECHNICAL NOTES

FILL PLACEMENT

NEW FILL MATERIALS MUST BE PLACED UNDER ENGINEERING SUPERVISION OF A GEOTECHNICAL ENGINEER. THE FILL SHOULD BE INORGANIC GRANULAR SOILS FREE FROM DELETERIOUS MATERIALS AND APPROVED BY OUR FIRM. THE FILL SHOULD BE PLACED IN LIFTS OF NO GREATER THAN 12 INCHES THICK, AND EACH LIFT SHOULD BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED COMPACTION TEST (ASTM D1 557). IN RESTRICTED AREAS WHERE A SMALL COMPACTOR MUST BE USED, THE LIFT THICKNESS SHOULD BE REDUCED TO 6 INCHES, AS DIRECTED BY THE INSPECTING GEOTECHNICAL ENGINEER. BACKFILL PLACED ADJACENT TO THE PILE CAPS AND GRADE BEAMS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

BACKFILL BEHIND WALLS SHOULD BE APPROVED SAND FILL AS INDICATED PREVIOUSLY AND SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN THICKNESS AND SHOULD BE COMPACTED TO MINIMUM DRY DENSITY OF BETWEEN 92 PERCENT AND 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY USING SMALL VIBRATORY COMPACTION EQUIPMENT, OVER COMPACTION IN THESE AREAS SHOULD BE AVOIDED. THE WALLS SHOULD BE TEMPORARILY BRACED DURING COMPACTION TO PREVENT OVERSTRESSING OF THE WALLS. PRIOR TO INITIATING COMPACTION OPERATIONS, REPRESENTATIVE SAMPLES OF THE STRUCTURAL FILL MATERIAL TO BE USED AND ACCEPTABLE IN-PLACE SOILS SHOULD BE COLLECTED AND TESTED TO DETERMINE THEIR COMPACTION AND CLASSIFICATION CHARACTERISTICS. THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, GRADATION AND PLASTICITY CHARACTERISTICS SHOULD BE DETERMINED. THESE TESTS ARE NEEDED FOR COMPACTION QUALITY CONTROL OF THE STRUCTURAL FILL AND EXISTING SOILS, AND TO DETERMINE IF THE FILL MATERIAL IS ACCEPTABLE.

EXCAVATION REQUIREMENTS

EXCAVATIONS OF FIVE FEET OR MORE IN DEPTH SHOULD BE SLOPED OR SHORED IN ACCORDANCE WITH OSHA AND STATE OF FLORIDA REQUIREMENTS. MATERIALS REMOVED FROM ANY EXCAVATION SHOULD NOT BE STOCKPILED IMMEDIATELY ADJACENT TO THE OPEN EXCAVATION AS THIS LOAD MAY CAUSE A SUDDEN COLLAPSE OF THE SIDEWALLS.

IN OCTOBER OF 1989, AS PUBLISHED IN THE FEDERAL REGISTRAR, VOLUME 54, NO. 209, THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS; "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29CRF PART 1926, SUBPART P". IT IS MANDATED BY THIS FEDERAL REGULATION THAT ALL EXCAVATIONS, WHETHER THEY BE UTILITY TRENCHES, BASEMENT EXCAVATION OR FOOTING EXCAVATIONS, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE, OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM.

IF CONDITIONS ARE ENCOUNTERED WHICH ARE NOT CONSISTENT WITH THE FINDINGS PRESENTED IN THIS REPORT, OR IF PROPOSED CONSTRUCTION IS MOVED FROM THE LOCATION STUDIED, THIS OFFICE SHALL BE NOTIFIED IMMEDIATELY SO THAT THE CONDITION OR CHANGE CAN BE EVALUATED AND APPROPRIATE ACTION TAKEN.

PROPOSED POOL

WE CONSIDER THE EXISTING SOILS TO BE SUITABLE FOR SUPPORT OF THE PROPOSED POOL USING CONVENTIONAL CONSTRUCTION METHODS. THE CONTRACTOR SHOULD TAKE MEASURES TO ENSURE THAT THE SIDE SLOPES ARE PROTECTED, AND WILL NOT AFFECT THE EXISTING STRUCTURE. ANY BACKFILL PLACED WITHIN THE ZONE OF INFLUENCE OF FOUNDATIONS (2 HORIZONTAL TO 1 VERTICAL) SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557).

BASED ON THE LEVEL OF THE GROUNDWATER LEVEL AT THE TIME OF THE FIELD WORK, (NINE TO NINE AND A HALF FEET BELOW THE EXISTING GROUND SURFACE) TEMPORARY DEWATERING MAY BE NEEDED IN ORDER TO CONSTRUCT THE POOL. THE POOL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE BEST METHODS OF DEWATERING FOR THE PROJECT.

THE POOL DECK MAY BE CONSTRUCTED ON COMPACTED EXISTING SOILS OR APPROVED FILL. THE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY TO A DEPTH OF 12 INCHES BELOW THE COMPACTED SURFACE.

PAVEMENT AREAS (UNLESS OTHERWISE MODIFIED BY MARTIN COUNTY STANDARDS)

PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY TO A DEPTH OF AT LEAST 12 INCHES BELOW THE BOTTOM OF THE SUBGRADE LEVEL. WE RECOMMEND THAT STABILIZED SUBGRADE HAVING A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 40 IS PLACED TO A DEPTH OF APPROXIMATELY ONE FOOT 1 BELOW THE BASE COURSE. THE BASE COURSE SHOULD BE AT LEAST 6 INCHES IN PARKING AREAS AND 8 INCHES IN ROADWAYS, AND SHOULD HAVE A MINIMUM LBR OF 100. THE PROJECT CIVIL ENGINEER SHOULD PROVIDE FINAL PAVEMENT RECOMMENDATIONS FOR THE PLANNED CONSTRUCTION.

WHERE CONCRETE PAVEMENT IS USED, A MINIMUM CONCRETE PAVEMENT THICKNESS OF 6 INCHES IS RECOMMENDED FOR THE STANDARD AND HEAVY DUTY PAVEMENT DESIGN. THE MINIMUM THICKNESS IS BASED UPON CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,500 PSI AND A MODULUS OF RUPTURE OF 550 PSI. THE PAVEMENT SECTION SHOULD BEAR ON PROPERLY COMPACTED SUBGRADE AS RECOMMENDED IN THIS REPORT.

ENVIRONMENTAL:
GFA INTERNATIONAL, INC.
607 NW COMMODITY COVE
PORT ST. LUCIE, FLORIDA 34986
(772) 924-3575

GEOTECHNICAL FIRM:
ECS FLORIDA, LLC
2000 AVENUE P
SUITE 3
WEST PALM BEACH, FLORIDA 33404
(561) 840-3667

PLANNER / LANDSCAPE ARCHITECT:
LUCIDO AND ASSOCIATES, INC.
701 SE OCEAN BOULEVARD
STUART, FLORIDA 34994
(772) 220-2100

10 DAYS PRIOR TO CROSSING EXISTING CONFLICTS, THE CONTRACTOR WILL POTHOLE THE LOCATION OF ALL EXISTING UTILITIES TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS. NO POTHOLES IN PAVEMENT AREA WILL BE ALLOWED.

CAPTEC Engineering, Inc.
Civil Engineering Professionals
301 N.W. Flagler Ave
Stuart, Florida 34994
Phone: (772) 692-4344
Fax: (772) 692-4341
E-mail: captecinfo@gocaptec.com
Engineering Business No. EB-0007657

DATE:	03-27-2020
DRAWN BY:	MDB
DESIGNED BY:	SPM
CHECKED BY:	JWC
PROJECT No.:	1329.2
HORZ. SCALE:	
VERT. SCALE:	

SCALE VERIFICATION
0 ▬▬▬ 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING. ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

NO.	BY	REVISIONS / DESCRIPTION	DATE
1	MDB	PERMIT PLANS	[illegible]

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

NOTES

Joseph W. Capra
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37938

1329.2 NOTES-DETAILS
CADD FILE:

SHEET IDENTIFICATION
JOB No.: 1329.2
SHEET 28 OF 28

BOARD OF COUNTY COMMISSIONERS:

DOUG SMITH	DISTRICT 1
STACEY HETHERINGTON	DISTRICT 2
HAROLD JENKINS	DISTRICT 3
SARAH HEARD	DISTRICT 4
EDWARD CIAMPI	DISTRICT 5

Construction Plans and Specifications
Of
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

Lying In
Section 27, Township 37 South, Range 41 East
Martin County, Florida

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16 - MAINTENANCE OF TRAFFIC
LA-1- LA-3 - LANDSCAPE PLANS
E0.1- E1.2 - ELECTRICAL / LIGHTING PLANS

END PROJECT
AT SAVANNAH RD.
℄ SURVEY STA. 60+17

BEGIN PROJECT
AT SAVANNAH RD.
℄ SURVEY STA 53+41

LOCATION MAP
NOT TO SCALE

GOVERNING SPECIFICATIONS:

- FDOT STANDARD PLANS FOR ROAD & BRIDGE CONSTRUCTION, FY2019-20.
- FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2019 EDITION.
- THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS (FLORIDA GREENBOOK), 2016 EDITION.
- THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON TRAFFIC CONTROL DEVICES (M.U.T.C.D.), 2009 EDITION.
- THE MARTIN COUNTY PUBLIC WORKS STANDARD DETAILS FOR ROAD AND SITE CONSTRUCTION AND PUBLIC FACILITIES, 12/03/2020 EDITION.

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CAPTEC Civil Engineering Professionals
Civil Engineering Professionals
Engineering Business No. EB-0007897
301 N.W. Flagler Avenue
Stuart, Florida 34994
Phone: (772) 283-4344
Fax: (772) 283-4341

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

Joseph W. Capra, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37858

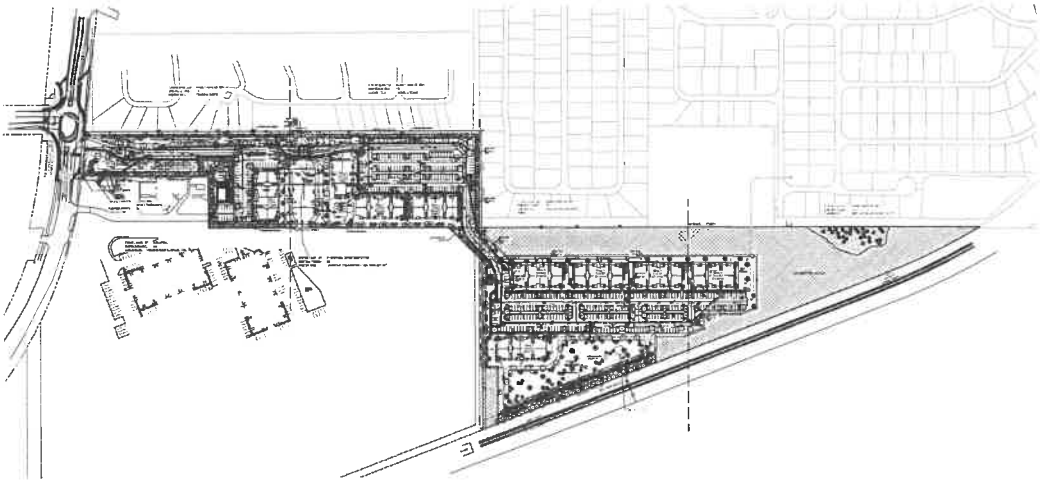
811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
Tri-State Tri-State Tri-State Inc.
www.callsunshine.com

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY IMPROVEMENTS	676	0.13
NET LENGTH OF PROJECT	676	0.13
GROSS LENGTH OF PROJECT	676	0.13

REVISIONS

	DESCRIPTION	DATE	APPR.
01	PERMIT PLANS	3-27-2020	MDB



Landscape Data:

Total Site Area	1 652,29* sf. (37.71 ac.)
Development Area	764,344 sf. (17.55 ac.)
Total Open Space	434,760 sf. (9.98 ac.)
Existing Zoning	CG/MUE, RM-4
Existing Future Land Use Designation	Medium Density & Commercial Office Residential

Sec. 4.663.A. Landscape Design Standards	Required	Provided
1. Min. 25% of Development Area to be Landscape Area	148,808 sf. (20%)	291,636 sf. (38%)
2. Hardwood Developments - 1 Tree 1,000 sf. of Development Area (764,344 sf./1,000 sf. = 465.82)	465 Trees	601 Trees (all to be from Palm Beach County approved list for hardwood)
Sec. 4.663.B.4.a - Type 1 Bufferyard Requirements (20' Wide Landscape Strip with a 6' High Opaque Fence)		
Trees (10' Min. Height, 2" Caliper) - 1 Tree/200 s.f., (37,548 sf. buffers/200 = 188.01)	188 Trees	188 Trees
Shrubs - 10 shrubs/200sf. (188.01 * 10 = 1,880.1)	1,880 Shrubs	1,372 Shrubs
Sec. 4.663.c - 1 of Type 3 Bufferyard Requirements (20' Wide Landscape Strip with a 6' High Opaque Fence or Wall)		
Trees (10' Min. Height, 2" Caliper) - 1 Tree/300 s.f., (16,292 sf. bufferyard/300 = 54.07)	54 Trees	54 Trees (all to be from Palm Beach County approved list for hardwood)
Shrubs - 24 shrubs/300sf. (54.07 * 24 = 1,297)	1,733 Shrubs	1,733 Shrubs
Sec. 4.663.d - 2 of Type 4 Bufferyard Requirements (20' Wide Landscape Strip with a 6' High Opaque Fence or Wall)		
Trees (10' Min. Height, 2" Caliper) - 1 Tree/300 s.f., (17,218 sf. bufferyard/300 = 56.39)	56 Trees	62 Trees (all to be from Palm Beach County approved list for hardwood)
Shrubs - 24 shrubs/300sf. (56.39*24 = 2,013)	2,013 Shrubs	2,013 Shrubs
Sec. 4.663.e.2 - Type 3 Bufferyard Requirements (20' Wide Landscape Strip with a 6' High Opaque Fence or Wall, 100% Native)		
Trees (10' Min. Height, 2" Caliper) - 3 Trees/300 sf. (17,448 sf. bufferyard/300 = 58.16 * 3= 174.48)	175 Trees	125 Trees (min. 50% Palm, 1 Palm per 40 L.F.)
Shrubs - 24 shrubs/300sf. (58.16 * 24 = 1,396)	1,396 Shrubs	1,396 Shrubs

Sec. 4.666 Tree Mitigation (See Tree Mitigation Plan)

Sec. 4.663 Water Efficient Landscaping

1. Min. 30 Points (for Lake)	
a. 5 points if moisture-sensing controller other than rain-sensor override device.	5 Points
b. 7 Points percent or more of the required shrubs are made up of drought-tolerant species from the list.	10 Points
b. Fifty-one percent or more of the required trees are made up of drought-tolerant species from the list.	10 Points
c. Fifty percent more than the required plant trees planted in the vehicular use areas.	10 Points
1. Utilization of composted mulch beds at least three inches deep in all planted areas except ground cover.	10 Points
m. Utilization of mulch.	5 Points
Total:	50 Points

Irrigation Notes:

- Adequate irrigation of landscaped areas will be provided for the full growing season and sufficient further so as to maintain in a vigorous required expansion in good and healthy condition.
- Irrigation systems shall conform to the following standards: Irrigation systems shall be automatically operated in working order and shall be designed not to overtax water power or to water impervious areas.
- 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 traffic passing vehicular traffic.

Landscape Notes:

- Alternative plant species for required landscape may be permitted subject to review and approval by the Martin County Growth Management Director and Board and/or its subsidiaries.
- All prohibited exotic species must be removed and all required landscape improvements must be inspected and approved by Martin County prior to the issuance of a Certificate of Occupancy.
- No Cypress Mulch or Red Mulch is to be used on site. Eucalyptus or Melaleuca Mulch is to be used in a 3" consistent layer in all planting beds.
- Enhanced landscaping beyond minimum requirements will conform to all applicable sections of the Martin County Landscape Code. Ordinance #651 Airport Overlay will be submitted to Martin County Growth Management and Certification of Landscaping Installation and Maintenance.
- The plan has been designed to meet the tree planting requirements stipulated within the FPL easement entitled "Plant the right tree in the Right Place".
  - 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 or more than 30') shall be planted no closer than a horizontal distance of 30' from the nearest overhead power line.
  - Medium height trees (height at maturity between 20' and 30') shall be a tree in base 20' and small trees (height at maturity of less than 20') may be utilized.
  - No tree, shrubs, hedges or vines shall be planted within 5' of an existing or proposed utility pole, guy wire, or pedestal/utility transformer.
  - Palms should be planted at a distance equal to or greater than the average frond length plus five (5) feet from power lines.
  - Tree species shall be selected so to minimize conflicts with existing or proposed utilities.
- Encroachment into required bufferyards and landscaped areas by vehicles, boats, mobile homes or trailers shall not be permitted. Any required landscape areas shall not be used for the storage or sale of materials or products or the parking of vehicles and equipment.
- Required landscaping shall be maintained so as to at all times present a healthy, neat and orderly appearance, free of refuse and debris. If vegetation which is required to be planted dies, it shall be replaced with equivalent vegetation. All trees for which credit was received and which subsequently die shall be replaced by the required number of living trees according to the standards established in the Martin County Landscape Code.
- All landscaping shall be maintained free from diseases, pests, weeds and litter. Maintenance shall include weeding, watering, fertilizing, pruning, mowing, edging, mulching or other maintenance as needed and in accordance with acceptable horticultural practices. Perpetual maintenance shall be provided so as not to hinder attainment of intended aesthetic values from landscaping and preservation areas.
- Regular landscape maintenance shall be provided for repair or replacement. Where necessary, all sprinkling or bubbler rig required as shown on the plan. Regular landscape maintenance shall be provided for the repair or replacement of required walls, fences or structures in a structurally sound condition as shown on this site.
- [illegible] To date [illegible]
- Stormwater management areas are to be maintained with planted littoral zone vegetation in perpetuity.

Sheet Index:

Cover Sheet	CV
Landscape Plans	LA-1 - LA-4
Tree Mitigation Plan	LA-5 - LA - 7
Plant Schedules	LA - 8
Landscape Details	LA-9
Landscape Specifications	LA-10

lucido & associates
701 SE Ocean Blvd, Stuart, Florida 34994 (772) 220-2100, Fax (772) 220-2200

Key / Location:

Project Team:

Applicant:	Reserve Investors, LLC & Seven, LLC P.O. Box 3363 Stuart, FL 34997
Land Planner Landscape Arch Rep:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Engineer Traffic Engineer:	Cheney Engineering 201 NW Flagler Avenue Stuart, FL 34994
Surveyor:	Betty Lindsay, Inc. 1907 SW Arch Jones Drive Stuart, FL 34993
Environmental Planner:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Engineer:	Mark Wagner & Associates 801 N. Federal Highway, Suite 212 Boca Raton, FL 33432

The Reserve at Jensen Beach

Landscape Plan

Cover Sheet

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.19	JJ	Initial Submittal
08.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = 150'

0 75' 150' 300' RSG. # 1918 Thomas P. Lucido

Designer	JJ	Sheet	CV
Manager	DF		
Project Number	19-020		
Municipal Number	—		
Computer File	19-020 The Reserve at Jensen Beach - Landscape Plan.dwg		

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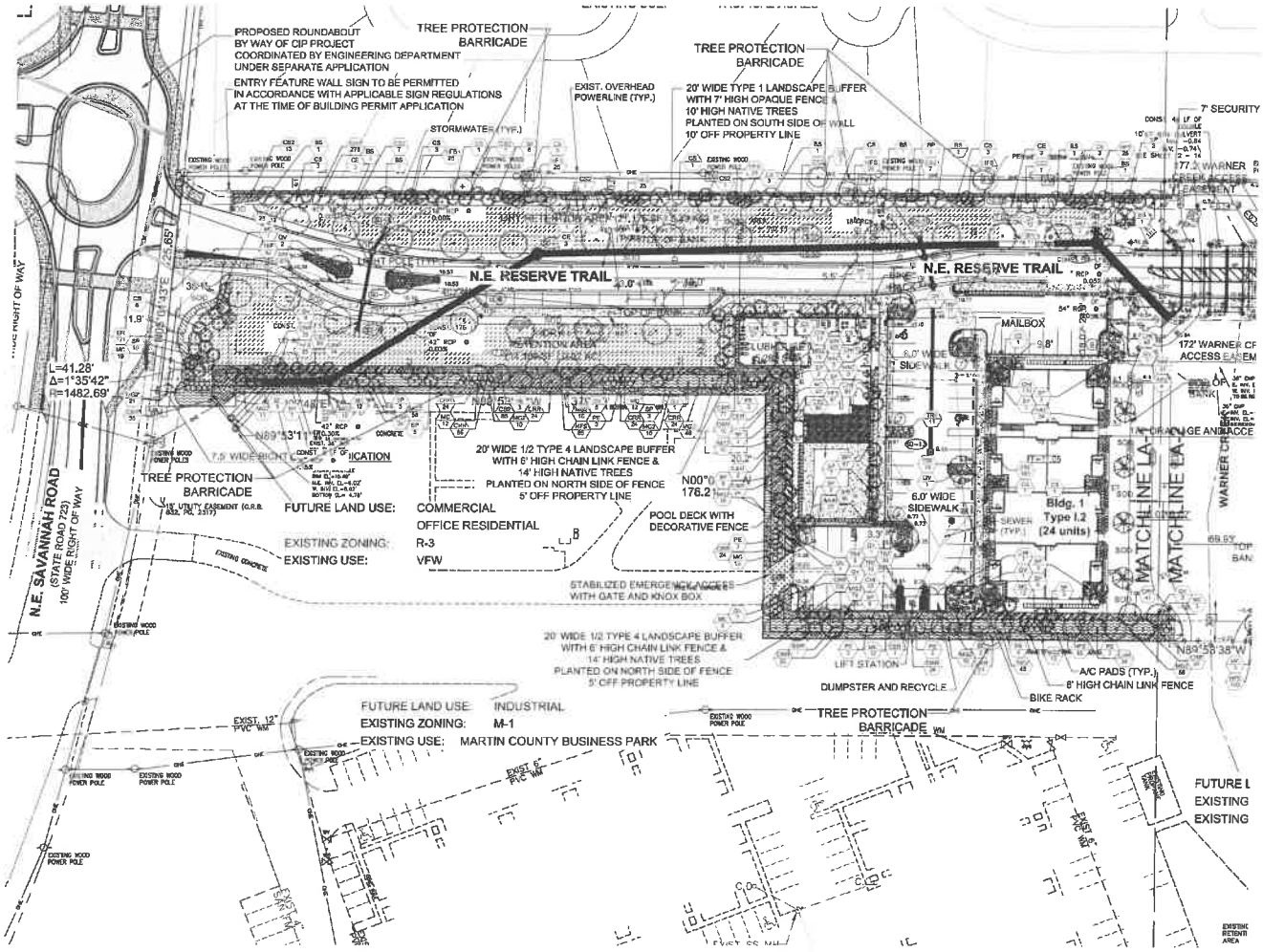

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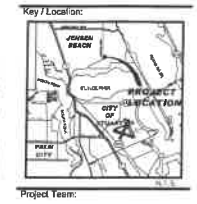
Key / Location:



Project Team:

Applicant:	Reserve Development, LLC & Seaside, LLC P.O. Box 2383 Stuart, FL 34995
Land Planner Landscape Architect:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Engineer Traffic Engineer:	Cheler Engineering 201 NW Flagler Avenue Stuart, FL 34994
Surveyor:	Bishop Lanham, Inc. 7900 SW Jack Jensen Drive Stuart, FL 34997
Environmental Planner:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Architect:	Marc Wilmer & Associates 851 E. Federal Highway - Suite 101 Stuart, FL 34994

The Reserve at Jensen Beach

Landscape Plan

Jensen Beach, Martin County, Florida

Date	By	Description
00.00.00	JJ	Initial Submittal
08.10.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
00.00.20	RAW	Third Resubmittal

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

REG. # 1015
Thomas P. Lucido

Designer	JJ
Manager	DF
Project Number	18-200
Municipal Number	—
Computer File	18-200 Jensen Beach - Landscape Plans

Sheet

LA-1

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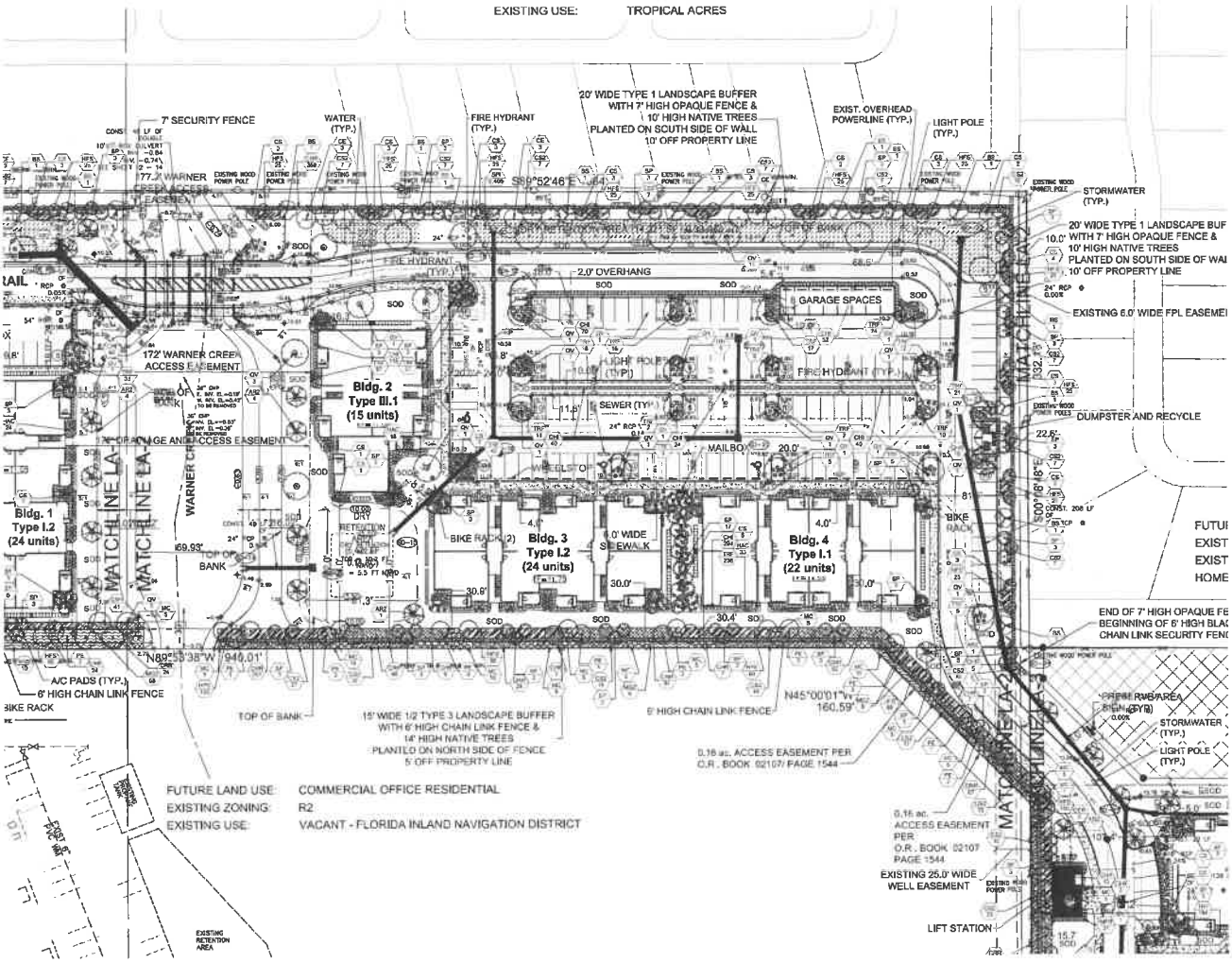

lucido & associates

Key / Location:

Project Team:

Applicant:	Senerval Investments, LLC & Dendis, LLC P.O. Box 2303 Stuart, FL 34995
Land Planner/ Landscape Architect:	Lucido & Associates 701 E Ocean Boulevard Stuart, FL 34994
Engineer/ Traffic Engineer:	Cotleur Engineering 201 NW Flagler Avenue Stuart, FL 34994
Surveyor:	Boley Lindsey, Inc. 2585 SW Jack James Drive Stuart, FL 34997
Environmental Planner:	Lucido & Associates 701 E Ocean Boulevard Stuart, FL 34994
Architect:	Mark Weaver & Associates 401 S. Dixie Highway, Suite 4 & 5 West Palm Beach, FL 33401

The Reserve at Jensen Beach

Landscape Plan

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.18	JJ	Initial Submittal
08.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = 30'

0 10' 20' 60'

REG. # 1018
Thomas P. Lucido

Designer	JJ
Manager	DP
Project Number	19-020
Municipal Number	—
Computer File	19-020 The Reserve at Jensen Beach - Landscape Plan.dwg

Sheet **LA-2**

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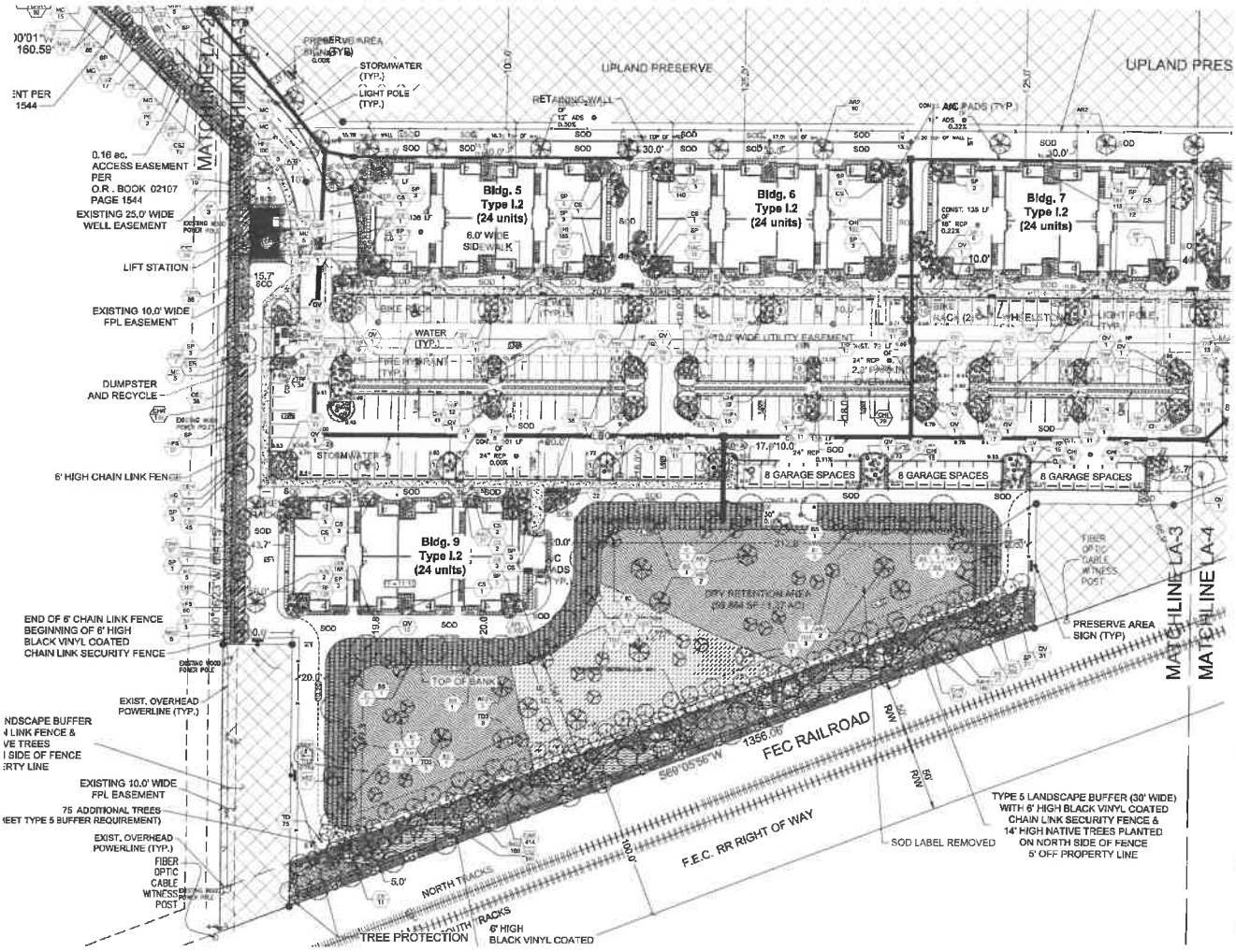

lucido & associates

Key / Location:

Project Team:

Applicant:	Sewright Investments, LLC & Dawn, LLC P.O. Box 2301 Stuart, FL 34995
Land Planner: Landscape Architect:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Engineer: Traffic Engineer:	Lenscioni Engineering 301 SW Flagler Avenue Stuart, FL 34994
Surveyor:	Bolte Lumber, Inc. 7897 SW Jack Johnson Drive Stuart, FL 34997
Environmental Planner:	Lucido & Associates 701 S.E. Ocean Boulevard Stuart, FL 34994
Architect:	Allen Wilson & Associates 401 S. Federal Highway, Suite 210 Stuart, FL 34994

The Reserve at Jensen Beach

Landscape Plan

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.18	JJ	Initial Submittal
06.18.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

REG. # 1018
Thomas P. Lucido

Designer:	JJ
Manager:	DF
Project Number:	18-020
Municipal Number:	—
Computer File:	18-020 The Reserve at Jensen Beach - Landscape Plans

Sheet: **LA-3**

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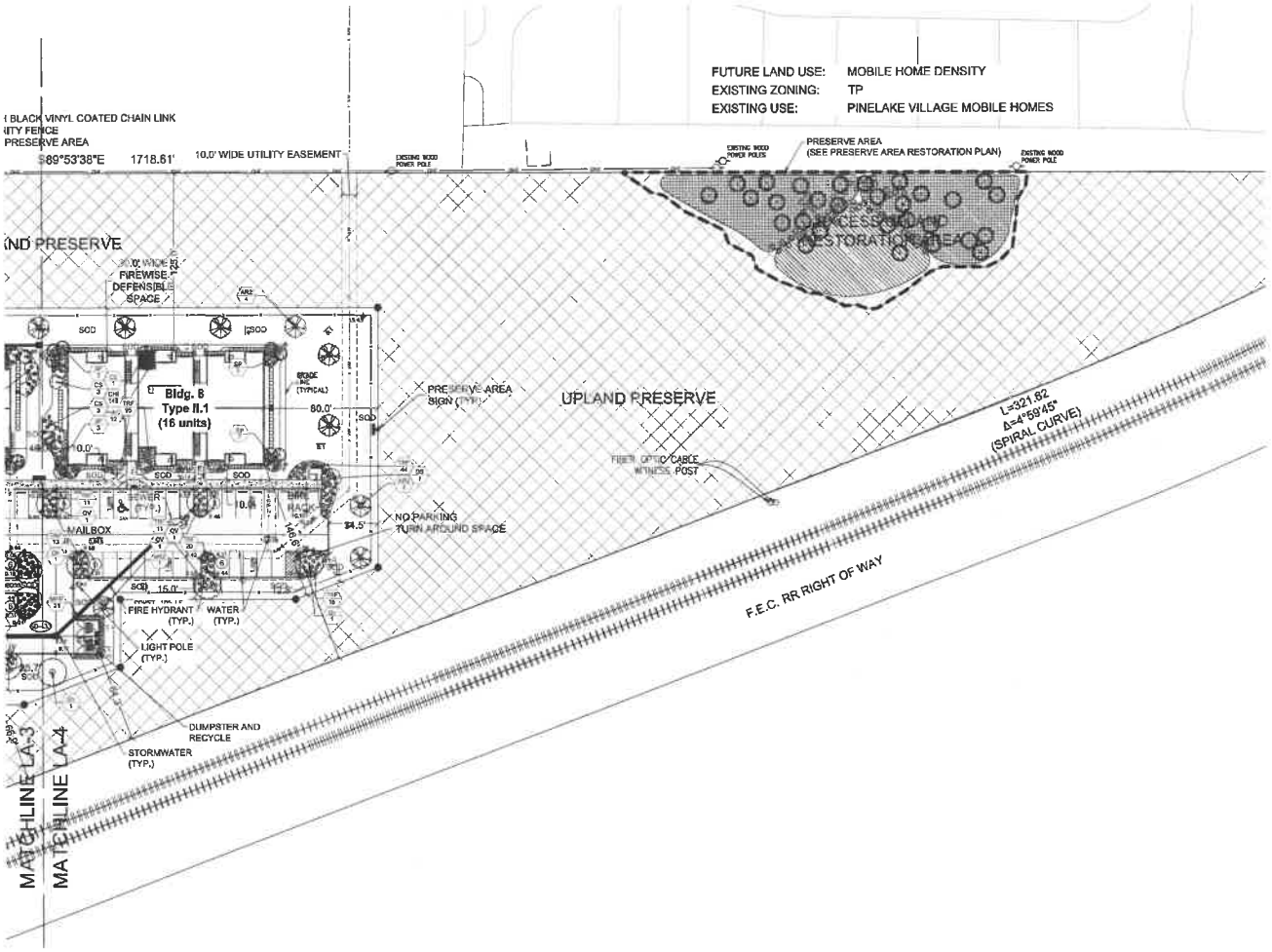

lucido & associates

Key / Location:

Project Team:

Applicant:	Reserve at Jensen Beach, LLC & Beach, LLC P.O. Box 5363 Boca Raton, FL 33482
Land Planner Landscape Architect:	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Engineer Traffic Engineer:	Cramer Engineering 301 NW Flagler Avenue Stuart, FL 34994
Surveyor	Bates & Lindsey Inc. 7987 SW Jack James Drive Stuart, FL 34997
Environmental Planner	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Architect	Harry Weiner & Associates 401 S. Federal Highway, Ste 4 Boca Raton, FL 33432

The Reserve at Jensen Beach

Landscape Plan

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.18	JJ	Initial Submittal
06.18.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.12.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = 20'

0 15' 30' 60'

REG. # 1916
Thomas P. Lucido

Designer	JJ	Sheet
Manager	DF	LA-4
Project Number	18-020	
Municipal Number	—	
Computer File	18-020 The Reserve at Jensen Beach - Landscape Plan.dwg	

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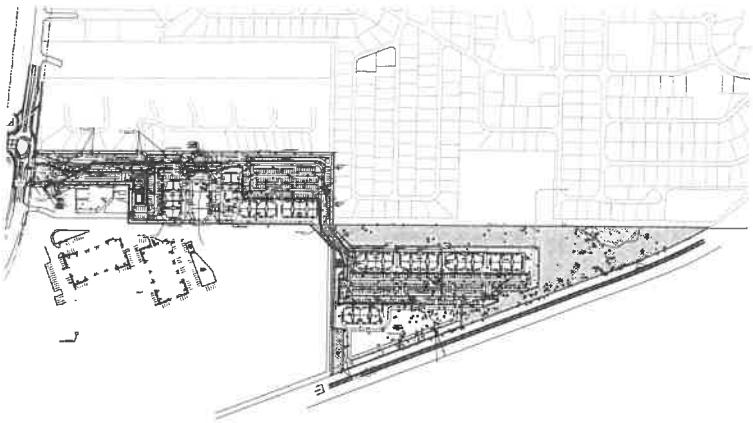

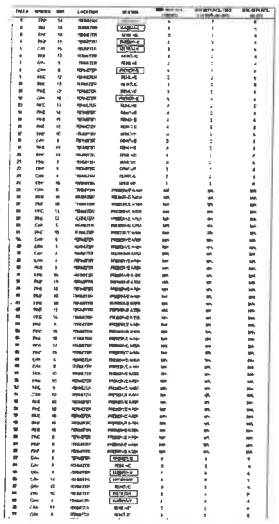

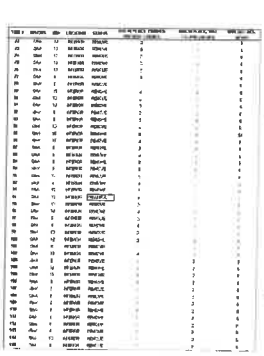

lucido & associates

Key / Location:

Project Team:

Applicant: Bucanyr Investments, LLC & Dunes, L.C.
710 Sea Stars
Stuart, FL 34996

Land Planner/ Landscape Architect: Lucido & Associates
701 SE Ocean Boulevard
Stuart, FL 34994

Engineer/ Traffic Engineer: Cotleur Hearing
2101 NW Flagler Avenue
Stuart, FL 34994

Surveyor: Betty Lindsey Inc.
2882 SW Jack James Drive
Stuart, FL 34997

Environmental Planner: Lucido & Associates
701 SE Ocean Boulevard
Stuart, FL 34994

Architect: Liam Hunter & Associates
411 S. Federal Highway, Suite 201
Boca Raton, FL 33432

The Reserve at Jensen Beach

Tree Mitigation

Jensen Beach, Martin County, Florida

Date	By	Description
06.05.19	JJ	Initial Submittal
06.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.05.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = 200'

0 100' 200' 400'

REG. # 1018
Thomas P. Lucido

Designer: JJ
Manager: DF
Project Number: 17-618
Municipal Number: —
Computer File: 17-618 The Reserve at Jensen Beach Landscape Plans.dwg

Sheet **LA-5**

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Tree Mitigation Data:

Total Replacement Credits Required:	207 Credits
Total Replacement Credits Proposed:	303 Credits
Total Trees Planted for Mitigation:	101 Trees

*101 Oaks Provided for MIL @ 4" caliper (3 Credits Per Tree): 101 Trees = 303 Credits

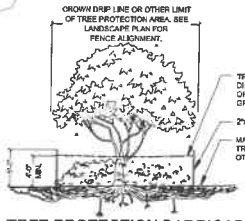
Tree Protection Data (Section 4.666.E):

Total Trees Eligible for Protection:	115 Trees
Total Trees Required to be Protected:	12 Trees

*115 Trees (Eligible for Protection) * .10 (10% Min. Required) = 11.5 Trees

Total Trees to be Protected (Preserved):	12 Trees

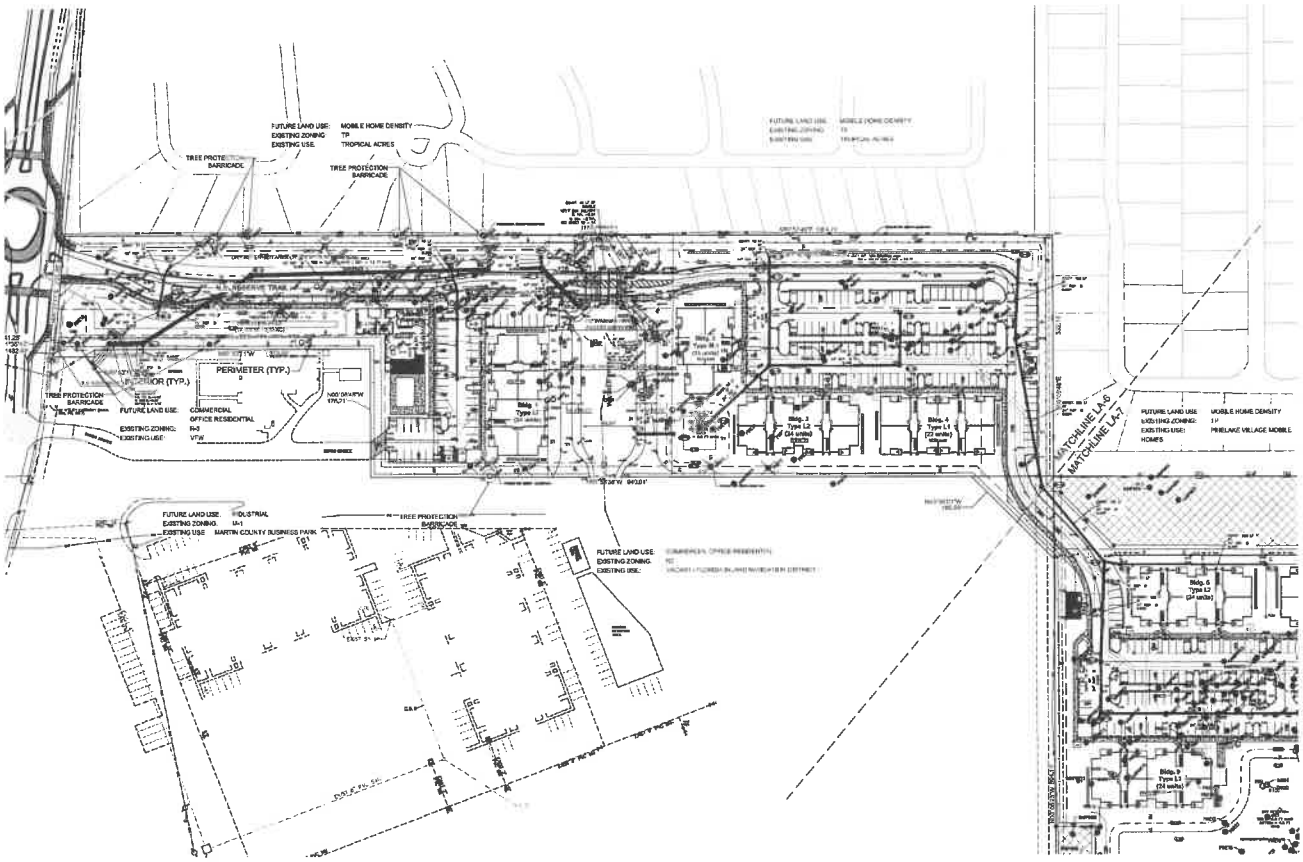
*12 additional oak trees (4" caliper) are provided to satisfy the 10% minimum Tree Protection requirement.



TREE PROTECTION BARRICADE

NOT TO SCALE

NOTES:
1- SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
3- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



lucido & associates

Key / Location:

Project Team:

Applicant:	Gemmati Apartments, LLC & Davis, LLC P.O. box 2365 Stuart FL 34995
Land Planner/ Landscape Architect:	Lucido & Associates 701 SE Ocean Boulevard Stuart FL 34996
Engineer/ Traffic Engineer:	Cotten Engineering 2171 SW Kanner Highway Stuart FL 34994
Surveyor:	Gang Liberty, Inc. 727 SW Jefferson Street Stuart, FL 34997
Environmental Planner:	Lucido & Associates 701 SE Ocean Boulevard Stuart FL 34994
Architect:	Mark Wetter & Associates 501 S. Federal Highway, Suite 202 Boca Raton, FL 33432

The Reserve at Jensen Beach

Tree Mitigation

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.18	JJ	Initial Submittal
06.19.19	JJ	First Resubmittal
12.12.19	GAW	Second Resubmittal
03.02.20	GAW	Third Resubmittal

NORTH

SCALE: 1" = 50'

0 25' 50' 200'

REG. # 1018
Thomas P. Lucido

Designer	JJ
Manager	DF
Project Number	17-610
Municipal Number	—
Computer File	16-039 The Reserve at Jensen Beach-Landscape Planning

Sheet **LA-6**

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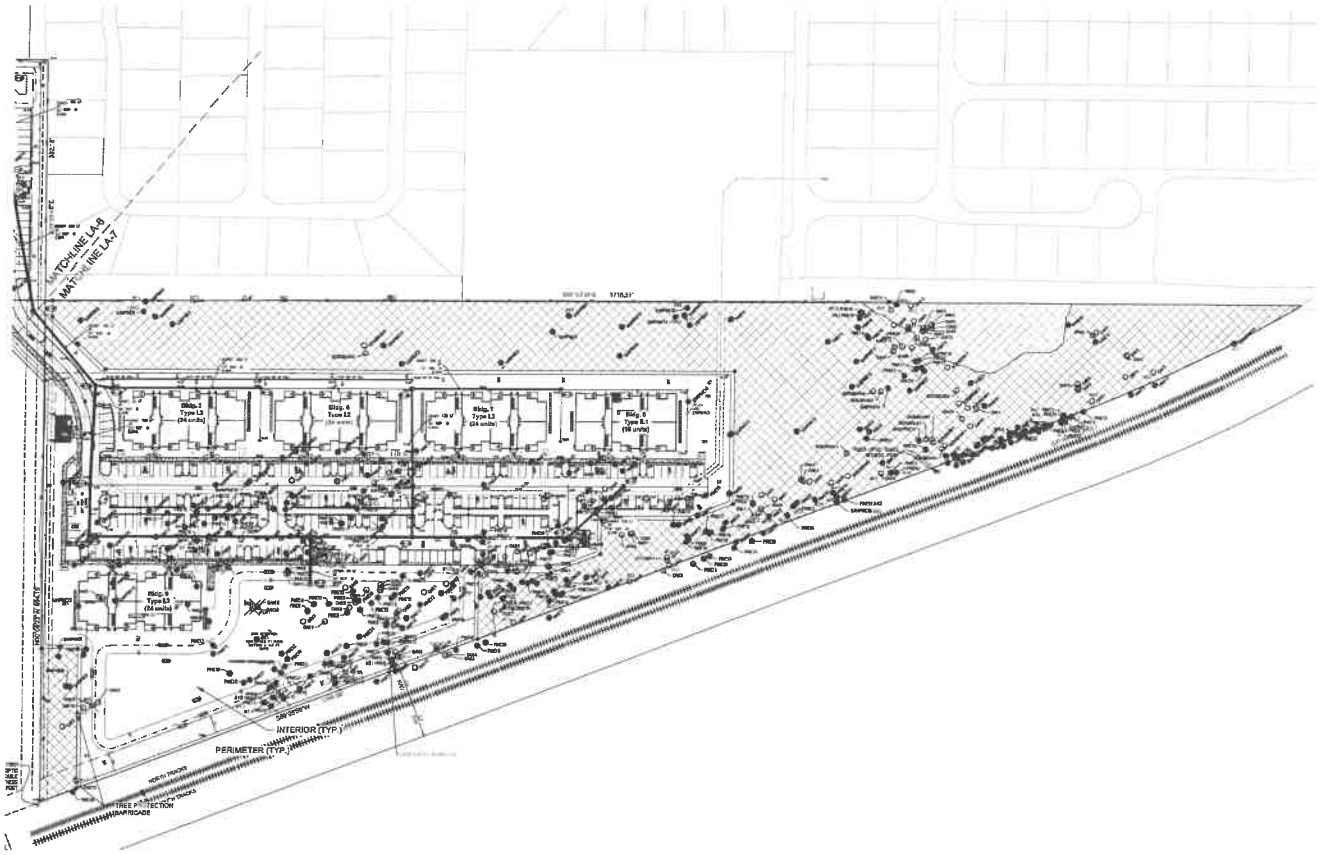
TREE MITIGATION LEGEND

- Oak Tree
- Pine Tree
- Existing Applicable Trees to be Removed
- Existing Applicable Trees to be Preserved



TREE MITIGATION LEGEND

- Oak Tree
- Pine Tree
- Existing Applicable Trees to be Removed
- Existing Applicable Trees to be Preserved

lucido & associates

Key / Location:

Project Team:

Applicant:	Spaceship Investments, LLC & Uemlo, LLC P.O. Box 3381 Stuart, FL 34482
Land Planner/ Landscape Architect:	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Engineer/ Traffic Engineer:	Cotleur Engineering 301 SW Flagler Avenue Stuart, FL 34994
Surveyor:	Kelly Lowery, Inc. 2787 SW 360 Jensen Drive Stuart, FL 34994
Environmental Planner:	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Architect:	Marc Weiner & Associates 801 S. Federal Highway, Suite 203 Boca Raton, FL 33432

The Reserve at Jensen Beach

Tree Mitigation

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.16	JJ	Initial Submittal
09.16.16	JJ	First Resubmittal
12.14.16	SAW	Second Resubmittal
03.02.17	SAW	Third Resubmittal

NORTH

SCALE: 1" = 60'

0 30' 60' 120'

REVIS. # 10/6
Thomas P. Lucido

Designer	JJ	Sheet
Manager	DF	LA-7
Project Number	17-010	
Municipal Number	—	
Computer File	"MLAD Tree Reserve at Jensen Beach - Landscape Plan.dwg"	

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605

PLANT SCHEDULE MASTER

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	ARD	40	Acer rubrum	Red Maple	30G	12' HT	6' SPR	F, SP, For Mitigation	Native	2" Caliper
	BS	34	Bursera simaruba	Gumbo Limbo	30G	10' HT	6' SPR		Native	2" Caliper
	BSR	1	Bursera simaruba	Gumbo Limbo	65G	14' HT	7' SPR		Native	4" Caliper
	CE	21	Conocarpus erectus	Buttonwood	30G	10' HT	5' SPR	F, SP	Native	2" Caliper
	CER	11	Conocarpus erectus	Buttonwood	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	CS	115	Conocarpus erectus 'Sericeus'	Silver Buttonwood	30G	10' HT	4' SPR		Native	2" Caliper
	IC	34	Ilex cassine	Dahoon Holly	FG	10' HT	6' SPR	F, SP, For Mitigation	Native	2" Caliper
	PE	29	Pinus elliottii var. densa	South Florida Slash Pine	FG	10' HT	6' W		Native	2" Caliper
	EXT	12	Quercus virginiana	Existing Tree to remain						
	QV	195	Quercus virginiana	Southern Live Oak	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	SP	320	Sabal palmetto	Sabal Palm	FG	10'-16' CT		HVY CAL, SP	Native	
	TDB	16	Taxodium distichum	Bald Cypress	FG	10' HT	6' SPR	F, SP, For Mitigation	Native	2" Caliper
	TD	71	Taxodium distichum	Bald Cypress	FG	14' HT	7' SPR	F, SP, used in type 5 buffer	Native	3" Caliper

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	CA	11	Callicarpa americana	American Beautyberry	7G	30" OA		F	Native
	CHI	2,100	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	3G	24" HT	18" W	F, SP	Native
	CHR	1,340	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W	FTB	Native
	HAL	140	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT	18" W	FTB	Non-native
	MFR	211	Myrcianthes fragrans	Simpson's Stopper	7G	4' HT	3' W	FTB, SP	Native
	MC	440	Myrica cerifera	Wax Myrtle	7G	30" HT	24" W	F	Native
	TRF	2,244	Tripsacum floridana	Florida Gamma Grass	3G	24" OA	18" W	F	Native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CPR	1,880	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W		Native	30" o.c.
	CSO	465	Conocarpus erectus 'Sericeus'	Silver Buttonwood	7G	30" HT	24" W	F	Native	36" o.c.
	ER	121	Euphorbia milii 'Rosy'	Pink Crown of Thorns	3G	24" HT	18" W	F		18" o.c.
	HPS	1,470	Hamelia patens 'Compacta'	Dwarf Firebush	7G	30" HT	24" W		Non-native	30" o.c.
	MAR	671	Myrsine cubana	Myrsine	7G	30" HT	24" W	F	Native	48" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	MUH	3,876	Muhlenbergia capillaris	Pink Muhly	3G	18" OA		F	Native	24" o.c.
	SPI	14,558	Spartina bakeri	Sand Cordgrass	1G	12" OA		F	Native	24" o.c.
	TRD	2,748	Tripsacum dactyloides	Fakahatchee Grass	3G	24" OA		F	Native	42" o.c.

PLANT SCHEDULE 20' WIDE TYPE 1 BUFFER (TOTALS INCLUDED IN MASTER)

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	ARD	1	Acer rubrum	Red Maple	30G	[illegible]	[illegible]	F, SP, For Mitigation	Native	2" Caliper
	BS	24	Bursera simaruba	Gumbo Limbo	30G	[illegible]	[illegible]		Native	2" Caliper
	CE	17	Conocarpus erectus	Buttonwood	30G	[illegible]	[illegible]	F, SP	Native	2" Caliper
	CS	10	Conocarpus erectus 'Sericeus'	Silver Buttonwood	30G	10' HT	4' SPR		Native	2" Caliper
	SP	28	Sabal palmetto	Sabal Palm	FG	[illegible]		HVY CAL, SP	Native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	CHR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W	FTB	Native
	TRF	4	Tripsacum floridana	Florida Gamma Grass	3G	24" OA	18" W		Native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CSO	[illegible]	Conocarpus erectus 'Sericeus'	Silver Buttonwood	7G	30" HT	24" W	F	Native	36" o.c.
	HPS	[illegible]	Hamelia patens 'Compacta'	Dwarf Firebush	7G	30" HT	24" W		Non-native	30" o.c.

PLANT SCHEDULE 15' WIDE 1/2 TYPE 3 BUFFER (TOTALS INCLUDED IN MASTER)

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	CER	13	Conocarpus erectus	Buttonwood	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	PE	24	Pinus elliottii var. densa	South Florida Slash Pine	FG	10' HT	6' W		Native	2" Caliper
	SP	47	Sabal palmetto	Sabal Palm	FG	[illegible]		HVY CAL, SP	Native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	CHR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W	FTB	Native
	MFR	1	Myrcianthes fragrans	Simpson's Stopper	7G	4' HT	3' W	FTB, SP	Native
	MC	111	Myrica cerifera	Wax Myrtle	7G	30" HT	24" W	F	Native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CPR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W		Native	30" o.c.
	CSO	[illegible]	Conocarpus erectus 'Sericeus'	Silver Buttonwood	7G	30" HT	24" W	F	Native	36" o.c.
	HPS	[illegible]	Hamelia patens 'Compacta'	Dwarf Firebush	7G	30" HT	24" W		Non-native	30" o.c.
	MAR	25	Myrsine cubana	Myrsine	7G	30" HT	24" W	F	Native	48" o.c.

PLANT SCHEDULE 20' WIDE 1/2 TYPE 4 BUFFER (TOTALS INCLUDED IN MASTER)

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	BSR	1	Bursera simaruba	Gumbo Limbo	65G	14' HT	7' SPR		Native	4" Caliper
	CER	[illegible]	Conocarpus erectus	Buttonwood	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	PE	[illegible]	Pinus elliottii var. densa	South Florida Slash Pine	FG	10' HT	6' W		Native	2" Caliper
	QV	14	Quercus virginiana	Southern Live Oak	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	SP	[illegible]	Sabal palmetto	Sabal Palm	FG	[illegible]		HVY CAL, SP	Native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	MC	[illegible]	Myrica cerifera	Wax Myrtle	7G	30" HT	24" W	F	Native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CPR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W		Native	[illegible]
	CSO	[illegible]	Conocarpus erectus 'Sericeus'	Silver Buttonwood	7G	30" HT	24" W	F	Native	36" o.c.
	HPS	[illegible]	Hamelia patens 'Compacta'	Dwarf Firebush	7G	30" HT	24" W		Non-native	30" o.c.
	MAR	[illegible]	Myrsine cubana	Myrsine	7G	30" HT	24" W	F	Native	48" o.c.

PLANT SCHEDULE 30' WIDE TYPE 5 BUFFER (TOTALS INCLUDED IN MASTER)

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	EXT	1	[illegible]	Existing Tree to remain						
	PE	43	Pinus elliottii var. densa	South Florida Slash Pine	FG	[illegible]	6' W		Native	2" Caliper
	QV	43	Quercus virginiana	Southern Live Oak	65G	14' HT	7' SPR	F, SP	Native	4" Caliper
	SP	[illegible]	Sabal palmetto	Sabal Palm	FG	10'-16' CT		HVY CAL, SP	Native	
	TD	[illegible]	Taxodium distichum	Bald Cypress	FG	14' HT	7' SPR	F, SP, used in type 5 buffer	Native	3" Caliper

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	CA	11	Callicarpa americana	American Beautyberry	7G	30" OA		F	Native
	CHR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W	FTB	Native
	MFR	[illegible]	Myrcianthes fragrans	Simpson's Stopper	7G	4' HT	3' W	FTB, SP	Native
	MC	[illegible]	Myrica cerifera	Wax Myrtle	7G	30" HT	24" W	F	Native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CPR	[illegible]	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	7G	30" HT	24" W		Native	30" o.c.
	CSO	[illegible]	Conocarpus erectus 'Sericeus'	Silver Buttonwood	7G	30" HT	24" W	F	Native	36" o.c.
	MAR	[illegible]	Myrsine cubana	Myrsine	7G	30" HT	24" W	F	Native	48" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	SPI	[illegible]	Spartina bakeri	Sand Cordgrass	1G	12" OA		F	Native	24" o.c.

lucido & associates

701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100

Key / Location:

Project Team:

Applicant:	[illegible]
Land Planner/ Landscape Architect:	Lucido & Associates, 701 SE Ocean Boulevard, Stuart, FL 34994
Engineer/ Traffic Engineer:	[illegible]
Surveyor:	[illegible]
Environmental Planner:	Lucido & Associates, 701 SE Ocean Boulevard, Stuart, FL 34994
Architect:	[illegible]

The Reserve at Jensen Beach

Plant Schedules

Jensen Beach, Martin County, Florida

Date	By	Description
08.30.18	JJ	Initial Submittal
06.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

NORTH

SCALE: 1" = n.t.s.

0 0' 0' 0'

REG. # 1016
Thomas P. Lucido

Designer	JJ	Sheet
Manager	DF	**LA-8**
Project Number	17-610	
Municipal Number	—	
Computer File	[illegible]	

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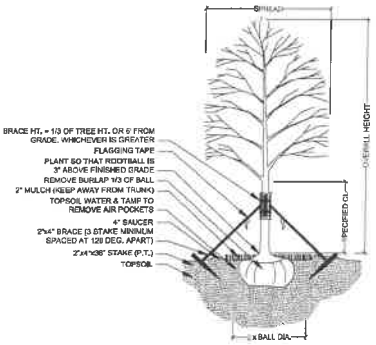
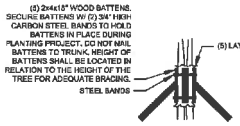


TREE PLANTING & STAKING

NOT TO SCALE



BRACING DETAIL

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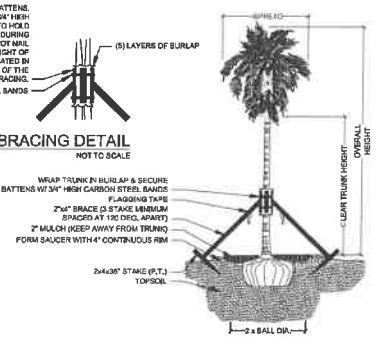
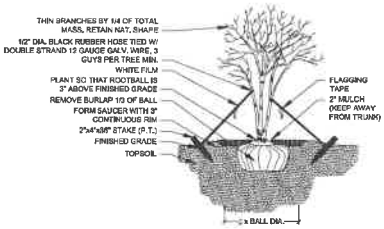


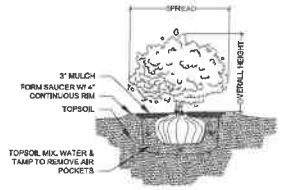
PALM PLANTING - ANGLE STAKE

NOT TO SCALE



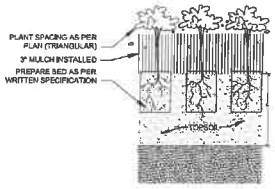
MULTI-TRUNK PLANTING & GUYING

NOT TO SCALE



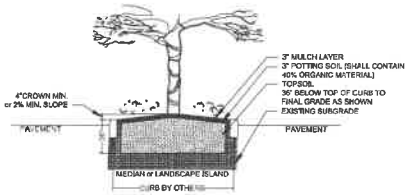
SHRUB PLANTING

NOT TO SCALE



GROUNDCOVER PLANTING DETAIL

NOT TO SCALE

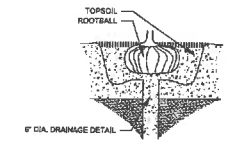


THIS DETAIL SHOWS DEPICTS A MEDIAN AND/OR LANDSCAPE ISLAND AND IS FOR GRAPHIC PURPOSES ONLY; SOIL PREPARATION SHALL APPLY TO ALL TREE, SHRUB, & GROUND COVER AREAS. THIS DOES NOT INCLUDE SOD AREAS

LANDSCAPE AREA PREPARATION DETAIL

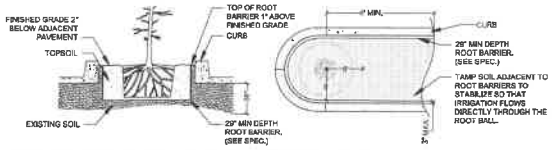
NOT TO SCALE

- TOPSOIL SHALL BE NATURAL FRIABLE, FINE LOAM SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY OF THE PROJECT SITE THAT PRODUCES HEAVY GROWTH.
- TOPSOIL SHALL BARE FREE OF STONES, ROOTS, WEEDS, LITTER, SOIL CLAY, STONES STUMPS, ROOTS, TRASH, HYDROCARBONS, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 5% ORGANIC MATERIAL.
- TOPSOIL MUST PERCOLATE WATER AT A RATE OF 1" PER HOUR (SEE ALSO DRAINAGE TESTING DETAIL FOR FRAME)
- LANDSCAPE AREA SOILS SHALL BE APPROVED BY LANDSCAPE ARCHITECT/OWNER PRIOR TO PLANTING



DRAINAGE TESTING DETAIL

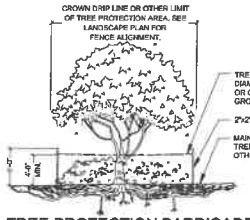
NOT TO SCALE



SPECIAL APPLICATIONS ROOT BARRIER DETAIL

NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE INSTALLED WHEN ROOT BALL IS LOCATED WITHIN 8' OF PAVEMENT AND OR CURB.
2- ROOT BARRIER SHALL BE "BIO-BARRIER 29" DEPTH OR APPROVED EQUAL.
3- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURE'S SPECIFICATIONS AND RECOMMENDATIONS.



TREE PROTECTION BARRICADE

NOT TO SCALE

NOTES:
1- SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
3- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS.

PRIOR TO PLANTING, ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER.

A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED. IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

E. WHEN BACKFILLING PLANTING PITS WITH NATIVE TOPSOIL, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL. MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.

lucido & associates

Key / Location:

Project Team:

Applicant:	Seacoast Investments, LLC & Dr. et al, LLC P.O. Box 2369 Stuart, FL 34995
Land Planner/ Landscape Architect:	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Engineer/ Traffic Engineer:	Cotleur Engineering 50 NW Flagler Avenue Stuart, FL 34994
Surveyor:	Berry Lindsey, Inc. 7207 SW Jack Jensen Drive Stuart, FL 34997
Environmental Planner:	Lucido & Associates 701 SE Ocean Boulevard Stuart, FL 34994
Architect:	Lister Hanna & Associates 801 S. Federal Hwy, Ste 202 Boca Raton, FL 33432

The Reserve at Jensen Beach

Landscape Details

Jensen Beach, Martin County, Florida

Date	By	Description
06.30.18	JJ	Initial Submittal
06.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

SCALE: 1" = 5'

0 5' 10' 20'

REG. # 1013
Thomas P. Lucido

Designer	JJ	Sheet
Manager	DF	LA-9
Project Number	17-010	
Municipal Number	—	
Computer File	18-020 The Reserve at Jensen Beach - Landscape Plan.dwg	

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LANDSCAPE SPECIFICATIONS

PART 1: GENERAL CONDITIONS

1.01 SCOPE
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and, additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS.
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well versed in plant materials, planting methods, reading plans, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Foreman shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the Superintendent is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e. damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE.
The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of 18 MONTHS from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guaranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.).

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000.00 per person and $300,000.00 per aggregate or as required by owner and agreed to in the contract. The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MARTERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. Substitutions: Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION

A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails.

2.06 TOP SOIL:
A. Planting soil for all plantings shall consist of topsoil and be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity of the project site that produces heavy growth. Topsoil shall have a PH range of 5.5-7.4, free from subsoil, weeds, litter, sods, clay, stones, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth, or hinder planting operations. Topsoil shall contain a minimum of 3% organic material. Topsoil must percolate water at a rate of 1" per hour (See also drainage testing detail for trees)

B. Landscape Area Preparation. The intent of this section is to ensure a healthy growing environment for all planting material in all landscaped areas. Landscape Contractor to examine existing soils prior to planting to ensure conformance to all definitions of "Topsoil" (see Landscape Area Preparation Detail). In addition, a 3" layer of high organic (min 40%) potting soil shall be added to the topsoil and mixed in at time of planting. *East Coast Recycling Inc.* is a recommended source for imported Topsoil (if needed) as well as the top 3" layer of potting soil.

Existing soils must meet all definitions of "Topsoil as described above in all planting areas throughout the site. If existing soils do not meet all definitions of Topsoil, please refer to the "Landscape Area Preparation" detail. Examination may require existing soils to be tested by an accredited testing laboratory. Should a soil test be necessary, Contractor shall contact soil testing lab directly to confirm such lab's soil collection and transmittal protocol; all costs if any shall be borne by the Contractor. Contractor shall provide to Landscape Architect for review the results of the soil test if conducted. Contractor shall schedule an on-site meeting with Landscape Architect to review existing and/or imported soils prior to planting. The Landscape Area Preparation is the responsibility of the Landscape Contractor. He/she shall accept all responsibility of planting soils and shall honor all guarantee items in section 1.08.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state and local fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected.

B. Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tableted fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tableted fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container	1 tablet
3 gallon container	2 tablets
5 gallon container	3 tablets
7 gallon container	5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material. The Landscape Architect reserves the right to inspect and review the application of fertilizer.

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited.

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs, keep 6" away from tree & palm trunks or as required by local jurisdiction.

PART 3 EXECUTION
3.01 DIGGING:
A. The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A. Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others.

B. It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified.

3.03 PLANTING:
A. Planting shall take place during favorable weather conditions.

B. The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them.

C. Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D. Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the landscape plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams".

E. A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Details for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and backfilled with Topsoil- see Landscape Area Preparation Detail:
1 Gallon material (1 gal.): 12" x 12" x 12" min.
3 Gallon material (3 gal.): 20" x 20" x 18" min.
Larger material (7 gal.): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be installed until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc. and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep.

H. Each plant shall be planted in an individual hole as specified for trees, shrubs and vines.

I. All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in.

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future waterings. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner.

3.04 PRUNING.
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted.

C. Trees shall not be poled or topped.

D. Remove all trimming from site.

3.05 GUYING:
A. All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail

B. Wires shall not come in direct contact with the tree but shall be covered with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

C. Stake & Brace all trees larger than 12' oa. See detail. Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

D. Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER.
A. Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect.

B. Prior to installing any irrigation system components, the contractor shall obtain a water sample from the proposed water supply and conduct a particle size and count analysis on the sample using the services of a reputable lab certified in such analysis. Submit the test results to the owner/owner's representative for review and approval. Do not proceed further with system installation until given written approval to do so.

3.07 SOD:
A. The Landscape Contractor shall sod all areas indicated on the drawings.

B. It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F. Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface.

G. The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs, walks, paving and wood borders to allow for building turf.

H. If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A. The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application. Argentine Bahia Grass seed- 200 Pounds per acre mixed with common hulled Bermuda seed- 30 lbs. per acre. All other seed mixtures shall be applied per the manufacturer's instructions.

C. Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre.

D. Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly.

C. Replacement of plants during the maintenance period shall be the responsibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

E. All trees & shrubs shall be straight and in correct position per the landscape plans, details and specifications. All nursery, shipping and identification tags & ribbons shall be removed from trees & shrubs immediately after planting.

lucido & associates

Key / Location:

Project Team:

The Reserve at Jensen Beach

Landscape Specifications

Jensen Beach, Martin County, Florida

Date	By	Description
08.30.18	JJ	Initial Submittal
06.19.19	JJ	First Resubmittal
12.12.19	SAW	Second Resubmittal
03.02.20	SAW	Third Resubmittal

SCALE: 1" = 0'

REG. # 1018
Thomas P. Lucido

Designer	JJ	Sheet
Manager	DF	LA-10
Project Number	17-610	
Municipal Number	—	

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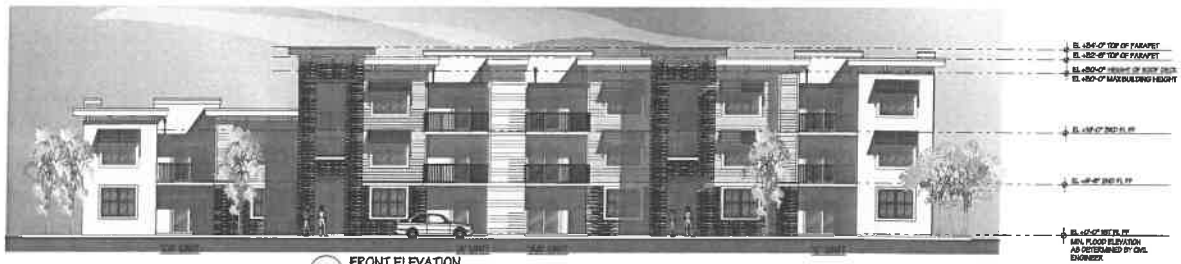
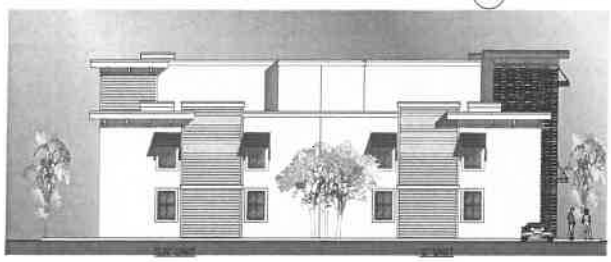


A FRONT ELEVATION

SCALE 1/8"=1'-0"

B REAR ELEVATION

SCALE 1/8"=1'-0"



C LEFT SIDE ELEVATION

SCALE 1/8"=1'-0"

D RIGHT SIDE ELEVATION

SCALE 1/8"=1'-0"

BUILDING TYPE I.1

BUILDING #4

MARK	DESCRIPTION	DATE

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

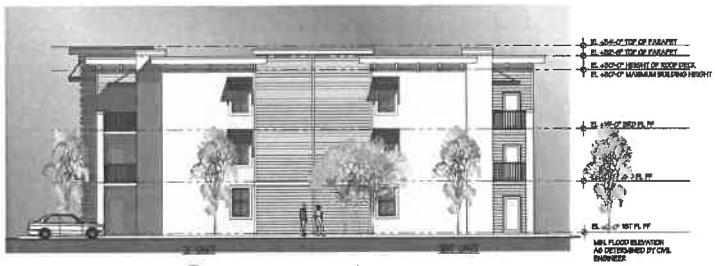
JOB NUMBER	15/045
SCALE	AS NOTED
ISSUE DATE	11.24.15
PROJECT STATE	
DRAWN BY	
CHECKED BY	MW
DISCIPLINE	ARCHITECTURE
PLAN TYPE	ELEVATIONS
SHEET NUMBER	AC3.01 I.1

15045- AC3.01-I.1 CB - 20.05.05 PLOT: 20.05.05

A FRONT ELEVATION

B REAR ELEVATION

C LEFT SIDE ELEVATION



D RIGHT SIDE ELEVATION

BUILDING TYPE 1.2

BUILDINGS #1 AND #3

MARK	DESCRIPTION	DATE

THE RESERVE AT
JENSEN BEACH

MARTIN COUNTY, FLORIDA

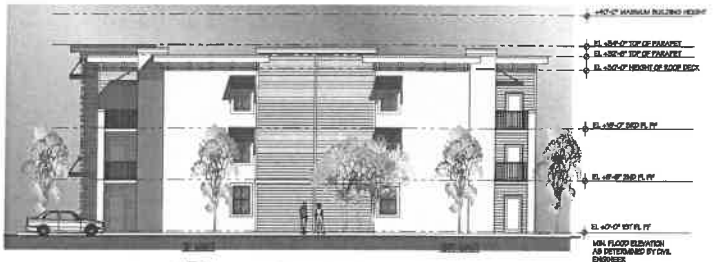
JOB NUMBER	150049
SCALE	AS NOTED
ISSUE DATE	10.14.19
DRAWN BY	MW
CHECKED BY	MW
TITLE	ARCHITECTURE ELEVATIONS
SHEET NUMBER	AC3.011.2

609

A FRONT ELEVATION SCALE 1/8"=1'-0"

B REAR ELEVATION SCALE 1/8"=1'-0"

C LEFT SIDE ELEVATION SCALE 1/8"=1'-0"



D RIGHT SIDE ELEVATION SCALE 1/8"=1'-0"

BUILDING TYPE 1.3

BUILDINGS #5, #6 AND #7

MARK	DESCRIPTION	DATE

REVISION SCHEDULE

SEAL

AR # 0011311

CONSULTANT

Construction

TRADE SPECIALISTS

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

JOB NUMBER	15045
SCALE	AS NOTED
ISSUE DATE	11.24.15
REPORT DATE	
ISSUE DATE	

PROJECT

DRAWN BY	
CHECKED BY	MW
DISCIPLINE	ARCHITECTURE
PLAN TYPE	ELEVATIONS
SHEET NUMBER	A C3.01 1.3

15045- ACSJH-1.5 R - 20.07.28 PLOT 1 - 20.07.28

610

A FRONT ELEVATION

SCALE 1/8"=1'-0"

B REAR ELEVATION

SCALE 1/8"=1'-0"

C LEFT SIDE ELEVATION

SCALE 1/8"=1'-0"

D RIGHT SIDE ELEVATION

SCALE 1/8"=1'-0"

BUILDING TYPE 1.3A

BUILDING #9

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

JOB NUMBER	16048
SCALE	AS NOTED
ISSUE DATE	11.14.18
REVISE DATE	
90% DATE	
DRAWN BY	
CHECKED BY	MW
DISCIPLINE	ARCHITECTURE
PLAN TYPE	ELEVATIONS
SHEET NUMBER	AC3.01 1.3A

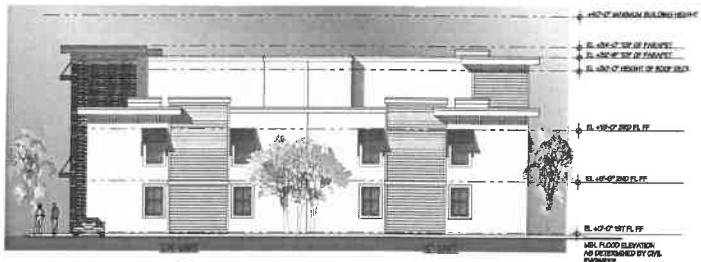
16048-AC3.01-1.3A.rf - 10.02.20 PLOT: 10.02.20

611

A FRONT ELEVATION

B REAR ELEVATION

C LEFT SIDE ELEVATION



D RIGHT SIDE ELEVATION

BUILDING TYPE II.1

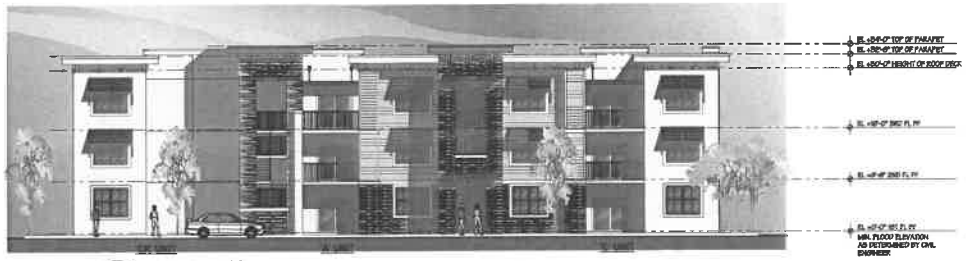
BUILDING #8

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

JOB NUMBER	18048
SCALE	AS NOTED
ISSUE DATE	10.04.18
REVISE DATE	
BID DATE	
DRAWN BY	
CHECKED BY	MM
DESCRIPTION	ARCHITECTURE ELEVATIONS
SHEET NUMBER	AC3.01 II.1

18048-AC3.01-11 (18 - 20.02.20) PLOT: 20.02.20



A FRONT ELEVATION

SCALE: 1/8"=1'-0"

B REAR ELEVATION

SCALE: 1/8"=1'-0"

C LEFT SIDE ELEVATION

SCALE: 1/8"=1'-0"

D RIGHT SIDE ELEVATION

SCALE: 1/8"=1'-0"

BUILDING TYPE III.1

BUILDING #2

MARK	DESCRIPTION	DATE

ARCHITECT

AB # 001353

CONSULTANT

GENERAL CONTRACTOR

THE RESERVE AT JENSEN BEACH

MARTIN COUNTY, FLORIDA

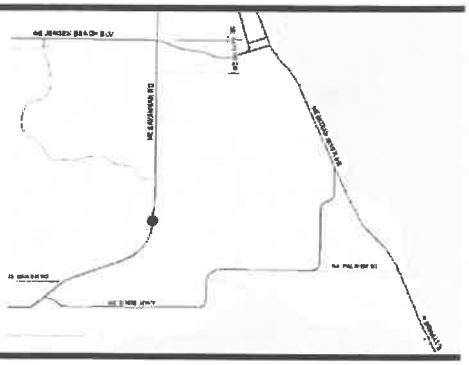
JOB NUMBER	15C425
SCALE	AS NOTED
ISSUE DATE	11.04.19
DRAWN BY	
CHECKED BY	MW
DISCIPLINE	ARCHITECTURE
PLAN TYPE	ELEVATIONS
SHEET NUMBER	AC3.01 IL1

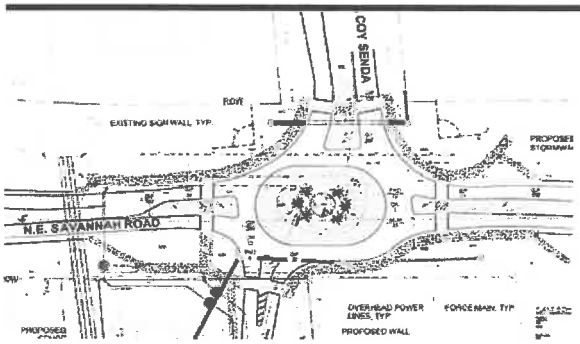
15C425 - AC3.01-IL1.DWG - 2020.2.26 PLOT: 2020.2.26

613

NE Savannah Road Roundabout

Category	Concurrency
CIP Rating Score	79
Project Number	TBD
Location	NE Savannah Road at NE Coy Senda
District	1
Project Limits	NE Savannah Road at NE Coy Senda
Related Projects	
Lead Dept/Division	Public Works/Capital Projects
Year Project Initiated	2020





DESCRIPTION

Construction of a four-way roundabout on NE Savannah Road at NE Coy Senda to accommodate a new access to property on the east side of NE Savannah Road. The construction includes landscape, hardscape and streetlights as well as accommodations for pedestrians and bicyclists.

BACKGROUND

In 2012 the Board of County Commissioners approved a Master Plan for The Savannah Apartments that gained access from NE savannah Road east of Jensen Park Estates and south of Tropical Acres Mobile Home Park. The propsed access does not align with NE Coy Senda on the west side of the road and does not meet the required separation necessary for the safe operation of an offest intersection with residential uses. The approved Master and Final Site Plan is being revised and renamed as The Reserve of Jensen Beach. As a condition of the approved Development Order, the County agrees to construct the roundabout using dedicated transportation impact fees and private contribution.

PROJECT ORIGINATION

Other

JUSTIFICATION

The Board of County Commissioner agrees to construct the roundabout being funded with developer funding as part of a Development Order.

				Funded					Unfunded
Expenditures	**Total**	**To Date**		**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25-FY29**
Design	0								
Construction	740,000			740,000					
Expenditure Total	740,000	0	0	740,000	0	0	0	0	0
Revenues	**Total**	**To Date**	**Carryover**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25-FY29**
Impact Fees	**526,367**			526,367					
Private Contribution	**213,633**			213,633					
	0								
Revenue Total	**740,000**	**0**	**0**	**740,000**	**0**	**0**	**0**	**0**	**0**
								Total Unfunded	0

OPERATING BUDGET IMPACT

Additional operation and maintenance costs associated with landscape, multimodal paths, and streetlights will be minimal.

BEFORE THE BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

RESOLUTION NUMBER

RESOLUTION INCREASING THE URBAN ROAD IMPACT FEE REVENUES AND APPROPRIATIONS

WHEREAS, The County has agreed to construct a roundabout on NE Savannah Road in conjunction with the request for approval of a Master and Final Site Plan for The Reserves at Jensen; and

WHEREAS, The construction will be funded by the development's impact fees and additional private contribution; and

WHEREAS, Unanticipated funds must be appropriated in accordance with Section 129.06(2)(d), F.S.;

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD OF COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA, THAT THESE RECEIPTS AND APPROPRIATIONS BE ADDED TO THE BUDGET AS FOLLOWS:

ACCOUNT NUMBER					AMOUNT	LINE ITEM DESCRIPTION
Fund	Organization	Account	Program	Activity		
REVENUES:						
1458	1323	32431	000	106401	$ 526,367.00	Impact Fees/Residential - Transportation
1458	1323	36600	000	106401	$ 213,633.00	Private Contributions
TOTAL:					**$ 740,000.00**	
APPROPRIATIONS:						
1458	1323	06300	541	106401	$ 740,000.00	Improvements Other than Buildings
TOTAL:					**$ 740,000.00**	

DULY PASSED AND ADOPTED THIS 11th DAY OF AUGUST, 2020

ATTEST:

Carolyn Timmann
Clerk of the Circuit Court and Comptroller

8/11/2020
Agenda Date Item Number

Batch Number Input Date

BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

Harold E. Jenkins, II
Chairman

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

Sarah W. Woods
County Attorney

BOARD OF COUNTY COMMISSIONERS:

DOUG SMITH	DISTRICT 1
STACEY HETHERINGTON	DISTRICT 2
HAROLD JENKINS	DISTRICT 3
SARAH HEARD	DISTRICT 4
EDWARD CIAMPI	DISTRICT 5

Construction Plans and Specifications
Of
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

Lying In
Section 27, Township 37 South, Range 41 East
Martin County, Florida

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END PROJECT
AT SAVANNAH RD.
℄ SURVEY STA. 60+17

BEGIN PROJECT
AT SAVANNAH RD.
℄ SURVEY STA 53+41

LOCATION MAP
NOT TO SCALE

GOVERNING SPECIFICATIONS:

- FDOT STANDARD PLANS FOR ROAD & BRIDGE CONSTRUCTION, FY2019-20.
- FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2019 EDITION.
- THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS (FLORIDA GREENBOOK), 2016 EDITION.
- THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON TRAFFIC CONTROL DEVICES (M.U.T.C.D.), 2009 EDITION.
- THE MARTIN COUNTY PUBLIC WORKS STANDARD DETAILS FOR ROAD AND SITE CONSTRUCTION AND PUBLIC FACILITIES, 12/03/2020 EDITION.

THIS DOCUMENT MAY BE REPRODUCED UPON REQUEST IN AN ALTERNATIVE FORMAT BY CONTACTING THE COUNTY ADA COORDINATOR (772) 320-3131, THE COUNTY ADMINISTRATION OFFICE (772) 288-5400, FLORIDA RELAY 711, OR BY COMPLETING OUR ACCESSIBILITY FEEDBACK FORM AT WWW.MARTIN.FL.US/ACCESSIBILITY-FEEDBACK.

CAPTEC Civil Engineering Professionals

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

Joseph W. Cheers, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 57638

Signature Date

811 KNOW WHAT'S BELOW. ALWAYS CALL 811 BEFORE YOU DIG

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY IMPROVEMENTS	676	0.13
NET LENGTH OF PROJECT	676	0.13
GROSS LENGTH OF PROJECT	676	0.13

REVISIONS			
01	PERMIT PLANS	3-27-2020	MDB
DESCRIPTION		DATE	APPR

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
SUMMARY OF PAY ITEMS

Item	Description	Quantity	Unit
101-1	Mobilization / Demobilization / General Conditions (includes Video)	1	LS
102-1	Maintenance of Traffic	1	LS
102-2	Temporary Asphalt	130	TN
103	Survey (Construction Staking & As-Builts)	1	LS
104	NPDES Compliance (Erosion Control)	1	LS
104-2	Staked Silt Fence	1,550	LF
110-1-1	Demolition / Clearing & Grubbing	1.30	AC
120-6	Embankment	730	CY
160-4	Type 'B' Stabilization (12")	2,350	SY
285-709	Optional Base Group 9	2,350	SY
327-70-6	Milling Exist. Asphalt 1" Avg Depth	2,050	SY
334-1-12	2" Type SP-12.5 Asphaltic Concrete	265	TN
334-1-13	1" Type SP-9.5 Asphaltic Concrete	330	TN
425-1-352	Type 'P-5' Inlet	3	EA
425-1-362	Type 'P-8' Inlet	1	EA
425-1-551	Type E Inlet	3	EA
430-175-118	18" RCP (Storm and Cross Drain)	128	LF
430-175-124	24" RCP (Storm and Cross Drain)	164	LF
430-175-136	36" RCP (Storm and Cross Drain)	18	LF
520-1-10	Concrete Curb & Gutter, Type F	1,816	LF
520-2-6	Concrete Curb, Type RA	280	LF
522-2	Concrete Sidewalk (Includes ADA Mat & Directional Indicator) (6" Thick)	770	SY
523-1	Patterned Pavement (Liquid Brick Crosswalk & Truck Apron)	345	SY
570-1-2	Performance Turf / Sod	1,000	SY
580-1	Landscape (includes all materials, labor and installation for complete job)	1	LS
700-20-11	(R1-2) Yield Sign (48" x 48" x 48")	4	EA
700-20-11	(R1-5A) Stop Within Crosswalk	4	EA
700-20-11	(R4-7) Keep Right Sign	2	EA
700-20-11	(R5-4) Directional Arrow Sign	4	EA
700-20-11	(W2-6) Roundabout Warning Sign (30" x 30")	4	EA
700-20-11	(W13-1P) Speed Limit Sign (20 mph)	4	EA
706-3	Reflective Pavement Markers	100	EA
711-11-123	Thermoplastic White 12" Solid Line (Crosswalks)	220	LF
711-34-170	Thermoplastic Standard White Arrow	3	EA
711-11-160	Thermoplastic White Yield Line (5 Triangles per Line)	64	LF
711-11-213	Thermoplastic Yellow 18" Solid Line (Gore Striping)	35	LF
711-11-131	Thermoplastic White 6" 2-4 Skip Line	0.02	GM
711-11-131	Thermoplastic White 6" 5-10 Skip Line	0.50	GM
711-11-111	Thermoplastic White 6" Solid Line	0.40	GM
711-11-211	Thermoplastic Yellow 6" Solid Line	0.30	GM
715	Lighting (includes all materials, labor and installation for complete job)	1	LS
1080-15	Utility Adjustments (includes valve boxes & manhole covers)	1	LS

PAY ITEM NOTES:

102-1 MAINTENANCE OF TRAFFIC INCLUDES THE COST OF THE PROJECT INFORMATION SIGN. SIGN SHALL BE SAME SIZE AS REQUIRED BY FLORIDA DEPARTMENT OF TRANSPORTATION.

110-1-1 PAY ITEM INCLUDES THE COST TO COMPLETELY REMOVE AND DISPOSE OF ALL EXISTING PIPES AND DRAINAGE STRUCTURES SHOWN TO BE REMOVED.

1080-15 PAY ITEM TO INCLUDE ALL NECESSARY TIME AND MATERIALS TO ADJUST VALVE BOXES, PIGGING STATIONS, AIR RELEASE VALVE BOXES, AND SANITARY CLEANOUTS TO COMPLY WITH M.C. UTILITY STANDARDS THIS ALSO INCLUDES THE ADJUSTMENT OF ANY FIBER OPTIC TRAFFIC SIGNAL CABLE BOXES AND APPURTENANCE. THE COST OF ADJUSTING UTILITY MARKERS, PLAQUES, MONUMENTS, ETC. IS INCIDENTAL TO THE COST OF THIS ITEM.

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE (772) 288-5927
FAX (772) 288-5955
www.martin.fl.us

DESIGNED BY: SPM	DATE: 5-27-2020
DWN BY: MDB	CKD BY: JWC
SOLICITATION NO.:	
SUBMITTED BY: SPM	CONTRACT NO.: (INTERIM)
SCALE: NA	PLOT DATE: INTERIM
FILE NUMBER: 13063	
SIZE: NCDS	FILE NAME: 1338.2 ROUNDABOUT NOTES AND DETAILS.DWG

0	PERMIT PLANS	5-27-2020
	DESCRIPTION	DATE

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
SUMMARY OF PAY ITEMS

CAPTEC
Civil Engineering Professionals
101 N.E. Flagler Ave.
Stuart, Florida 34994
Phone: (772) 288-0047
Fax: (772) 288-0047
Engineering Business
CA 7888

STATE OF FLORIDA
JOHN K. Flagler Ave.
Stuart, Florida 34994
P.E. No. 70638

SHEET IDENTIFICATION
2
SHEET 2 OF 16

B17

GENERAL NOTES:

1. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR TO UTILIZE "APPROVED FOR CONSTRUCTION PLANS" ONLY.

2. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES 14 DAYS PRIOR TO CONSTRUCTION OPERATIONS ADJACENT TO THEIR FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

3. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. ALL BELL SOUTH, FPL, LOCAL CABLE, AND ALL LOCAL UTILITY COMPANY (CITY, COUNTY, WATER AND SEWER) LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR TO EXPOSE ALL CROSSINGS WITH SOUTHERN BELL, CABLES/CATV AND FLORIDA POWER AND LIGHT CONDUITS PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVES PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY FACILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE APPROXIMATE LOCATION OF THESE FACILITIES. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

4. CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, LANDSCAPE FEATURES, TREES AND UTILITIES NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION.

5. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER REQUESTING ATTENDANCE AT THE PRE-CONSTRUCTION MEETING THE SUPERINTENDENT FOR THIS PROJECT SHALL SUBMIT A FORMAL RESUME SHOWING QUALIFICATIONS PRIOR TO THE PRE-CONSTRUCTION MEETING. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.

7. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.

8. AS-BUILT RECORD DRAWINGS: UPON COMPLETION OF THE WORK, BUT PRIOR TO SUBMITTAL OF REQUEST FOR FINAL PAYMENT OR FINAL ACCEPTANCE, THE CONTRACTOR OR DEVELOPER'S ENGINEER SHALL OBTAIN AND SUBMIT RECORD INFORMATION CERTIFIED BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER PREPARED IN ACCORDANCE WITH MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT MINIMUM CONSTRUCTION STANDARDS - SECTION 7 - RECORD DRAWINGS. TWO (2) PAPER PRINTS OF THE PLAN SHEETS, PROFILES, DETAILS AND LIFT STATION SHALL BE PROVIDED. THE PRINT SHALL BE SIGNED AND SEALED BY THE FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND THE FLORIDA PROFESSIONAL ENGINEER RESPONSIBLE FOR CERTIFYING THE PROJECT. ALL SHEETS MUST INCLUDE THE VERTICAL DATUM AND HORIZONTAL DATUM USED IN EASILY READABLE PRINT.

   THREE (3) ELECTRONIC RECORD DRAWING FILES SHALL ALSO BE PROVIDED AS FOLLOWS: ONE (1) DIGITAL RECORD DRAWING CAD FILE SAVED IN THE ORIGINAL FORMAT AS DESIGNED, BUT BEING AUTOCAD VERSION 2004 OR NEWER. ONE (1) DIGITAL RECORD DRAWING SAVED IN DWF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI). ONE (1) DIGITAL RECORD DRAWING SAVED IN PDF FORMAT AS AN EXACT REPRODUCTION OF THE SIGNED AND SEALED RECORD DRAWING ON PAPER, WITHOUT SIGNATURE OR SEAL WITH A RESOLUTION OF 300 DOTS PER INCH (DPI).

   ALL RECORD DRAWING INFORMATION SHALL ACCURATELY DEPICT ALL SURVEYED INFORMATION WITH ALL HORIZONTAL VECTOR INFORMATION BEING SHOWN IN THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND IN THE FLORIDA EAST ZONE STATE PLANE COORDINATE SYSTEM OR THE LATEST NGS ADOPTED DATUM USING U.S. SURVEY FEET AS THE UNIT OF MEASUREMENT.

   CAD FILES: THE DIGITAL RECORD DRAWING CAD FILE SHALL FOLLOW THESE GENERAL STANDARDS FOR INCLUSION IN THE UTILITY'S GEOGRAPHIC INFORMATION SYSTEM (GIS): ALL RECORD DRAWING PIPING INFORMATION SHALL BE PLACED ON SEPARATE LAYERS BY PIPING TYPE, DIAMETER AND MATERIAL. ALL RECORD DRAWING FIXTURE INFORMATION (FIRE HYDRANTS, VALVES, METERS, REDUCERS, TEES, WYES, CROSSES, CAPS, ETC.) SHALL BE PLACED ON SEPARATE LAYERS BY THE PIPING TYPE THEY ARE ATTACHED TO. ALL PIPING SHALL BE DRAFTED AS POLYLINES; SEPARATED ONLY AT JUNCTIONS OR CHANGES IN PIPE DIAMETER. ALL PIPING POLYLINES SHALL SNAP TO ONE ANOTHER AT EVERY JUNCTION AND CHANGE IN PIPE DIAMETER. A TEMPLATE FILE SHALL BE PROVIDED TO THE UTILITY DEPARTMENT WHICH CLEARLY DEPICTS RECORD DRAWING LAYERS AND BLOCKS TO BE USED IN FINAL RECORD DRAWING SUBMITTALS. ALL RECORD DRAWING CAD FILES SHALL ADHERE TO THE LAYER AND BLOCK STRUCTURE SUBMITTED IN THE TEMPLATE FILE.

9. THE CONTRACTOR WILL SUBMIT FOR APPROVAL BY OWNER A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION WHICH WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND COUNTY RULES AND REGULATIONS GOVERNING THE USE OF STREETS FOR PROTECTION OF THE WORK AND PUBLIC SAFETY. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - LATEST EDITION AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

10. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS (LATEST EDITION), THE REQUIREMENTS OF MARTIN COUNTY CODES AND REGULATIONS AND MARTIN COUNTY UTILITIES AND SOLID WASTE DEPARTMENT SPECIFICATIONS AND STANDARDS (AUGUST 2016). IN ADDITION ALL ACTIVITIES ARE TO BE IN ACCORDANCE WITH F.D.E.P. STANDARDS AND ITEMS DESCRIBED IN THE TECHNICAL PROVISIONS OF THE CONSTRUCTION CONTRACT.

GENERAL NOTES (CONT.):

11. ANY MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY,

    GEODETIC INFORMATION CENTER
    ATTN.: CHARLIE NOVICE
    ATTN.: MCO - 142
    6001 EXECUTIVE BOULEVARD
    ROCKVILLE, MARYLAND 20852
    TELEPHONE: (301) 443-8319

12. BENCH MARK DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88).

13. SHOP DRAWING SUBMITTAL APPROVALS ARE REQUIRED FOR ALL STRUCTURES AND SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING. THE ENGINEER REQUIRES FIVE (5) BUSINESS DAYS TO REVIEW SHOP DRAWINGS AFTER RECEIPT. THIS ITEM SHALL BE COMPLETED IN COMPLIANCE WITH THE GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

14. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M 145, FOUND SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL, AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12 INCH LIFTS COMPACTED TO NOT LESS THAN 98% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-180. THICKNESS OF LAYERS MAY BE INCREASED, PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABLE OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.

15. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS CLEARING AND GRUBBING SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE (1) FOOT. ITEMS DESIGNATED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE DESIGNATED ON THE DRAWINGS.

16. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145. FILL SHOULD BE FREE FROM DEBRIS, VEGETATION, ORGANIC OR OTHER DELETERIOUS MATTER, AND SHOULD CONSIST OF CLEAN GRANULAR MATERIAL. IT SHOULD CONTAIN NOT MORE THAN 10 PERCENT PASSING THE U.S. STANDARD NUMBER 200 SIEVE, AND HAVE AN ORGANIC CONTENT LESS THAN ONE PERCENT. FILL SHOULD BE PLACED IN APPROXIMATELY LEVEL LIFTS OF LESS THAN 12 INCHES IN UNCOMPACTED THICKNESS, BE MOISTURE CONDITIONED AS NECESSARY, AND UNIFORMLY COMPACTED TO AT LEAST 98 PERCENT RELATIVE COMPACTION AS DETERMINED BY THE MODIFIED PROCTOR PROCEDURE (ASTM D1557). THE EXCAVATED SURFACE AND EACH LAYER OF BACKFILL SHOULD BE COMPACTED WITH A SELF-PROPELLED STEEL DRUM VIBRATORY ROLLER HAVING A MINIMUM TOTAL APPLIED FORCE OF 10 TONS. CONTRACTOR TO OVER EXCAVATE ALL DRY DETENTION AREAS TO FULLY REMOVE ANY SOILS THAT MAY LIMIT THE INFILTRATION OF STORM WATER LOCATED WITHIN 24" OF THE HARD PAN LAYER.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO: DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC. DENSITY TESTS SHALL BE PERFORMED AT THREE (3) LOCATIONS AROUND AND WITHIN 2' OF ALL STRUCTURES. TEST SHALL BE TAKEN IN THE FIRST FOOT ABOVE THE BOTTOM OF THE STRUCTURE AND THEN EVERY TWO FEET UP TO WITHIN TWO FEET OF THE FINISH GRADE.

18. ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF GRADING TO AVOID EROSION AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE WATER QUALITY MANAGEMENT SYSTEM.

19. TRENCHES AND EXCAVATIONS SHOULD BE KEPT DRY WHILE WORK IS IN PROGRESS. EXCAVATED MATERIALS, SUCH AS BOULDERS AND LOGS THAT ARE NOT SUITABLE FOR BACKFILL, SHOULD BE REMOVED FROM SITE. THE PIPE BARREL SHALL BE UNIFORMLY SUPPORTED ALONG ITS ENTIRE LENGTH ON UNDISTURBED SOIL OR BEDDING MATERIAL. PROPER BEDDING SHALL BE SUPPLIED IF THE EXISTING MATERIAL INCLUDES ROCK, ORGANIC MATTER OR OTHER SHARP OR UNSTABLE MATERIAL.

20. THE CONTRACTOR SHALL CONSTRUCT THE IMPROVEMENTS IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES AND WATER QUALITY ON OR OFF-SITE. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS. ALL WORK WITHIN THIS PROJECT WILL BE COMPLETED IN STRICT COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).

21. ALL EXISTING LINES THAT ARE ABANDONED SHALL BE CUT, PLUGGED AND GROUTED, OR REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AND OWNER. SINCE EXISTING LINES WITHIN THE PROJECT ARE ASBESTOS CONCRETE PIPE THEY SHALL BE HANDLED BY F.D.E.P. RULES AND REGULATIONS.

CLEAN-UP:

1. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A NEAT CONDITION AT ALL TIMES AND SHALL RESTORE/REPAIR ALL DRIVEWAYS, SIDEWALKS, UTILITIES, LANDSCAPING, IRRIGATION SYSTEMS, ETC., AFFECTED BY CONSTRUCTION ACTIVITIES.

2. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIALS, DEBRIS, EQUIPMENT, ETC., FROM THE JOB SITE IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION OPERATIONS.

3. UNLESS OTHERWISE SPECIFIED OR NOTED; ALL DISTURBED AREAS SHALL BE RESTORED BY CONTRACTOR TO PRE-CONSTRUCTION CONDITION OR BETTER PRIOR TO ACCEPTANCE BY THE OWNER AND LOCAL REGULATOR

4. ALL DISTURBED AREAS WILL BE SODDED UPON COMPLETION FOR STABILIZATION.

EROSION AND SEDIMENT CONTROL / ENVIRONMENTAL PROTECTION

1. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE LATEST LOCAL WATER MANAGEMENT DISTRICT SURFACE WATER PERMIT, COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITIONS AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY DISTRICT REPRESENTATIVES. THE CONTRACTOR SHALL REVIEW THE COMPLETE PERMIT PRIOR TO COMMENCEMENT OF THE ACTIVITY AUTHORIZED BY THE PERMIT. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ALONG WITH AN APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND THESE DOCUMENTS MUST REMAIN ON THE PROJECT SITE AT ALL TIMES, THROUGHOUT THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR COULD BE REQUIRED TO ENHANCE UPON THE SWPPP PLANS TO COMPLY WITH THE NPDES PERMIT AND THE STATE WATER QUALITY GUIDELINES. THESE ENHANCEMENTS ARE CONSIDERED INCIDENTAL TO THE COST OF EROSION AND SEDIMENT CONTROL.

2. ALL ACTIVITIES SHALL BE IMPLEMENTED AS SET FORTH IN THE PLANS, SPECIFICATIONS, AND PERFORMANCE CRITERIA AS APPROVED BY LOCAL SURFACE WATER PERMIT. ANY DEVIATION FROM THE PERMITTED ACTIVITY AND THE CONDITIONS FOR UNDERTAKING THAT ACTIVITY SHALL BE CONSIDERED A VIOLATION OF THE PERMIT. PRIOR TO ANY WORK, A NOTICE OF PENDING CONSTRUCTION NEEDS TO BE SUBMITTED TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

3. THE LOCAL WATER MANAGEMENT DISTRICT AUTHORIZED STAFF, UPON PROPER IDENTIFICATION, MUST BE GRANTED PERMISSION TO ENTER, INSPECT, AND OBSERVE THE SYSTEM TO INSURE CONFORMITY WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE PERMIT.

4. PRIOR TO AND DURING CONSTRUCTION, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. ALL PRACTICES MUST BE IN ACCORDANCE WITH THE GUIDELINES AND SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATIONS 1988), WHICH ARE HEREBY INCORPORATED BY REFERENCE, UNLESS A PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN IS APPROVED AS PART OF THE SFWMD PERMIT, IN WHICH CASE THE PRACTICES MUST BE IN ACCORDANCE WITH THE PLAN. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION OR OPERATION TO PREVENT EROSION OR CONTROL SEDIMENT, BEYOND THOSE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY, IN ACCORDANCE WITH THE SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 1988). THE CONTRACTOR SHALL CORRECT ANY EROSION OR SHOALING THAT CAUSES ADVERSE IMPACTS TO THE WATER RESOURCES.

5. STABILIZATION MEASURES UTILIZING SOD OR SEED AND MULCH SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. ALL WORK ON THIS PROJECT WILL BE CONSTRUCTED IN COMPLIANCE WITH THE APPROVED NPDES PERMIT.

6. THE STORM WATER MANAGEMENT SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO THE INITIATION OF THE PERMITTED USE OF SITE INFRASTRUCTURE. THE SYSTEM MUST BE COMPLETE IN ACCORDANCE WITH THE PERMITTED PLANS AND PERMIT CONDITIONS PRIOR TO TRANSFER AND RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF THE STORM WATER MANAGEMENT SYSTEM TO A RESPONSIBLE ENTITY. THE OWNER WILL NOT RELEASE FINAL PAYMENTS AND ALLOW REDUCTION OF RETAINAGE UNTIL ALL ITEMS ARE COMPLETED AND ACCEPTED BY THE OWNER.

7. NPDES PERMIT MONITORING MUST BE COMPLETED BY CONTRACTOR IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND MARTIN COUNTY.

GEOTECHNICAL NOTES

FILL PLACEMENT

NEW FILL MATERIALS MUST BE PLACED UNDER ENGINEERING SUPERVISION OF A GEOTECHNICAL ENGINEER. THE FILL SHOULD BE INORGANIC GRANULAR SOILS FREE FROM DELETERIOUS MATERIALS AND APPROVED BY OUR FIRM. THE FILL SHOULD BE PLACED IN LIFTS OF NO GREATER THAN 12 INCHES THICK, AND EACH LIFT SHOULD BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED COMPACTION TEST (ASTM D1 557). IN RESTRICTED AREAS WHERE A SMALL COMPACTOR MUST BE USED, THE LIFT THICKNESS SHOULD BE REDUCED TO 6 INCHES, AS DIRECTED BY THE INSPECTING GEOTECHNICAL ENGINEER. BACKFILL PLACED ADJACENT TO THE PILE CAPS AND GRADE BEAMS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE ASTM D-1557 MAXIMUM DRY DENSITY.

BACKFILL BEHIND WALLS SHOULD BE APPROVED SAND FILL AS INDICATED PREVIOUSLY AND SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN THICKNESS AND SHOULD BE COMPACTED TO MINIMUM DRY DENSITY OF BETWEEN 92 PERCENT AND 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY USING SMALL VIBRATORY COMPACTION EQUIPMENT. OVER COMPACTION IN THESE AREAS SHOULD BE AVOIDED. THE WALLS SHOULD BE TEMPORARILY BRACED DURING COMPACTION TO PREVENT OVERSTRESSING OF THE WALLS. PRIOR TO INITIATING COMPACTION OPERATIONS, REPRESENTATIVE SAMPLES OF THE STRUCTURAL FILL MATERIAL TO BE USED AND ACCEPTABLE IN-PLACE SOILS SHOULD BE COLLECTED AND TESTED TO DETERMINE THEIR COMPACTION AND CLASSIFICATION CHARACTERISTICS. THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, GRADATION AND PLASTICITY CHARACTERISTICS SHOULD BE DETERMINED. THESE TESTS ARE NEEDED FOR COMPACTION QUALITY CONTROL OF THE STRUCTURAL FILL AND EXISTING SOILS, AND TO DETERMINE IF THE FILL MATERIAL IS ACCEPTABLE.

EXCAVATION REQUIREMENTS

EXCAVATIONS OF FIVE FEET OR MORE IN DEPTH SHOULD BE SLOPED OR SHORED IN ACCORDANCE WITH OSHA AND STATE OF FLORIDA REQUIREMENTS. MATERIALS REMOVED FROM ANY EXCAVATION SHOULD NOT BE STOCKPILED IMMEDIATELY ADJACENT TO THE OPEN EXCAVATION AS THIS LOAD MAY CAUSE A SUDDEN COLLAPSE OF THE SIDEWALLS.

IN OCTOBER OF 1989, AS PUBLISHED IN THE FEDERAL REGISTRAR, VOLUME 54, NO. 209, THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS; "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29CRF PART 1926, SUBPART P". IT IS MANDATED BY THIS FEDERAL REGULATION THAT ALL EXCAVATIONS, WHETHER THEY BE UTILITY TRENCHES, BASEMENT EXCAVATION OR FOOTING EXCAVATIONS, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE, OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM.

IF CONDITIONS ARE ENCOUNTERED WHICH ARE NOT CONSISTENT WITH THE "FINDINGS PRESENTED IN THIS REPORT, OR IF PROPOSED CONSTRUCTION IS MOVED FROM THE LOCATION STUDIED, THIS OFFICE SHALL BE NOTIFIED IMMEDIATELY SO THAT THE CONDITION OR CHANGE CAN BE EVALUATED AND APPROPRIATE ACTION TAKEN.

ENVIRONMENTAL:
GFA INTERNATIONAL, INC.
587 NW COMMODITY COVE
PORT ST. LUCIE, FLORIDA 34986
(772) 924-3575

ELECTRICAL / LIGHTING ENGINEER:
BEACON CONSULTING ENGINEERS, INC
625 CASA LOMA BLVD., SUITE 106
BOYNTON BEACH, FLORIDA 33435
(561) 242-3270

GEOTECHNICAL FIRM:
ECS FLORIDA, LLC
2000 AVENUE P, SUITE 3
WEST PALM BEACH, FLORIDA 33404
(561) 840-3667

PLANNER / LANDSCAPE ARCHITECT:
LUCIDO AND ASSOCIATES, INC.
701 SE OCEAN BOULEVARD
STUART, FLORIDA 34994
(772) 220-2100

21 DAYS PRIOR TO SUBMITTAL OF SHOP DRAWINGS, THE CONTRACTOR WILL POTHOLE THE LOCATION OF ALL EXISTING UTILITIES TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS. NO POTHOLES IN PAVEMENT AREA WILL BE ALLOWED.

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

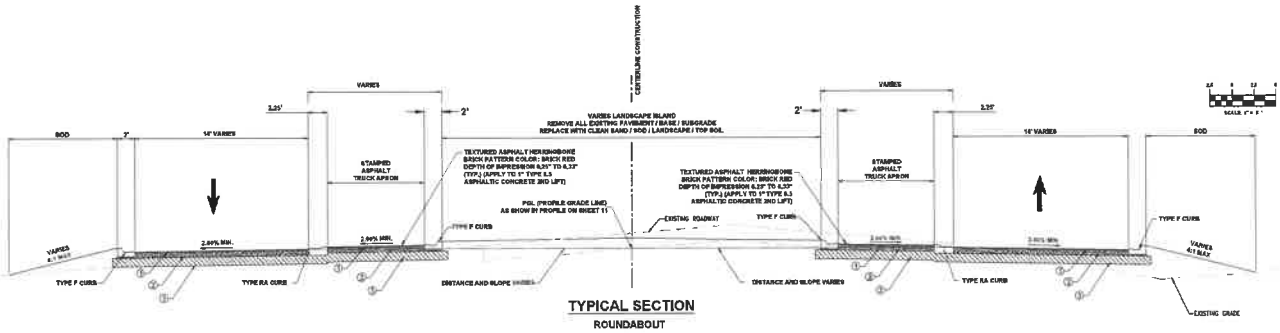
DESIGNED BY:	DATE:
DWN BY: / CKD BY: JWC	SOLICITATION NO.:
SUBMITTED BY:	CONTRACT NO.:
SCALE: NA / PLOT DATE:	FILE NUMBER:
SIZE: / FILE NAME: 1329.2 ROUNDABOUT NOTES AND DETAILS.DWG	

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
GENERAL NOTES

CAPTEC Civil Engineering Professionals

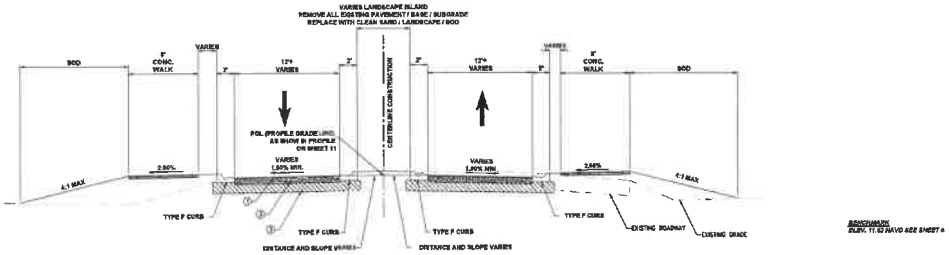
Joseph W. Capra, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37838

SHEET IDENTIFICATION
3
SHEET 3 OF 16



TYPICAL SECTION

ROUNDABOUT



TYPICAL SECTION

APPROACHES

MILLING AND OVERLAY

MILL 1" AVERAGE
OVERLAY WITH 1" SP-9.5 ASPHALT

ARTERIAL (ON-4.0 MIN.)

1. 3" TYPE SP-12.5 ASPHALTIC CONCRETE (1st LIFT)
   1" TYPE SP-9.5 ASPHALTIC CONCRETE (2nd LIFT)
2. OPTIONAL BASE GROUP 9 (12") (MIN. LBR 100)
3. 12" TYPE "B" STABILIZATION (MIN. LBR 40)

BENCHMARK
ELEV. 11.62 NAVD SEE SHEET 6

NOTES

1. SEE PLAN AND/OR CROSS SECTION SHEETS FOR DIMENSIONS ELEVATIONS AND SLOPES INDICATED AS VARIES.
2. ALL DISTURBED AREAS WITHIN RIGHT OF WAY SHALL BE SODDED USING COMMON BAHIA SOD EXCEPT WHEN MATCHING EXISTING FLORATAM GRASSES.
3. MAXIMUM SIDEWALK SLOPE IS 2%
4. PROPOSED LANDSCAPE IMPROVEMENT SEE LANDSCAPE PLANS

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2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

DESIGNED BY: BPM	DATE: 3/24/2020
DWN BY: BGB / CKD BY: JPC	SOLICITATION NO.:
SUBMITTED BY: BPM	CONTRACT NO.: 2017-0075
SCALE: 1" = 5' / PLOT DATE: 3/27/2020	FILE NUMBER: 1336.2
SIZE: 24X36 / FILE NAME: 1336.2 ROUNDABOUT TYP SECTIONS.DWG	

A	PERMIT PLAN	
	DESCRIPTION	DATE / APPR.

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

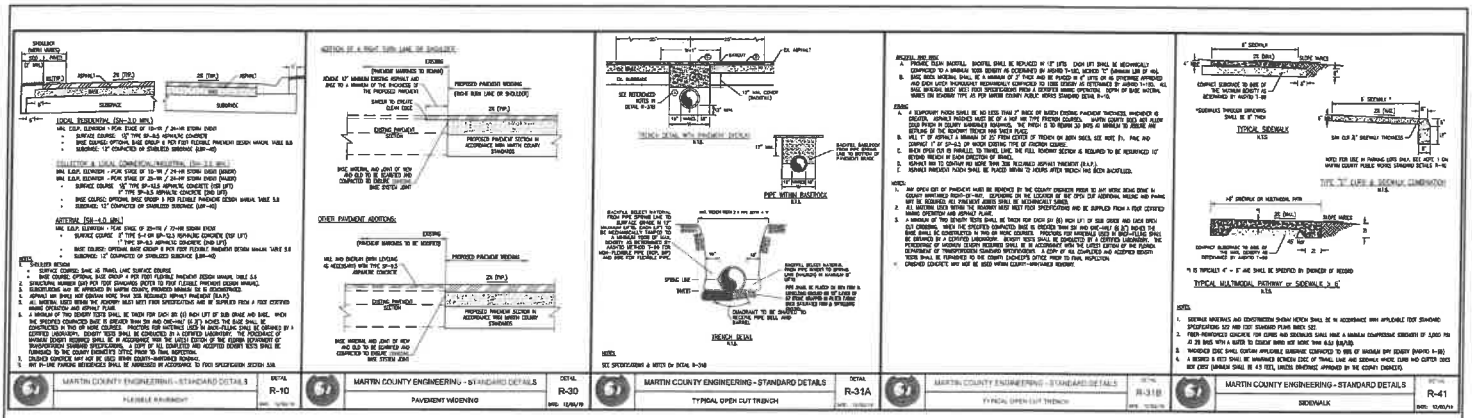
MARTIN COUNTY, FLORIDA

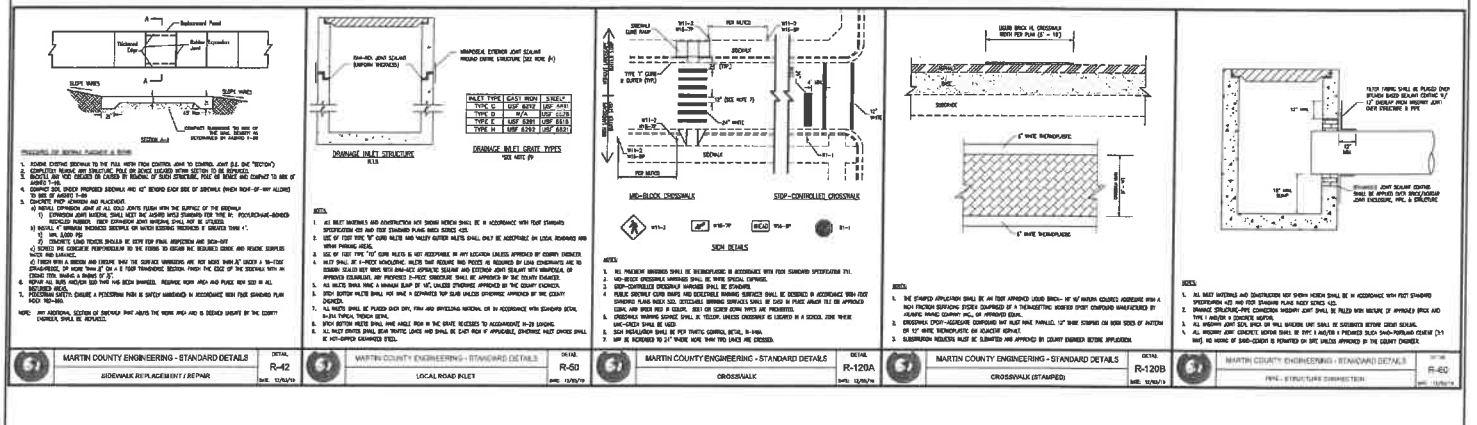
TYPICAL SECTIONS

CAPTEC Civil Engineering Professionals
201 N.W. Flagler Ave.
Stuart, Florida 34994
Phone: (772) 288-0884
Fax: (772) 288-0244
Florida Certificate No. 8324-0007

JOHN P. CARLO P.E. 201 N.W. Flagler Ave. Stuart, Florida 34994 P.E. No. 37630 STATE OF FLORIDA
Date

SHEET IDENTIFICATION
4
SHEET 4 OF 10





MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 283-5927
FAX: (772) 288-5935

DESIGNED BY: MPW	DATE: 3/07/2020
DWN BY: MCG / CKD BY: JMC	SOLICITATION NO.:
SUBMITTED BY: SPW	CONTRACT NO.: 2017-0073
SCALE: NA / PLOT DATE: 2020/03/20	FILE NUMBER: 1520-2
DWG: 1520	FILE NAME: 1520LS ROUNDABOUT NOTES AND DETAILS.DWG

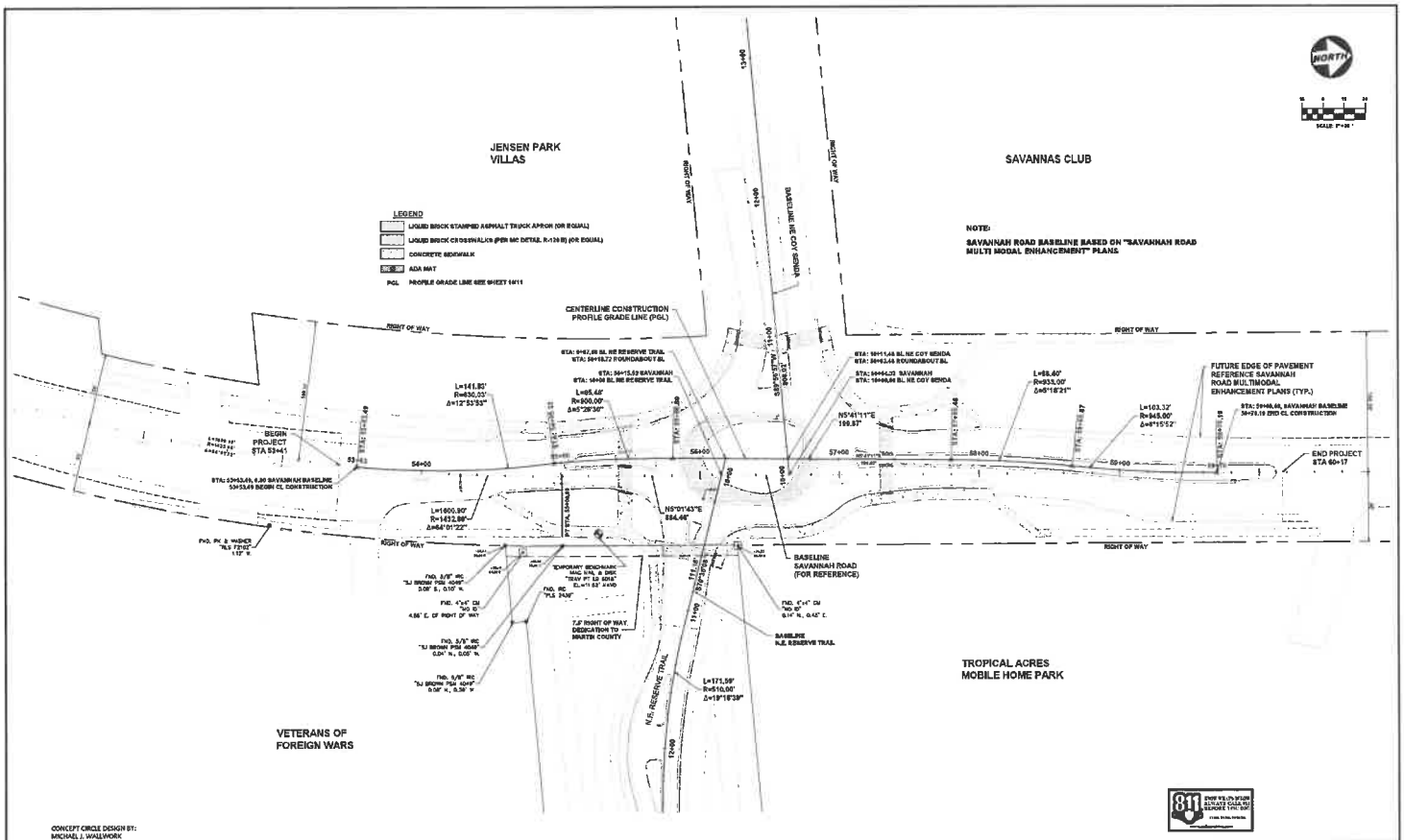
NE SAVANNAH ROAD AT NE COY
SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
MARTIN COUNTY DETAILS

CAPTEC Civil Engineering Professionals
2001 N.E. Flagler Ave.
Stuart, Florida 34996
Phone: (772) 692-2051
Fax: (772) 692-2057
Engineering Business No. 6506

JOSHUA H. CLARKE, P.E.
2001 N.E. Flagler Ave.
Stuart, Florida 34996
P.E. No. 57638

SHEET IDENTIFICATION
5
SHEET 5 OF 14

620



CONCEPT CIRCLE DESIGN BY:
MICHAEL J. WALLWORK

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE (772) 288-5927
FAX. (772) 288-5955
www.martin.fl.us

DESIGNED BY: SPW	DATE: 3-21-2008
DWN BY: KDS	CKD BY: JWC
SUBMITTED BY: SPW	SOLICITATION NO.: CONTRACT NO.:
SCALE: 1" = 30'	PLOT DATE: 3/27/2008
FILE NUMBER: 1998.3	
REV DATE	FILE NAME: 1998.3 RTD-ROUNDABOUT CONTROL SHEET.DWG

REV.	DESCRIPTION	DATE	APPR.
1	PERMIT PLANS	04-01-2008	

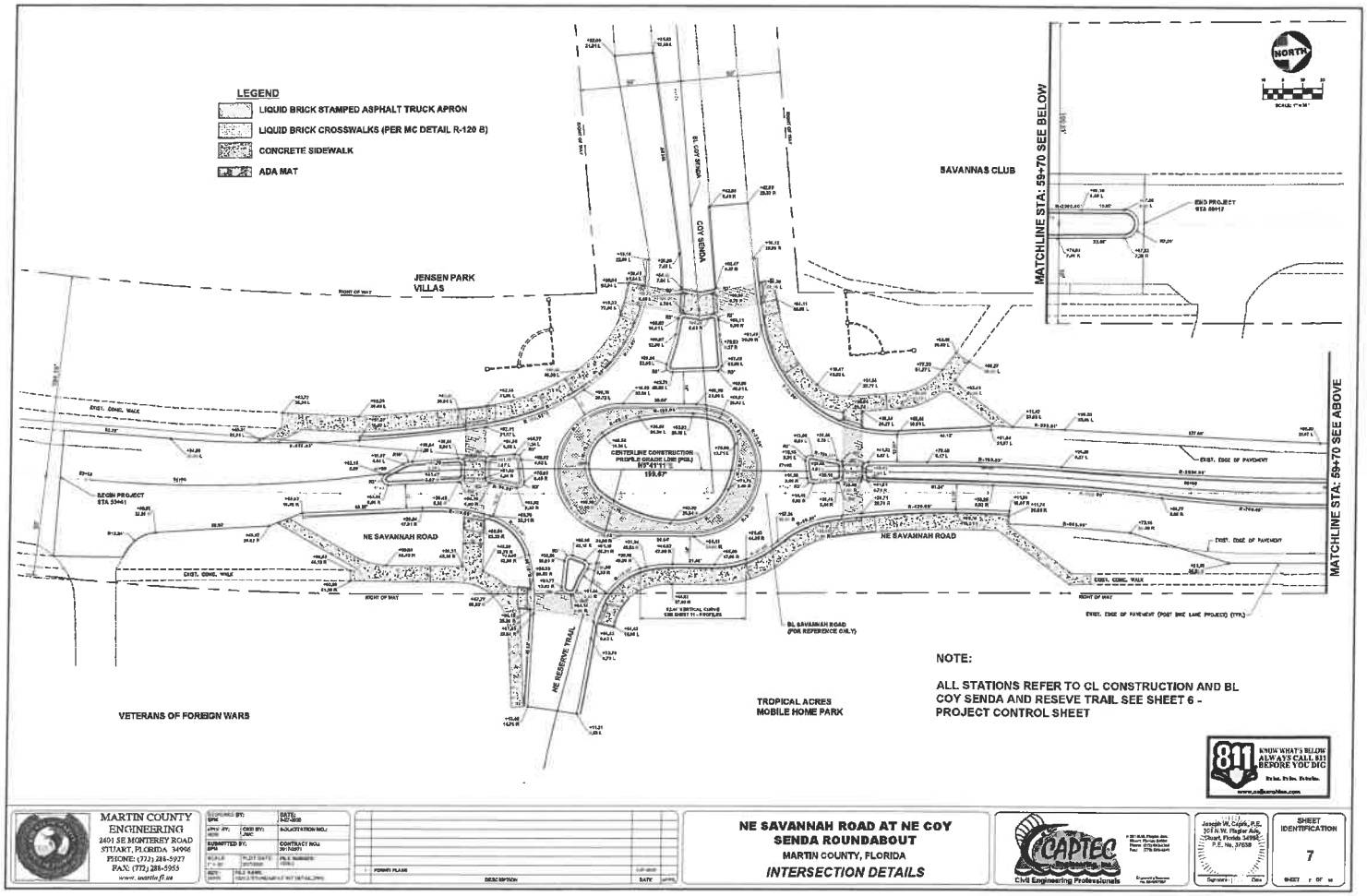
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

PROJECT CONTROL SHEET

CAPTEC Civil Engineering Professionals
Engineering Business No. EB-0000027
JOSEPH W. CAPPELLO
201 N.W. Flagler Ave.
Stuart, Florida 34994
Phone (772) 288-9400
Fax (772) 288-9401
P.E. No. 37628
Date

SHEET IDENTIFICATION
6
SHEET 6 OF 16



NOTE:

ALL STATIONS REFER TO CL CONSTRUCTION AND BL COY SENDA AND RESEVE TRAIL SEE SHEET 6 - PROJECT CONTROL SHEET

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ENGINEERED BY: SPW	DATE: 2/27/2008
DWN BY: SPW	CKD BY: JWC
SUBMITTED BY: SPW	SOLICITATION NO.:
	CONTRACT NO.: 20-10201
SCALE: 1" = 50'	PLOT DATE: 2/27/2008
DGN:	FILE NAME:
DATE	DESCRIPTION
1	FORMAL PLANS

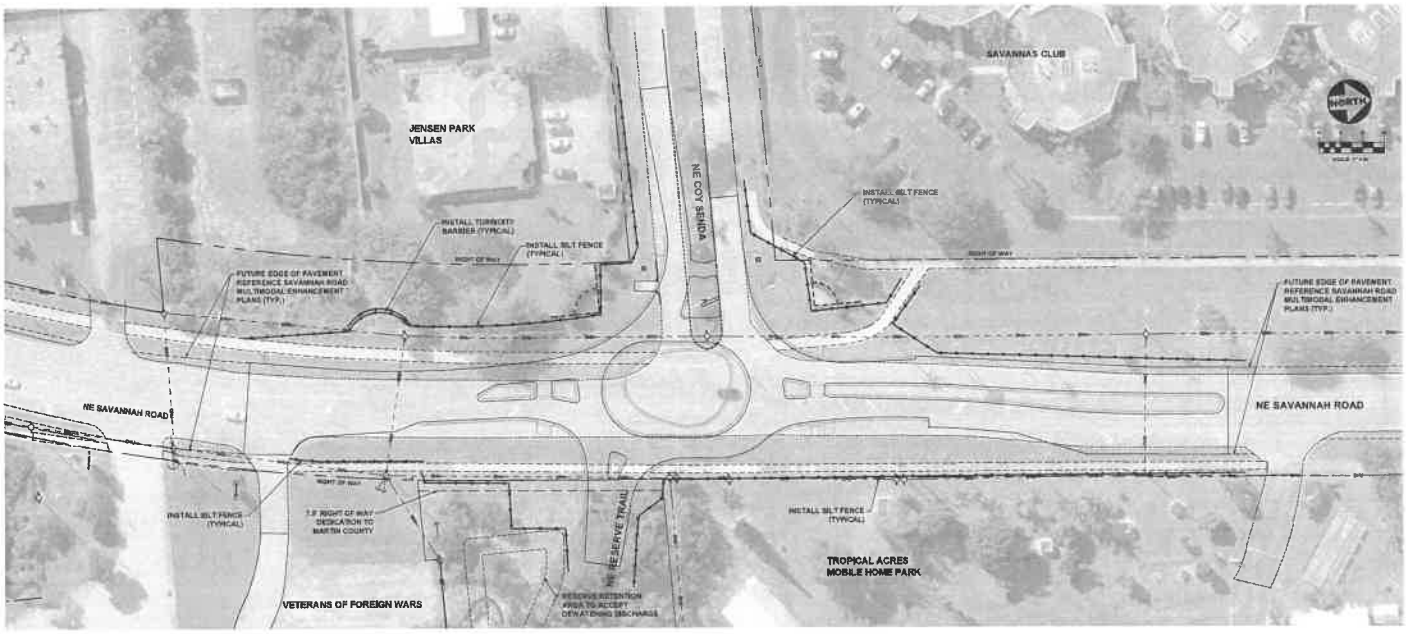
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
INTERSECTION DETAILS

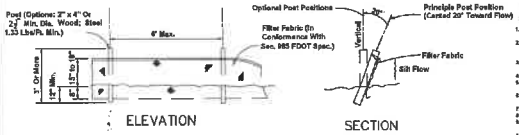
CAPTEC Civil Engineering Professionals

Jessie W. Culick, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37038

Signature | Date

SHEET IDENTIFICATION
7
SHEET 7 OF 10





Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

TYPE III SILT FENCE

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO MARTIN COUNTY, SFWMD, FDEP AND FDOT STANDARD SPECIFICATIONS AND REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
2. ALL TOPOGRAPHIC INFORMATION REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) PER MARTIN COUNTY BENCHMARK "RAY-A", ELEVATION = 10.34 FEET (NGVD 29) AND "DAN", ELEVATION = 8.771 FEET (NGVD 29) CONVERTED TO NAVD 88 BY SUBTRACTING 1.00 FEET.
3. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE MARTIN COUNTY ENGINEERING DEPT PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
4. CLEARING LIMITS ARE APPROXIMATE AND WILL BE ADJUSTED ON SITE TO PRESERVE EXISTING PROTECTED TREES.
5. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND SHALL BE MONITORED FOR SUFFICIENCY DURING THE CLEARING ACTIVITIES.
6. SOD, STABILIZATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES CAUSING VEGETION REMOVAL.
7. THE PROPOSED LAND CLEARING DEBRIS METHOD SHALL BE CHIPPED ON SITE FOR OFF-SITE DISPOSAL.
8. CONTRACTOR WILL MAKE EVERY EFFORT TO UTILIZE EXISTING DISTURBED AREA OR CLEARED AREA ON SITE.
9. ANY PROTECTED TREES WILL BE IDENTIFIED AND MITIGATED FOR ON THE LANDSCAPE PLANS PREPARED BY LUCIDO & ASSOCIATES.
10. CONTRACTOR SHALL OBTAIN A MARTIN COUNTY RIGHT-OF-WAY USE PERMIT FOR ALL WORK PERFORMED WITHIN NE SAVANNAH ROAD RIGHT-OF-WAY.

CLEARING AND GRUBBING

THE CONTRACTOR WILL NOT CLEAR AND GRUB ANY SITE WITHOUT PRIOR CONFIRMATION OF WETLAND AND UPLAND PRESERVATION REQUIREMENTS. ALL PRESERVATION AREAS WILL BE FENCED TO AVOID ENCROACHMENT AND WILL BE STRICTLY ENFORCED. CAPTEC ENGINEERING INC. WILL NOT BE RESPONSIBLE FOR ENCROACHMENT BY CONTRACTOR WITHIN UPLAND PRESERVE AREAS. CONTRACTOR IS CAUTIONED TO REVIEW ALL PERMITS AND CONSTRUCTION DOCUMENTS PRIOR TO THE CLEARING/GRUBBING PHASE.

ORDER OF EXCAVATION

1. INSTALL SILT FENCES AND ORANGE SAFETY FENCES.
2. INSTALL WELL POINTS OR UNDERGROUND SOCK DRAINS AS NEEDED.
3. DEWATERING SHALL DISCHARGE INTO THE RESERVE RETENTION AREAS ONLY.
4. SET DEWATERING PUMPS IF NEEDED FOR EXCAVATION.
5. PUMP TO RETENTION AREAS.
6. INSTALL DRAINAGE SYSTEMS AND UTILITY ADJUSTMENTS.

DEWATERING NOTES

PUMPING OPERATIONS:

AVERAGE DAILY PUMPAGE

SINGLE (1) 3,500 GPM, 8" DISCHARGE PUMP OPERATING AT 44% MAXIMUM CAPACITY FOR AN AVERAGE PUMPING RATE OF 2,500 GPM ≈ 45% ≈ 1 PUMP = 1,500 GPM

TOTAL AVERAGE DAILY PUMPING RATE = 1,500 GPM @ 8HR = 480,000 GPD

MAXIMUM DAILY PUMPAGE

SINGLE (1) 3,500 GPM, 8" DISCHARGE PUMP OPERATING AT 89% MAXIMUM CAPACITY FOR A MAXIMUM PUMPING RATE OF 3,150 GPM ≈ 90% ≈ 1 PUMP = 2,000 GPM

TOTAL MAXIMUM DAILY PUMPING RATE = 2,000 GPM @ 8HR = 960,000 GPD

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STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
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DESIGNED BY: SPG		DATE: 3/27/2009
DWN BY: SPG	CKD BY: JWC	SOLICITATION NO.:
SUBMITTED BY: SPG		CONTRACT NO.:
SCALE: 1" = 50'	PLOT DATE: 3/27/2009	FILE NUMBER: 1328.3
SHEET: 34/34	FILE NAME: NE SAVANNAH ROAD ROUNDABOUT DEWATERING.DWG	

1	REVISED PLANS	3-27-2009
	DESCRIPTION	DATE

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

EROSION AND SEDIMENT CONTROL

CAPTEC Civil Engineering Professionals
401 N.W. Flagler Ave.
Stuart, Florida 34994
Phone (772) 288-0047
Fax (772) 288-0047
Engineering Business
CA 0000767

Joseph W. Capra, P.E.
401 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37638

Signature Date

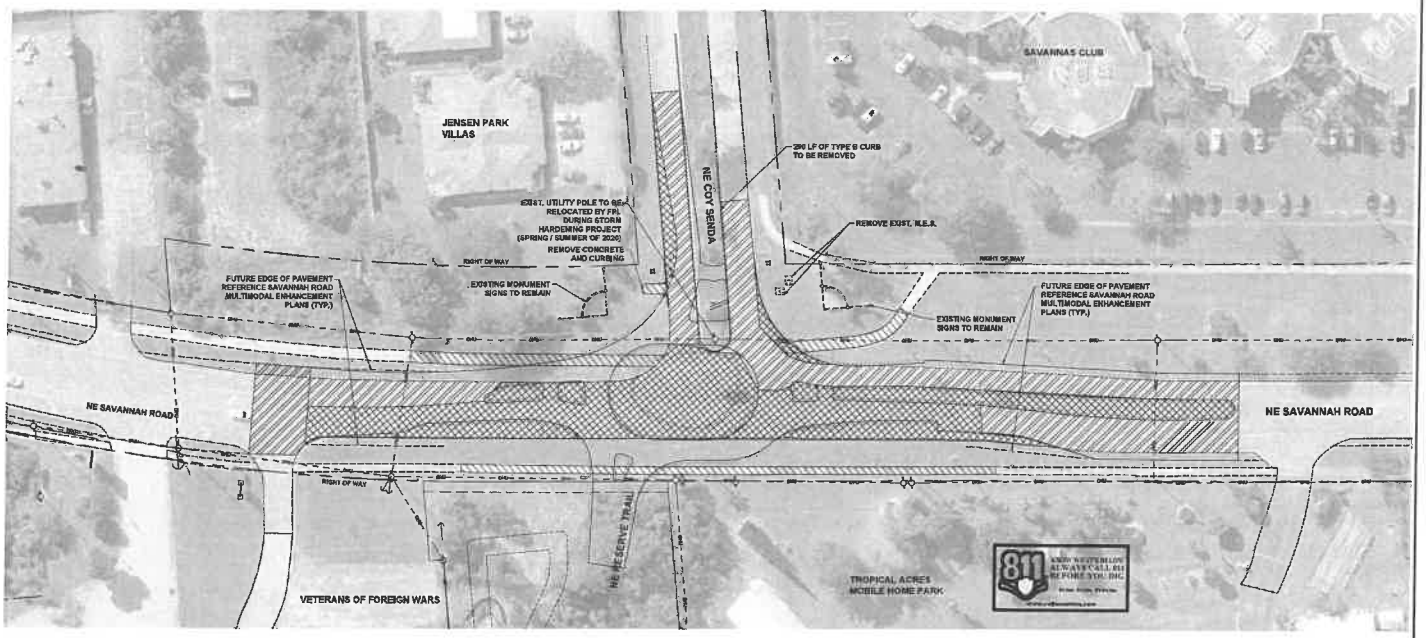
SHEET IDENTIFICATION

8

SHEET 8 OF 14

LEGEND

- PAVEMENT TO REMOVED
- CONCRETE WALKS ETC. TO BE REMOVED
- MILLING AND OVERLAY



MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5945
www.martin.fl.us

DESIGNED BY: SPM	DATE: 02/21/2020
DWN BY: MDB	CKD BY: JMC
SOLICITATION NO.:	
SUBMITTED BY: SPM	CONTRACT NO.:
SCALE: 1" = 20'	PLOT DATE: 02/21/2020
FILE NUMBER: 1020-2	
REF. SHEA:	FILE NAME: 1020-2 ROUNDABOUT DEMO & SIGNING

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

DEMOLITION PLAN

CAPTEC Civil Engineering Professionals

Joseph W. Capek, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37939

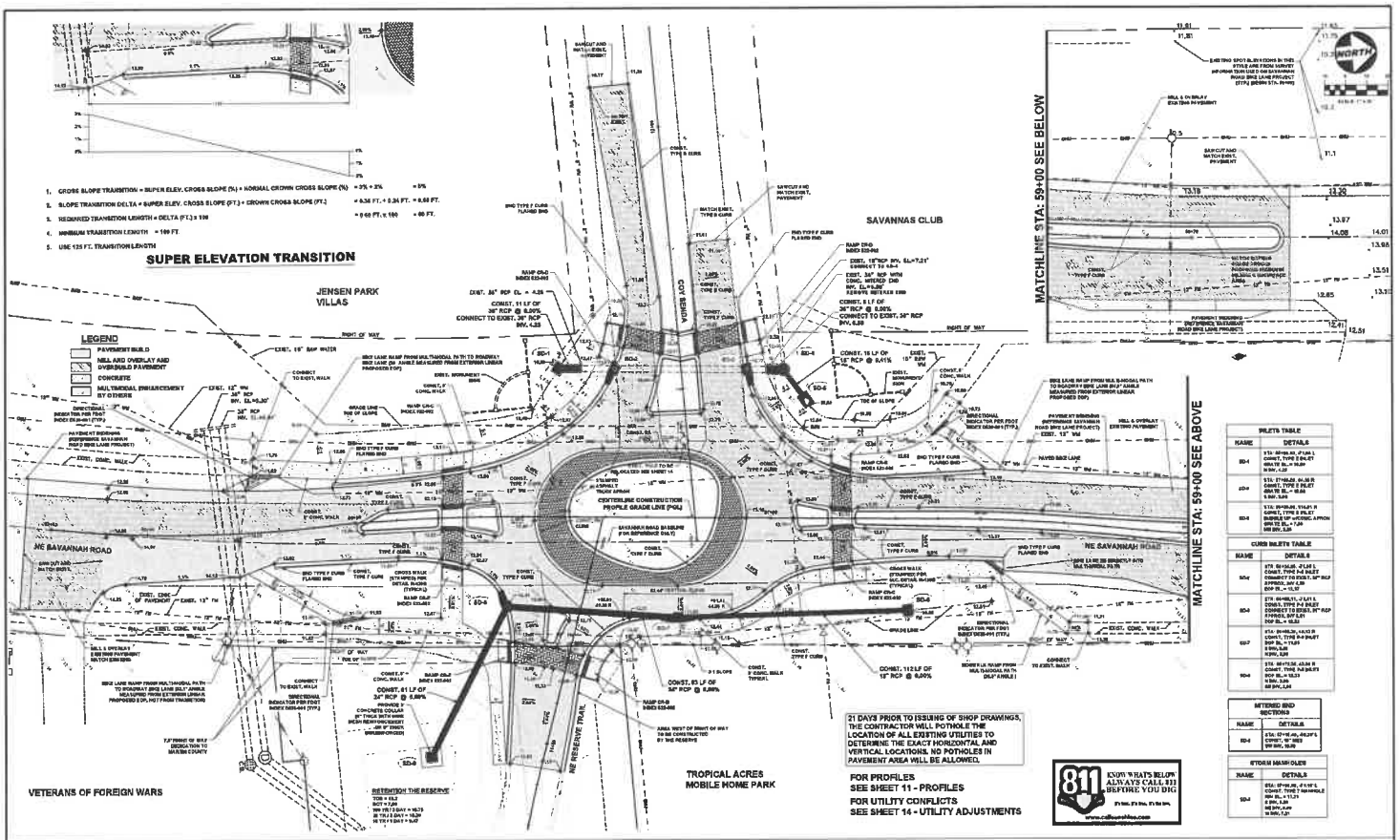
Signature | Date

SHEET IDENTIFICATION

9

SHEET 9 OF 10

524


SUPER ELEVATION TRANSITION
1. CROSS SLOPE TRANSITION = SUPER ELEV. CROSS SLOPE (%) + NORMAL CROWN CROSS SLOPE (%) = 3% + 2% = 5%
2. SLOPE TRANSITION DELTA = SUPER ELEV. CROSS SLOPE (FT.) + CROWN CROSS SLOPE (FT.) = 0.34 FT. + 0.34 FT. = 0.68 FT.
3. REQUIRED TRANSITION LENGTH = DELTA (FT.) x 100 = 0.68 FT. x 100 = 68 FT.
4. MINIMUM TRANSITION LENGTH = 100 FT.
5. USE 125 FT. TRANSITION LENGTH
LEGEND
PAVEMENT BUILD
MILL AND OVERLAY AND OVERBUILD PAVEMENT
CONCRETE
MULTIDIGITAL ENHANCEMENT BY OTHERS
JENSEN PARK VILLAS
SAVANNAS CLUB
COY SENDA
NE SAVANNAH ROAD
NE RESERVE TRAIL
VETERANS OF FOREIGN WARS
TROPICAL ACRES MOBILE HOME PARK
MATCHLINE STA: 59+00 SEE BELOW
MATCHLINE STA: 59+00 SEE ABOVE
RIGHT OF WAY
CENTERLINE CONSTRUCTION PROFILE GRADE LINE (PGL)
SAVANNAH ROAD BASELINE (FOR REFERENCE ONLY)
RETENTION THE RESERVE
21 DAYS PRIOR TO ISSUING OF SHOP DRAWINGS, THE CONTRACTOR WILL POTHOLE THE LOCATION OF ALL EXISTING UTILITIES TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS. NO POTHOLES IN PAVEMENT AREA WILL BE ALLOWED.
FOR PROFILES SEE SHEET 11 - PROFILES
FOR UTILITY CONFLICTS SEE SHEET 14 - UTILITY ADJUSTMENTS
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3401 SE MONTERREY ROAD
STUART, FLORIDA 34996
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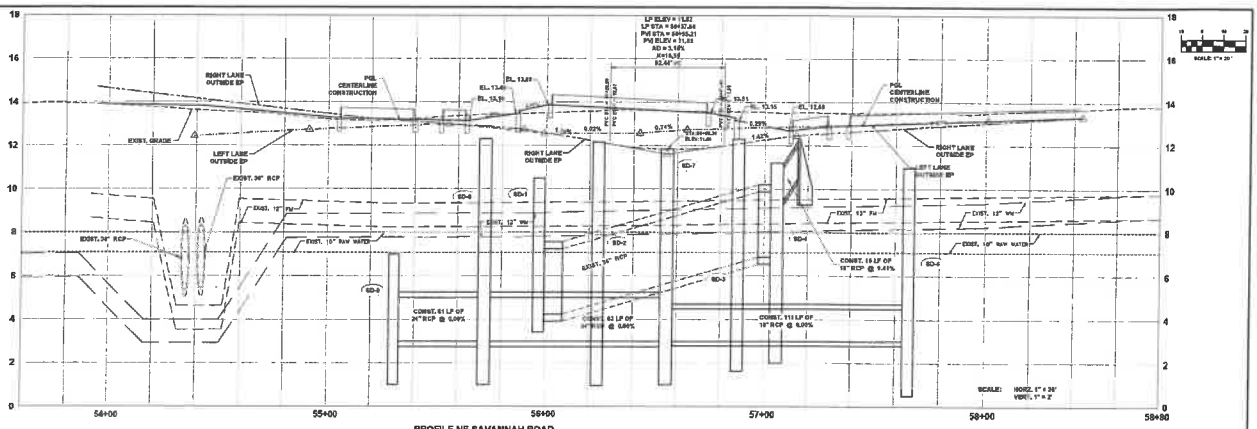
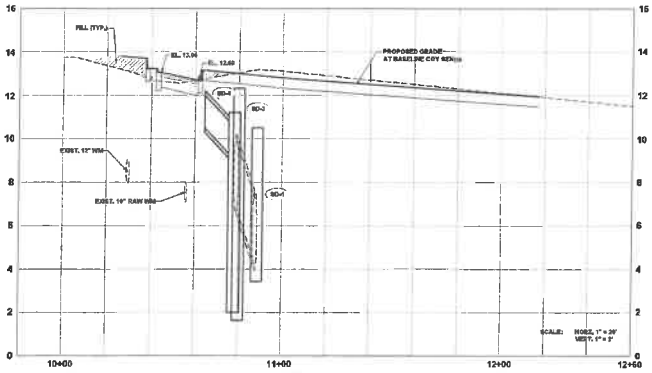
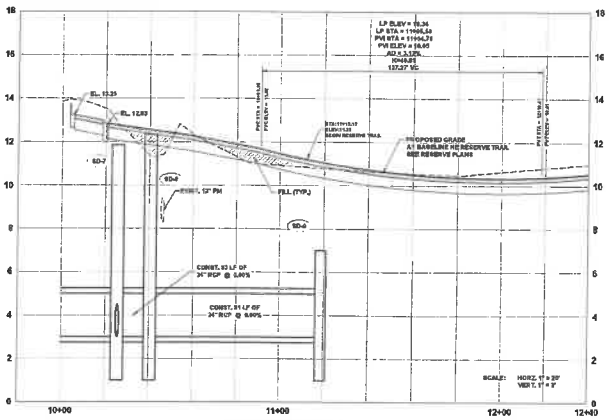
FAX (772) 288-5955
www.martin.fl.us
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
PAVING, GRADING AND DRAINAGE
CAPTEC Civil Engineering Professionals
Joseph W. Capra, P.E.
P.E. No. 37658
SHEET IDENTIFICATION
10







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2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5655
www.martin.fl.us

DESIGNED BY: NPB	DATE: 3-01-2020
DWN BY: NCB	CKD BY: JWC	SOLICITATION NO.:
SUBMITTED BY: GPM	CONTRACT NO.: 2017-2871
SCALE: 1" = 20'	PLOT DATE: 3/17/2020	FILE NUMBER: 1738.2
SHEET: 34/36	FILE NAME: 1738.2 ROUNDABOUT.DWG

DESCRIPTION	DATE
PERMIT PLANS	3-01-2020

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
PROFILES

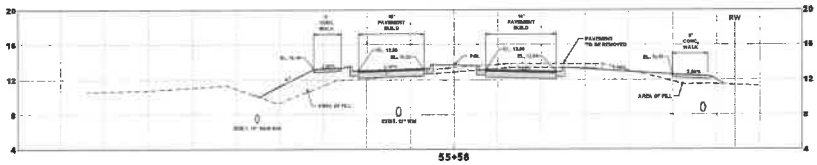
CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave. Stuart, Florida 34994 Phone: (772) 220-2100 Fax: (772) 220-2101
Certificate of Authorization No. CA 0007967

Joseph W. Capra, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37958
Signature Date

SHEET IDENTIFICATION
11
SHEET 11 OF 19

P:\1738\DWG\Plans\Roundabout\1738.2-RD-PROFILE.dwg, 3/17/2020 10:16:24 AM, Adobe PDF (DPI=72, V5) v5.0

56+49



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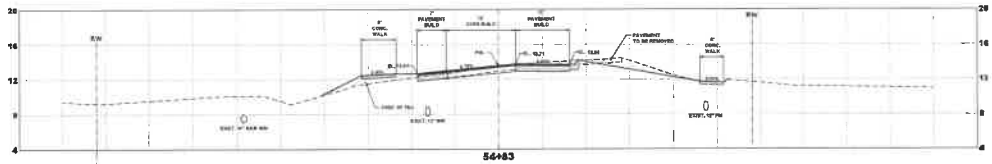

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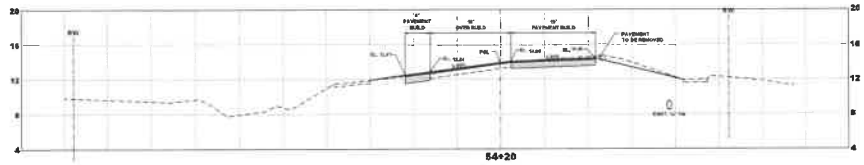

54+20

SCALE: 1" = 10'

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SCALE: HORZ. 1" = 10'
VERT. 1" = 5'

MARTIN COUNTY ENGINEERING
2401 SE MONTERREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5953
www.martin.fl.us

DESIGNED BY: SPM	DATE: 3-27-2020
DWN BY: MDB	CKD BY: JWC
SUBMITTED BY: SPM	SOLICITATION NO.:
SCALE: 1" = 10'	PLOT DATE: 3/23/2020
	CONTRACT NO.: 20**-0070
	FILE NUMBER: 13262
SIZE: 22X34	FILE NAME: ROUNDABOUT CORRIDOR.DWG

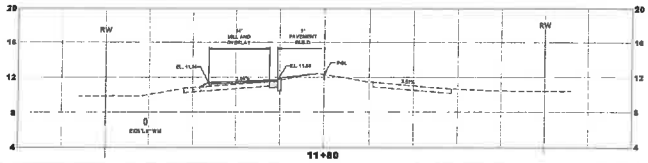
1	REVISED PLANS	3-27-2020

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
CROSS SECTIONS

CAPTEC
Civil Engineering Professionals
2615 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37698
Date

SHEET IDENTIFICATION
12
SHEET 12 OF 14

627



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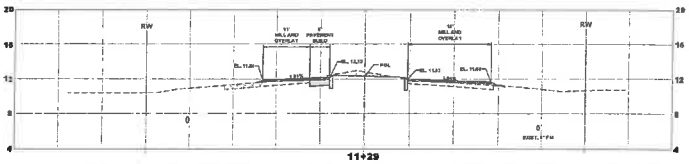

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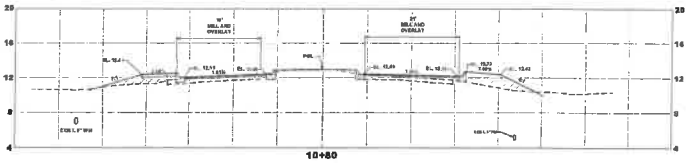

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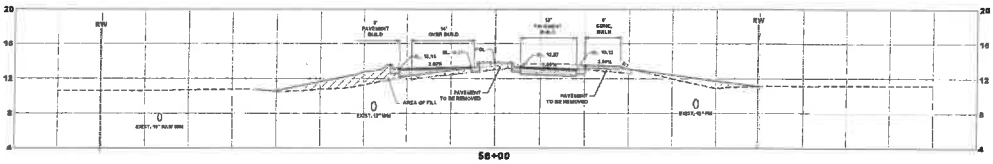
NE COY SENDA



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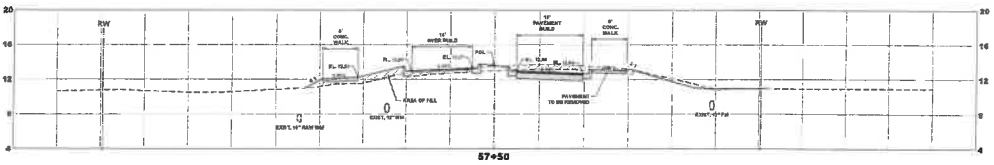

57+50

SCALE: HORZ. 1" = 10'
VERT. 1" = 5'

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2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

DESIGN CO BY: SPW	DATE: 3-21-2006
DWN BY: MSN	CKD BY: JWC
SOLICITATION NO.:	
SUBMITTED BY: SPW	CONTRACT NO.: 2017-2001
SCALE: 1" = 10'	PLOT DATE: 10/7/2020
FILE NUMBER: 1525.2	
REV. DATE: 3/2006	FILE NAME: 1525.2 ROUNDABOUT CS RIBBON.DWG

3-21-06 SPW

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

CROSS SECTIONS

CAPTEC
Civil Engineering Professionals
Engineering Business No. 7-0000787
20 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 27536
Phone: (772) 220-2100
Fax: (772) 220-2101

Joseph C. Cappelli
Date

SHEET IDENTIFICATION
13
SHEET 13 OF 16

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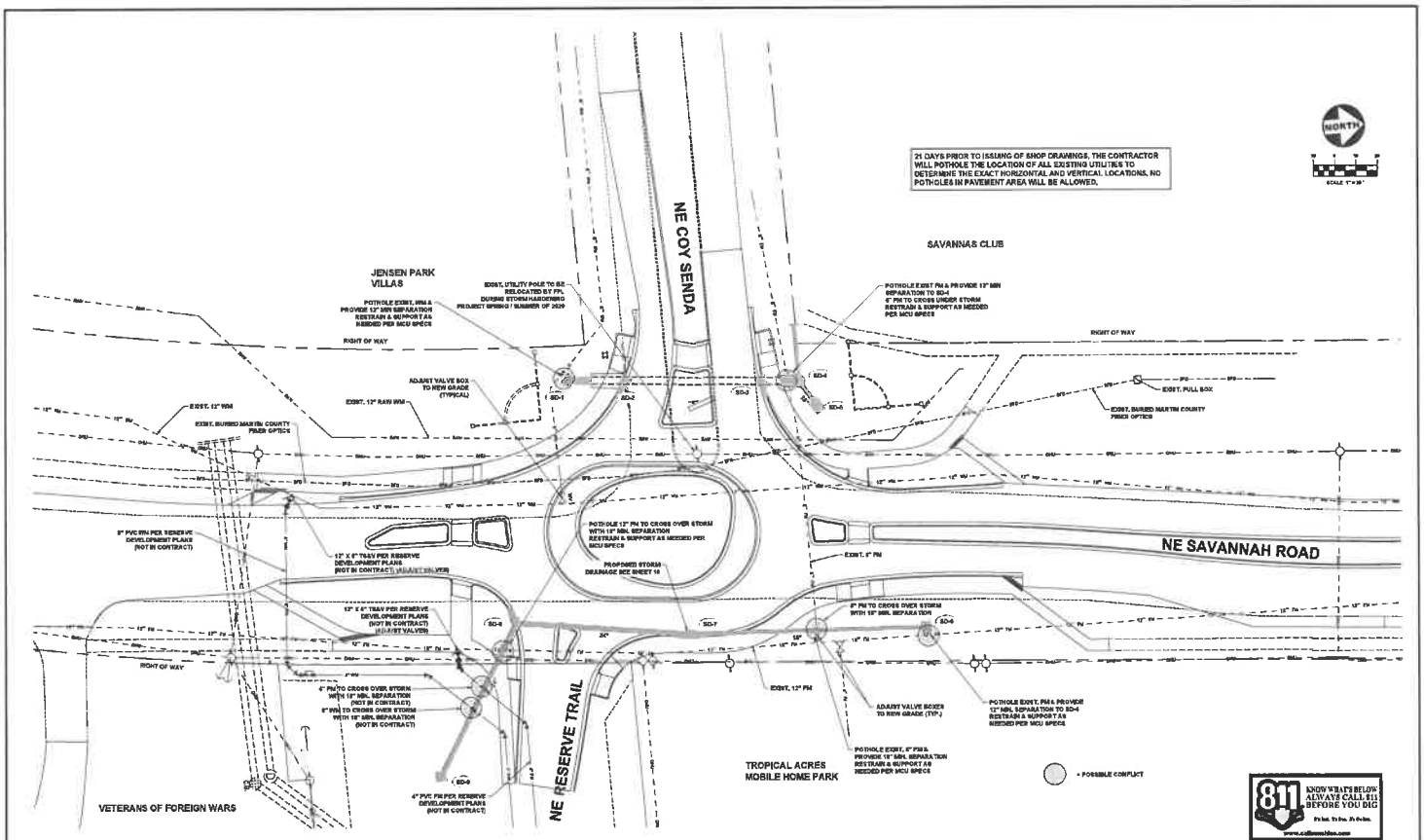


MARTIN COUNTY ENGINEERING
3401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

DESIGNED BY: SDB	DATE: 10/1/2020
DWN BY: SDB	CKD BY: JMC
SOLICITATION NO.:	
CONTRACT NO.:	
SCALE: 1" = 20'	PLOT DATE: 10/1/2020
FILE NUMBER: 1.0.0.0	
DATE:	FILE NAME: COLLY PKWY/SAVANNAH LOOP, SCALE 1" = 20'

1	PERMIT PLANS	

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

UTILITY ADJUSTMENTS

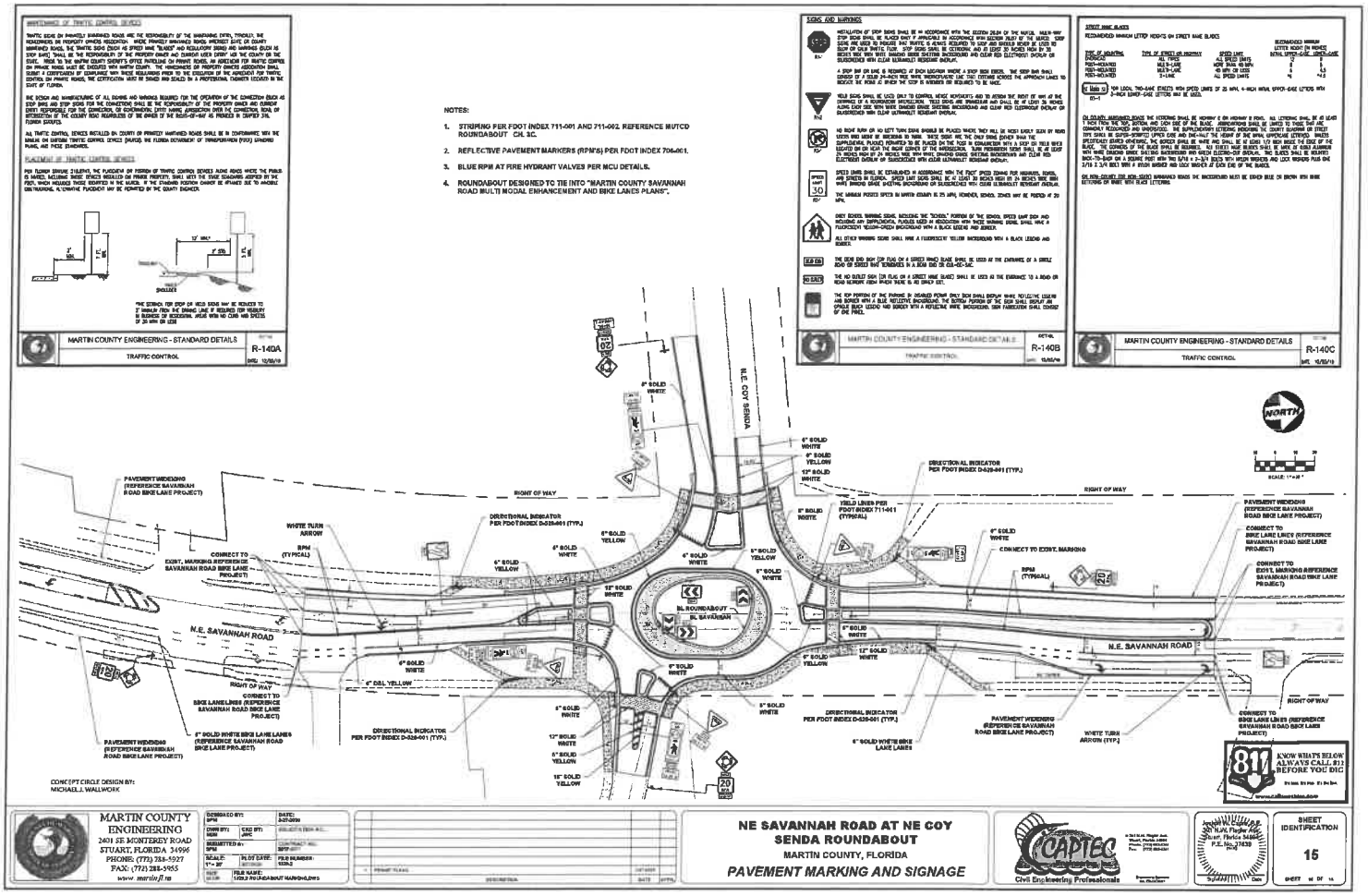
CAPTEC Civil Engineering Professionals
301 N.W. Flagler Ave.
Stuart, Florida 34994
Fax (772) 220-2042
Engineering Business No. 26-00001877

Joseph W. Capra, P.E.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37838
Signature Date

SHEET IDENTIFICATION

14

SHEET 14 OF 16


MAINTENANCE OF TRAFFIC CONTROL DEVICES
PLACEMENT OF TRAFFIC CONTROL DEVICES
MARTIN COUNTY ENGINEERING - STANDARD DETAILS
TRAFFIC CONTROL
R-140A
SIGNS AND MARKINGS
MARTIN COUNTY ENGINEERING - STANDARD DETAILS
TRAFFIC CONTROL
R-140B
STREET NAME BLADES
MARTIN COUNTY ENGINEERING - STANDARD DETAILS
TRAFFIC CONTROL
R-140C
NOTES:
1. STRIPING PER FDOT INDEX 711-001 AND 711-002 REFERENCE MUTCD ROUNDABOUT CH. 3C.
2. REFLECTIVE PAVEMENT MARKERS (RPM'S) PER FDOT INDEX 706-001.
3. BLUE RPM AT FIRE HYDRANT VALVES PER MCU DETAILS.
4. ROUNDABOUT DESIGNED TO TIE INTO "MARTIN COUNTY SAVANNAH ROAD MULTI MODAL ENHANCEMENT AND BIKE LANES PLANS".
N.E. COY SENDA
N.E. SAVANNAH ROAD
RIGHT OF WAY
NORTH
SCALE: 1"=20'
PAVEMENT WIDENING (REFERENCE SAVANNAH ROAD BIKE LANE PROJECT)
CONNECT TO EXIST. MARKING SAVANNAH ROAD BIKE LANE PROJECT
WHITE TURN ARROW
RPM (TYPICAL)
DIRECTIONAL INDICATOR PER FDOT INDEX D-629-001 (TYP.)
YIELD LINES PER FDOT INDEX 711-001 (TYPICAL)
CONNECT TO EXIST. MARKING
CONNECT TO BIKE LANE LINES (REFERENCE SAVANNAH ROAD BIKE LANE PROJECT)
CONNECT TO EXIST. MARKING (REFERENCE SAVANNAH ROAD BIKE LANE PROJECT)
6" SOLID WHITE
6" SOLID YELLOW
12" SOLID WHITE
6" DBL YELLOW
6" SOLID WHITE BIKE LANE LANES
BL ROUNDABOUT BL SAVANNAH
CONCEPT CIRCLE DESIGN BY: MICHAEL J. WALLWORK
KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
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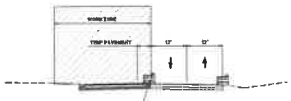
NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
PAVEMENT MARKING AND SIGNAGE
CAPTEC
Civil Engineering Professionals
SHEET IDENTIFICATION
15

PHASE 1

PHASE 2

PHASE 3

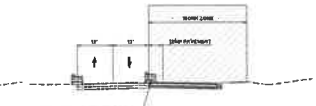
PHASE 4



NOTE: MAINTAIN 2 LANES (2-WAY TRAFFIC) AT ALL TIMES

* MAINTAIN DRAINAGE/EROSION CONTROL DURING CONSTRUCTION

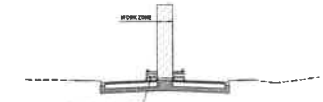
PHASE 1
N.T.S.



NOTE: MAINTAIN 2 LANES (2-WAY TRAFFIC) AT ALL TIMES

* MAINTAIN DRAINAGE/EROSION CONTROL DURING CONSTRUCTION

PHASE 2
N.T.S.



NOTE: MAINTAIN 2 LANES (2-WAY TRAFFIC) AT ALL TIMES

* MAINTAIN DRAINAGE/EROSION CONTROL DURING CONSTRUCTION

PHASE 3
N.T.S.

NOTES:

1. *INSTALL ADVANCED WARNING SIGNS ON SIDE STREETS. SIGN TO REMAIN DURING ALL PHASES.*
2. *PLACE TEMPORARY WORK SIGNS, CHANNELIZING DEVICES AND OTHER TRAFFIC CONTROL DEVICES DURING CONSTRUCTION ACTIVITIES PER FDOT INDEX 102-600, 102-613, 102-615 AND 102-616.*
3. *USE STANDARD CLEARING AND GRUBBING FOR EXISTING MEDIAN PREPARATION.*
4. *UPON COMPLETION OF PHASES 1, 2, AND 3, PLACE TEMPORARY PAVEMENT MARKINGS AND STRIPING .*
5. *UPON COMPLETION OF ALL PHASES, PLACE PERMANENT PAVEMENT MARKINGS AND STRIPING.*

NOTE:
PER FDOT INDEX 102-600, ANY DROP-OFF CONDITION THAT IS CREATED AND RESTORED WITHIN THE SAME WORK PERIOD WILL NOT BE SUBJECT TO THE USE OF BARRIERS; HOWEVER, WARNING DEVICES WILL BE REQUIRED.

SEQUENCING OF CONSTRUCTION

MAINTENANCE OF TRAFFIC (MOT) PLAN
NE SAVANNAH ROAD / NE COY SENDA INTERSECTION ROUNDABOUT

NOT BASIS
1. SAVANNAH RD MULTIMODAL ENHANCEMENT PROJECT WILL BE CONSTRUCTED PRIOR TO ROUNDABOUT
2. COY SENDA INTERSECTION TO REMAIN OPEN DURING CONSTRUCTION AT ALL TIMES

MOBILIZATION
SET UP EROSION CONTROL / PLACE TEMPORARY SIGNAGE AND MARKINGS PER FDOT INDEX 102-600 SERIES.

PHASE 1: WEST SECTION CONSTRUCTION
MAINTAIN NORTH/SOUTH TRAFFIC ON EAST SIDE OF ROADWAY
CONSTRUCT OUTSIDE CURBING / PLACE DRAINAGE / OPEN CUT / INSTALL BASE & OVERBUILD / 1ST LAYER OF ASPHALT/ SIDEWALK / DO NOT BUILD MEDIANS OR SPLITTER ISLANDS--PAVE THRU / RELOCATE ANY DRY UTILITIES / SET CONDUITS FOR LIGHTING. USE EXISTING PAVEMENT IN MEDIAN LOCATION FOR PHAST 2 TRAFFIC.

PHASE 2: EAST SECTION CONSTRUCTION
MAINTAIN NORTH/SOUTH TRAFFIC ON WEST SIDE OF ROADWAY.
CONSTRUCT OUTSIDE CURBING / PLACE DRAINAGE / OPEN CUT / INSTALL BASE & OVERBUILD / 1ST LAYER OF ASPHALT/ SIDEWALK / DO NOT BUILD MEDIANS OR SPLITTER ISLANDS--PAVE THRU / RELOCATE ANY DRY UTILITIES / SET CONDUITS FOR LIGHTING.

PHASE 3: ROUNDABOUT & MEDIAN CONSTRUCTION, NORTH LANE COY SENDA
MAINTAIN TRAFFIC ON OUTSIDE LANES, REDIRECT TRAFFIC ON COY SENDA TO SOUTH LANES, RIGHT TURN ONLY AT SAVANNAH ROAD.
CONSTRUCT MEDIAN CURBING / CUT IN ISLANDS & ROUNDABOUT / INSTALL BASE / 1ST LAYER OF ASPHALT/ SET CONDUITS FOR LIGHTING / TEMPORARY STRIPING AT ROUNDABOUT / SPLITTER ISLANDS / SIGNAGE / ADD PATTERNED PAVEMENT / ADD FINAL LAYER OF ASPHALT / PAINT PAVEMENT MARKINGS / ADD LIGHT POLES / ADD LANDSCAPING.

PHASE 4: SOUTH LANE COY SENDA
REDIRECT TRAFFIC ON COY SENDA TO NORTH LANE, MAINTAIN TRAFFIC ON ROUNDABOUT, CONSTRUCT OUTSIDE CURBING / INSTALL BASE / FINAL LAYER OF ASPHALT/ SIDEWALK / RELOCATE ANY DRY UTILITIES.

FINAL PHASE:
PLACE THERMOPLASTIC STRIPING / REMOVE TEMPORARY SIGNAGE / CLEAN UP / SOD / LIGHT STARTUP.

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2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
www.martin.fl.us

DESIGNED BY: SPM		DATE: 3-27-2020
DWN BY: MDA	CKD BY: JMC	SOLICITATION NO.:
SUBMITTED BY: SPM		CONTRACT NO.: 2017-5073
SCALE: 1"=100'	PLOT DATE: 3/27/2020	FILE NUMBER: 150052
SCC: 5030	FILE NAME: 150052 ROUNDABOUT MOT.DWG	

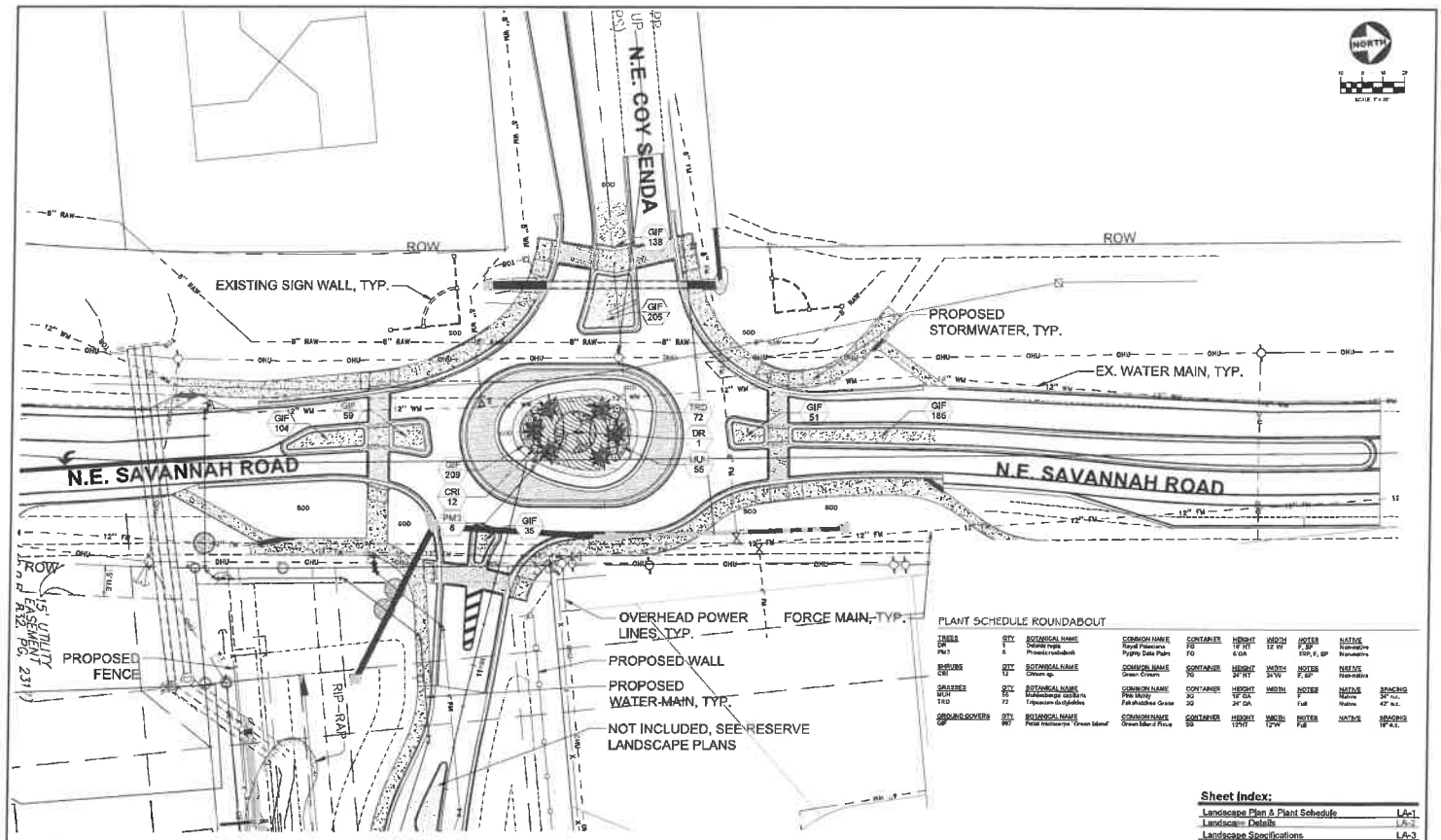
1	PERMIT PLANS	3-27-2020
	DESCRIPTION	DATE

NE SAVANNAH ROAD AT NE COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
MAINTAIN OF TRAFFIC

CAPTEC
Civil Engineering Professionals
1-301 N.W. Flagler Ave.
Stuart, Florida 34994
Phone: (772) 220-1041
Fax: (772) 220-1051
Engineering Services
CA-7420

JOHN W. FLEGLER JR.
301 N.W. Flagler Ave.
Stuart, Florida 34994
P.E. No. 37538
STATE OF FLORIDA
Not Valid Without Raised Seal

SHEET IDENTIFICATION
16
SHEET 16 OF 16



PLANT SCHEDULE ROUNDABOUT

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
DR	1	Delonix regia	Royal Poinciana	FG	18' HT	12' W	F, SP	Non-native
PM3	6	Phoenix roebelenii	Pygmy Date Palm	FG	6 OA		FXP, F, SP	Non-native

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
CRI	12	Crinum sp.	Green Crinum	7G	24" HT	24"W	F, SP	Non-native

GRASSES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
MUH	72	Muhlenbergia capillaris	Pink Muhly	3G	18" OA		F	Native	24" o.c.
TRD	72	Tripsacum dactyloides	Fakahatchee Grass	3G	24" OA		Full	Native	42" o.c.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
GIF	997	Ficus microcarpa 'Green Island'	Green Island Ficus	3G	12"HT	12"W	Full	NATIVE	18" o.c.

Sheet Index:

Landscape Plan & Plant Schedule	LA-1
Landscape Details	LA-2
Landscape Specifications	LA-3

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955
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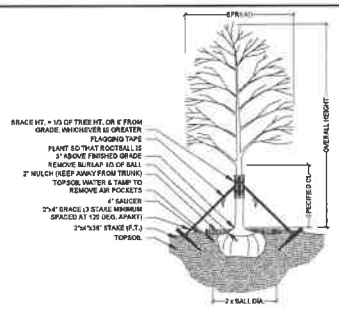
DESIGNED BY: BH | DATE: 09/1/2019
DWN BY: BH | CK BY: PD | SUBMITTED BY: | CONTRACT NO.: 2015-2021
SCALE: 1" = 20' | PLOT DATE: 07/12/2019 | FILE NUMBER: 4825
SIZE: 22X34 | FILE NAME:

DESCRIPTION

NE SAVANNAH ROAD AT COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
Landscape Plan

lucido & associates
REG. # 1018 Thomas P. Lucido

SHEET IDENTIFICATION
LA-1
SHEET 1 OF 3



TREE PLANTING & STAKING

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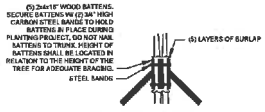
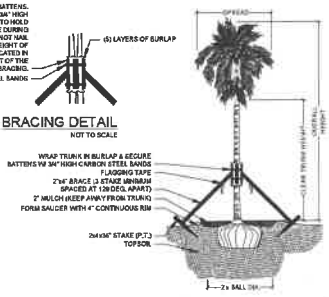


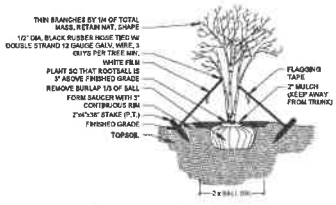
BRACING DETAIL

NOT TO SCALE



PALM PLANTING - ANGLE STAKE

NOT TO SCALE



MULTI-TRUNK PLANTING & GUYING

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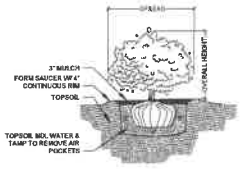

SHRUB PLANTING

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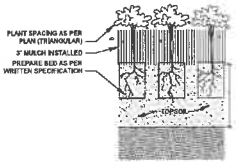

GROUNDCOVER PLANTING DETAIL

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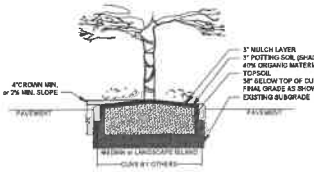
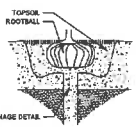


THIS DETAIL SHOWN DEPICTS A MEDIAN AND/OR LANDSCAPE ISLAND AND IS FOR GRAPHIC PURPOSES ONLY. SOIL PREPARATION SHALL APPLY TO ALL TREE, SHRUB, & GROUND COVER AREAS. THIS DOES NOT INCLUDE SOD AREAS

LANDSCAPE AREA PREPARATION DETAIL

NOT TO SCALE

- TOPSOIL SHALL BE NATURAL, FRIABLE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY OF THE PROJECT SITE THAT PRODUCES HEALTHY GROWTH.
- TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 7 AND BE FREE FROM SUBSOIL, THICKNESS, STIFF, WOOD, CLAY, STONES, STRAWS, BRUSH, WEEDS, ROOTS, TOXIC SUBSTANCES AND ANY OTHER MATERIAL WHICH MAY BE DETRIMENTAL TO PLANT GROWTH OR HINDER PLANTING OPERATIONS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 5% ORGANIC MATERIAL.
- TOPSOIL MUST BE SUPPLIED IN NATURAL STATE OR OTHER SOILS USED ALONG DRAINAGE TESTING DETAIL FOR TREES.
- LANDSCAPE AREA SOILS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING



DRAINAGE TESTING DETAIL

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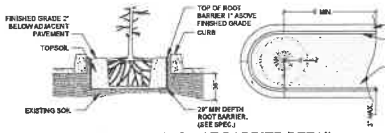
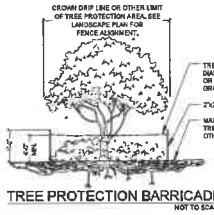


SPECIAL APPLICATIONS ROOT BARRIER DETAIL

NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE INSTALLED WHEN ROOT BALL IS LOCATED WITHIN 6' OF PAVEMENT AND OR CURB.
2- ROOT BARRIER SHALL BE "BIO-BARRIER 24" DEPTH OR APPROVED EQUAL.
3- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURE'S SPECIFICATIONS AND RECOMMENDATIONS.



TREE PROTECTION BARRICADE

NOT TO SCALE

NOTES:
1- SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
2- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS.

PRIOR TO PLANTING, ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER.

A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED. IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

E. WHEN BACKFILLING PLANTING PITS WITH NATIVE TOPSOIL, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5935
www.martin.fl.us

ENGINEER BY BW	DATE 07/12/2019
DRW BY BW	CKD BY PG
SUBMITTED BY	CONTRACT NO. 2017-0701
SCALE 1" = 20'	PLOT DATE 07/12/2019
REF. DWG.	FILE NUMBER 19-025
	FILE NAME

PERMIT PLAN

NE SAVANNAH ROAD AT COY SENDA ROUNDABOUT

MARTIN COUNTY, FLORIDA

Landscape Details

lucido & associates
701 SE Ocean Blvd, Stuart, Florida 34994
(772) 220-2100, Fax (772) 220-2101
REG. # 1013
Thomas P. Lucido

SHEET IDENTIFICATION

LA-2

SHEET 1 OF 1

LANDSCAPE SPECIFICATIONS

PART 1: GENERAL CONDITIONS

1.01 SCOPE:
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in; Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and, additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS:
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well versed in plant materials, planting methods, reading plans, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Foreman shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the *Superintendent* is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e. damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE:
The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of 18 MONTHS from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guaranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God, as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY:
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.).

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data:
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000.00 per person and $300,000.00 per aggregate or as required by owner and agreed to in the contract. The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MARTERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes, and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. *Substitutions:* Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections, grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION

A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails.

2.06 TOP SOIL:
A. Planting soil for all plantings shall consist of topsoil and be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity of the project site that produces heavy growth. Topsoil shall have a PH range of 5.5-7.4, free from subsoil, weeds, litter, sods, clay, stones, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth, or hinder planting operations. Topsoil shall contain a minimum of 3% organic material. Topsoil must percolate water at a rate of 1" per hour (See also drainage testing detail for trees)

B Landscape Area Preparation. The intent of this section is to ensure a healthy growing environment for all planting material in all landscaped areas. Landscape Contractor to examine existing soils prior to planting to ensure conformance to all definitions of "Topsoil" (see Landscape Area Preparation Detail); In addition, a 3" layer of high organic (min 40%) potting soil shall be added to the topsoil and mixed in at time of planting. *East Coast Recycling Inc* is a recommended source for imported Topsoil (if needed) as well as the top 3" layer of potting soil.

Existing soils must meet all definitions of "Topsoil" as described above in all planting areas throughout the site. If existing soils do not meet all definitions of Topsoil, please refer to the "Landscape Area Preparation" detail. Examination may require existing soils to be tested by an accredited testing laboratory. Should a soil test be necessary, Contractor shall contact soil testing lab directly to confirm such lab's soil collection and transmittal protocol; all costs if any shall be borne by the Contractor. Contractor shall provide to Landscape Architect for review the results of the soil test if conducted. Contractor shall schedule an on-site meeting with Landscape Architect to review existing and/or imported soils prior to planting. The Landscape Area Preparation is the responsibility of the Landscape Contractor. He/she shall except all responsibility of planting soils and shall honor all guarantee items in section 1.08

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state and local fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected

B Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tabletized fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tabletized fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container 1 tablet
3 gallon container 2 tablets
5 gallon container 3 tablets
7 gallon container 5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material. The Landscape Architect reserves the right to inspect and review the application of fertilizer

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs. keep 6" away from tree & palm trunks or as required by local jurisdiction.

PART 3 EXECUTION

3.01 DIGGING:
A The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others

B It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified

3.03 PLANTING:
A Planting shall take place during favorable weather conditions

B The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them

C Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the landscape plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams"

E A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Details for complete testing methods and requirements

F. Planting pits shall be excavated to the following dimensions and backfilled with Topsoil- see Landscape Area Preparation Detail:
1 Gallon material (1 gal): 12" x 12" x 12" min
3 Gallon material (3 gal): 20" x 20" x 18" min
Lerio material (7 gal): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be initiated until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc. and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep

H Each plant shall be planted in an individual hole as specified for trees, shrubs, and vines.

I All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future watering's. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner

3.04 PRUNING:
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted

C. Trees shall not be poled or topped.

D. Remove all trimming from site.

3.05 GUYING:
A All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail

B. Wires shall not come in direct contact with the tree but shall be severed with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

C. Stake & Brace all trees larger than 12' oa. See detail. Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

D Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER:
A Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect

B Prior to installing any irrigation system components, the contractor shall obtain a water sample from the proposed water supply and conduct a particle size and count analysis on the sample using the services of a reputable lab certified in such analysis. Submit the test results to the owner/owner's representative for review and approval. Do not proceed further with system installation until given written approval to do so.

3.07 SOD:
A The Landscape Contractor shall sod all areas indicated on the drawings

B It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface

G The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs, walks, paving and wood borders to allow for building turf

H If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application: Argentine Bahia Grass seed- 300 Pounds per acre mixed with common hulled Bermuda seed- 30 lbs per acre. All other seed mixtures shall be applied per the manufacturer's instructions

C Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre

D Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP:
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and/or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly

C Replacement of plants during the maintenance period shall be the responsibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

E All trees & shrubs shall be straight and in correct position per the landscape plans, details and specifications. All nursery, shipping and identification tags & ribbons shall be removed from trees & shrubs immediately after planting

MARTIN COUNTY ENGINEERING
2401 SE MONTEREY ROAD
STUART, FLORIDA 34996
PHONE: (772) 288-5927
FAX: (772) 288-5955

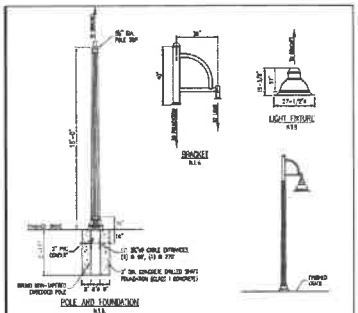
DESIGNED BY: BW	DATE: 07/13/2016
DWN BY: BW / CKD BY: PO	SOIL MATERIAL
SUBMITTED BY: BW	CONTRACT NO. 2017-2071
SCALE: 1" = 20' / PLOT DATE: 07/13/2016	FILE NUMBER: 16-022
SIZE: 24X36	FILE NAME

NE SAVANNAH ROAD AT COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA
Landscape Specifications

lucido & associates

REG. # 1018
Thomas P. Lucido

SHEET IDENTIFICATION
LA-3
SHEET 3 OF 3



NOTES:

1. WIRING SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD plans INDEX 715-001, LATEST EDITION.
2. POLE: AMERICAN LIGHT POLES, INC. PA35-SCI35-4-1 BURNS INCL. 4" DIA. X 8' LONG WITH ACRYLIC ANTI-GRAFFITI COATING OR APPROVED EQUAL. COLOR OF POLE SHALL BE SANDSTONE.
3. FIXTURE: LUMEC CO. CAT. #RVD2S-R08-HCTD-3K-H-UL3-240-GRAY OR APPROVED EQUAL.
4. BRACKET: LUMEC CO. CAT. #RVD2S-14-MCTB OR APPROVED EQUAL.
5. [illegible] 16' POLE DIRECTLY EMBEDDED APPROX. 6.61 CY EA
6. POLES SHALL NOT HAVE OUTLETS OR BARRIER ARMS.

MARTIN COUNTY PUBLIC WORKS - STANDARD DETAILS

STREET LIGHT

DETAIL R-130

DATE: 04/23/18

ELECTRICAL GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE DRAWINGS. WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER THE CONTRACTOR SHALL NOTIFY THE A/E IMMEDIATELY IN WRITTEN FORM. CONTRACTOR SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL A WRITTEN DIRECTIVE HAS BEEN RECEIVED. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES WHEREIN THE CODE SHALL GOVERN.

2. THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION, METHODS, MATERIALS AND EQUIPMENT, OR EXACT LOCATIONS, ROUTING, ETC. THEY INDICATE THE RESULT TO BE ACHIEVED BY THE ASSEMBLAGE OF SEVERAL DEVICES FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. DO NOT SCALE THE CONTRACT DOCUMENTS. COORDINATE EXACT EQUIPMENT LOCATIONS WITH THE ARCHITECTURAL PORTIONS OF THE CONTRACT DOCUMENTS, AS WELL AS FIELD CONDITIONS, APPROVED SHOP DRAWINGS, AND WORK OF ALL OTHER DIVISIONS/TRADES.

3. THE TERM "PROVIDE" USED IN THE CONTRACT DOCUMENTS INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS, INCLUDING ALL COSTS FOR SHIPPING, UNLOADING, STORAGE, UNPACKING, ERECTION, MACHINING, ETC. REQUIRED FOR CORRECT INSTALLATION OF A COMPLETE SYSTEM, UNLESS SPECIFICALLY NOTED OTHERWISE.

4. UNLESS NOTED AS EXISTING, ALL ELECTRICAL INDICATED IN THE CONTRACT DOCUMENTS SHALL BE NEW. EQUIPMENT SHALL BE INSTALLED AND USED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING.

5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), ALL APPLICABLE LOCAL CODES, ORDINANCES AND ALL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION (AHJ), AS A MINIMUM.

6. THE CONTRACTOR SHALL CARRY ALL INSURANCE REQUIRED TO PROTECT AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THIS PROJECT.

7. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP ARE FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE A/E AND OWNER. THE CONTRACTOR, AT NO ADDITIONAL COSTS, SHALL PROVIDE THE CORRECTION OF ANY DEFECTS INCLUDING REPAIR OR REPLACEMENT.

8. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. EXTRA CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE REASONABLY BEEN DISCERNED BY THE CONTRACTOR WILL NOT BE RECOGNIZED.

9. THE CONTRACTOR SHALL COORDINATE ALL PROJECT SCHEDULING REQUIREMENTS WITH A/E AND OWNER PRIOR TO SUBMITTING PROPOSAL. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE CONTRACTOR'S PROPOSAL. THE CONTRACTOR SHALL PROVIDE ADEQUATE WORK FORCE, EQUIPMENT, AND SHALL WORK SUCH HOURS INCLUDING PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, THE CONTRACTOR SHALL ENSURE THAT LONG-LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING.

10. ALL TEMPORARY BORROWING REQUIRED FOR SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED BY THE OWNER AND SCHEDULED IN ADVANCE.

11. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS AND GUIDELINES CONCERNING REMOVAL, HANDLING, DISPOSAL, AND PROTECTION AGAINST ENVIRONMENTAL EXPOSURE OR POLLUTION. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF SAID COMPLIANCE.

12. CONDUCT WORK OPERATIONS AND BEGINS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMAL BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. OVERSEE IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL WAS IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. ANY DAMAGE TO SURROUNDING ELEMENTS RESULTING FROM THE CONTRACTOR'S FAILURE TO ADHERE TO THIS REQUIREMENT SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR, TO THE SATISFACTION OF THE A/E AND OWNER, AT NO ADDITIONAL COSTS. REPORT ANY SUCH OCCURRENCE TO THE A/E AND OWNER IMMEDIATELY AND ABIDE WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.

13. CONTRACTOR SHALL MAINTAIN A CURRENT ACCURATE SET OF PROJECT RECORD DOCUMENTS (AS-BUILTS) AT THE SITE THROUGHOUT THE DURATION OF THIS PROJECT. RECORD DRAWINGS SHALL BE UPDATED EACH DAY TO REFLECT THE ACTUAL LOCATIONS, SIZES, ROUTING, ETC. OF EACH PORTION OF THE ELECTRICAL SYSTEM AFFECTED BY THIS WORK. A FINAL SET OF RECORD DOCUMENTS SHALL BE ISSUED TO THE A/E FOR REVIEW AND THEN SUBMITTED TO THE OWNER AT THE CONCLUSION OF THE PROJECT.

14. IN GENERAL, VOLTAGE DROP FOR ANY BRANCH CIRCUIT SHALL NOT EXCEED 3%. VOLTAGE DROP FOR ANY FEEDER SHALL NOT EXCEED 2%. WHERE VOLTAGE DROP EXCEEDS THESE REQUIREMENTS, THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONDUCTORS AND RACEWAY AS REQUIRED.

15. ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OR INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE WATERPROOF TYPE NEMA 3R (UNLESS), WHETHER INDICATED ON CONTRACT DOCUMENTS OR NOT.

16. THE USE OF ALUMINUM CONDUCTORS, RACEWAYS, BOXES, BUSSING, WIRINGS, ETC. ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE.

17. FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E AND OWNER GRANTS WRITTEN PERMISSION.

18. PROVIDE TYPED PANEL DIRECTORIES FOR ALL PANELBOARDS.

19. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE.

20. PROVIDE FIELD WARNING WARNING PERSONNEL OF POTENTIAL ARC FLASH HAZARDS IN ACCORDANCE WITH NEC 110.

ELECTRICAL SHEET INDEX

E0.1	ELECTRICAL NOTES & DETAILS
E1.1	ELECTRICAL SITE PLAN - PHOTOMETRIC VALUES
E1.2	ELECTRICAL SITE PLAN

PERMIT SET
07/17/19

TO THE BEST OF MY KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE, ALL AMENDMENTS AND SECTION 633 OF THE FLORIDA STATUTES.

Beacon Consulting Engineers
833 Cook Lake Blvd., Suite 106
Boynton Beach, FL 33435
561 424 1270
Mechanical / Plumbing / Electrical / Fire-Protection
Consulting Engineering

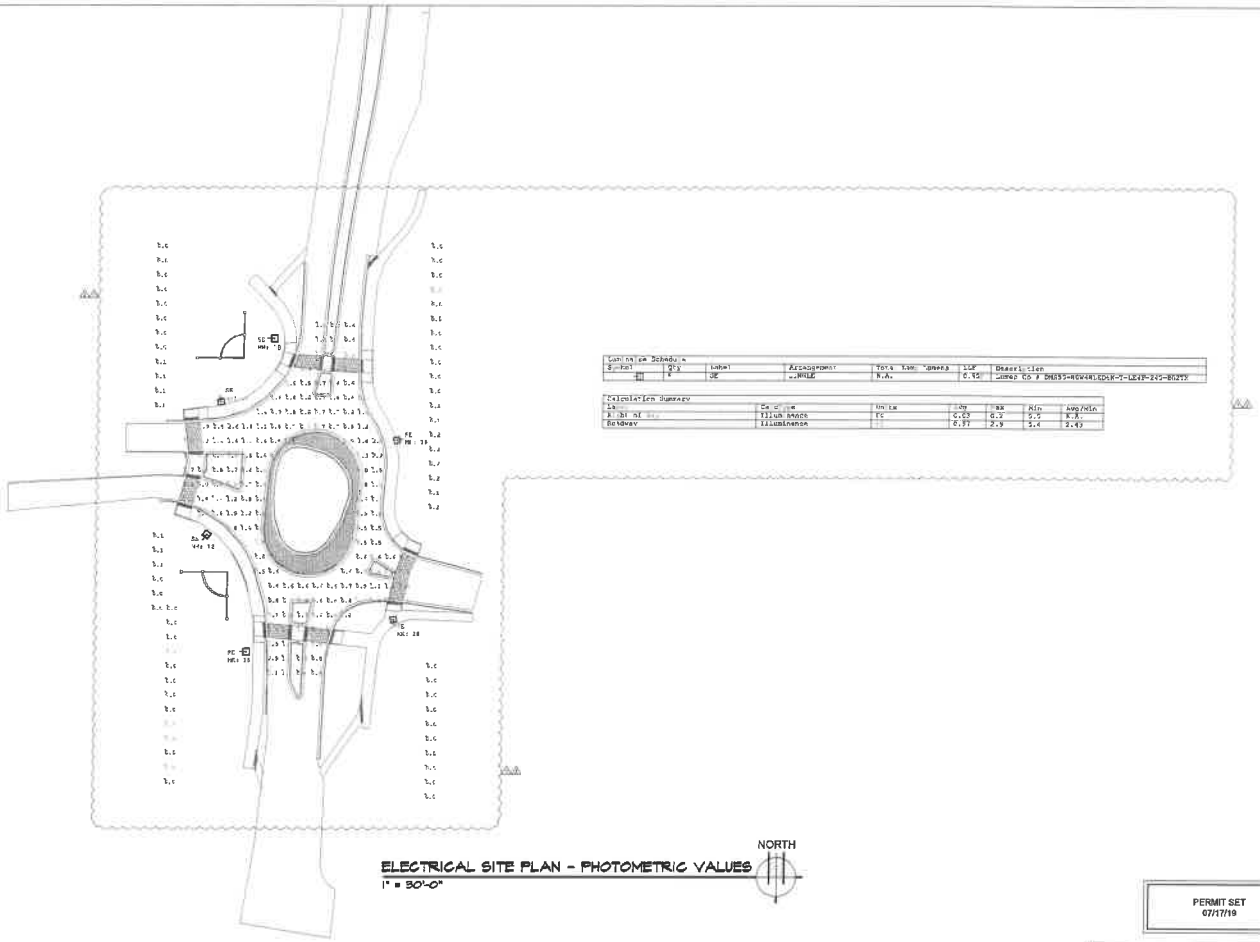
NE SAVANNAH ROAD AT COY SENDA ROUNDABOUT
MARTIN COUNTY, FLORIDA

SEAL

Jonathan M. Vaencourts P.E.
Florida Reg. No. 62287

PROJECT NO. 2018-26
ISSUE DATE 07/17/19
FILE NO.
DRAWN BY MJC/JMV
REVISIONS
1 BLDG. DEPT. SUBMITTAL 11/21/18
2 BLDG. DEPT. SUBMITTAL 06/06/19

E0.1



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	8	SE	SINGLE	N.A.	0.95	LUMEC CS 9 SMS59-MDWAMLEDUK-T-LE49-240-BRZ2

Calculation Summary						
Label	Calculation Type	Units	Avg	Max	Min	Avg/Min
Roadway Illuminance	Illum Grade	FC	0.03	0.2	0.0	N.A.
	Illuminance	FC	0.97	2.9	0.4	2.43

NORTH

ELECTRICAL SITE PLAN - PHOTOMETRIC VALUES

1" = 30'-0"

PERMIT SET
07/17/19

TO THE BEST OF MY KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE, ALL AMENDMENTS AND SECTION 633 OF THE FLORIDA STATUTES.

Beacon Consulting Engineers
815 Cass Lyons Blvd., Suite 106
Boynton Beach, FL 33435
561 425-3270
Mechanical · Plumbing · Electrical · Fire-Protection
Consulting Engineering

NE SAVANNAH ROAD AT COY SENDA
ROUNDABOUT
MARTIN COUNTY, FLORIDA

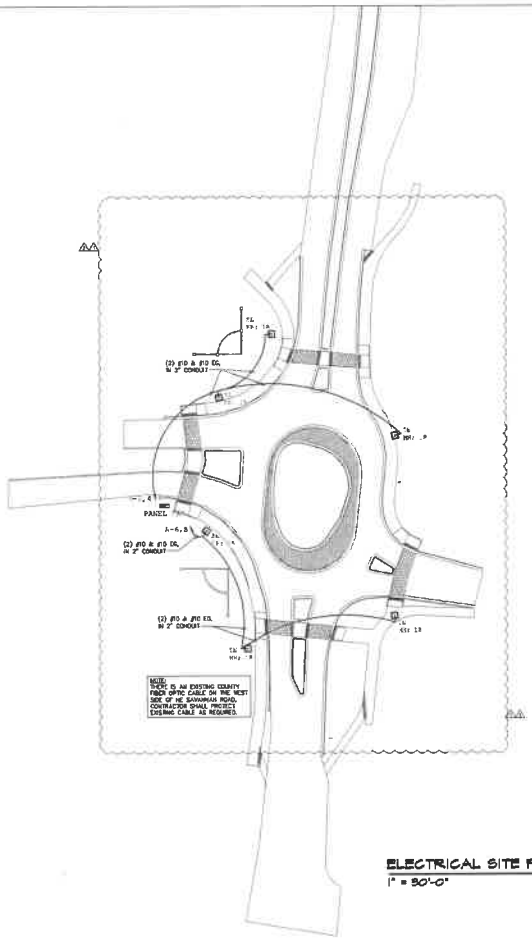
SEAL

Spencer M. Malczewski P.E.
Florida Reg. No. 66363

PROJECT NO: 18-015
ISSUE DATE: 07/17/19
FILE NAME:
DRAWN By: DA/JAV

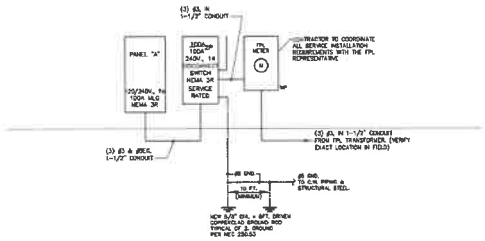
REVISIONS
1 SUB. DEPT. COMMENTS 11/15/18
2 SUB. DEPT. COMMENTS 06/05/19

E1.1



ELECTRICAL SITE PLAN

1" = 50'-0"



ELECTRICAL RISER DIAGRAM

SCALE: NONE

CONTRACTOR SHALL VERIFY ACTUAL TRANSFORMER SECONDARY FAULT CURRENT WITH FPL REPRESENTATIVE AND PROVIDE INFORMATION TO ARCHITECT/ENGINEER.

A.I.C. RATING 22,000
TYPE SQUARE D MDDD
MOUNTING SURFACE - NEMA 3R

FED FROM SERVICE DISCONNECT SWITCH
PANEL "A"

MAINS 100A M.L.O.
BUS RATING 100A
VOLTAGE 120/240V 1Ø, 3W

DESCRIPTION	WIRE	GND	CONDUIT	CB	CKT.	PHASE A	PHASE B	CKT.	CB	CONDUIT	GND.	WIRE	DESCRIPTION
SITE LIGHTS - ROUNDABOUT *	#8	#8		20	1			2	-	-	-	-	SPACE
					3			4	-	-	-	-	SPACE
SITE LIGHTS - ROUNDABOUT *	#8	#8		20	5			6	-	-	-	-	SPACE
SPACE	-	-	-	-	7			8	-	-	-	-	SPACE
SPACE	-	-	-	-	9			10	15	-	-	-	SPACE
SPACE	-	-	-	-	11			12	-	-	-	-	SPACE
SPACE	-	-	-	-	13			14	-	-	-	-	SPACE
SPACE	-	-	-	-	15			16	-	-	-	-	SPACE
SPACE	-	-	-	-	17			18	-	-	-	-	SPACE
SPACE	-	-	-	-	19			20	-	-	-	-	SPACE
SPACE	-	-	-	-	21			22	-	-	-	-	SPACE
SPACE	-	-	-	-	23			24	-	-	-	-	SPACE
					SUBTOTAL	0.0	0.0	0.0	0.0				
					TOTAL LOAD / PHASE	0.0	0.0	0.0	0.0				

SUB-TOTAL: - 0.0 KW
TOTAL: - 0.0 AMPS

* - INDICATES SWITCHED VIA PHOTOCELL CONTROL

LOCATION SHALL BE FINALIZED AT A LATER TIME.

PERMIT SET
07/17/19

TO THE BEST OF MY KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE, ALL AMENDMENTS AND SECTION 633 OF THE FLORIDA STATUTES.

Beacon Consulting Engineers
625 Clare Lane Blvd., Suite 108
Boynton Beach, FL 33435
561-424-3270
Mechanical /Plumbing/ Electrical /Fire-Protection
Consulting Engineering

NE SAVANNAH ROAD AT COY SENDA
ROUNDABOUT
MARTIN COUNTY, FLORIDA

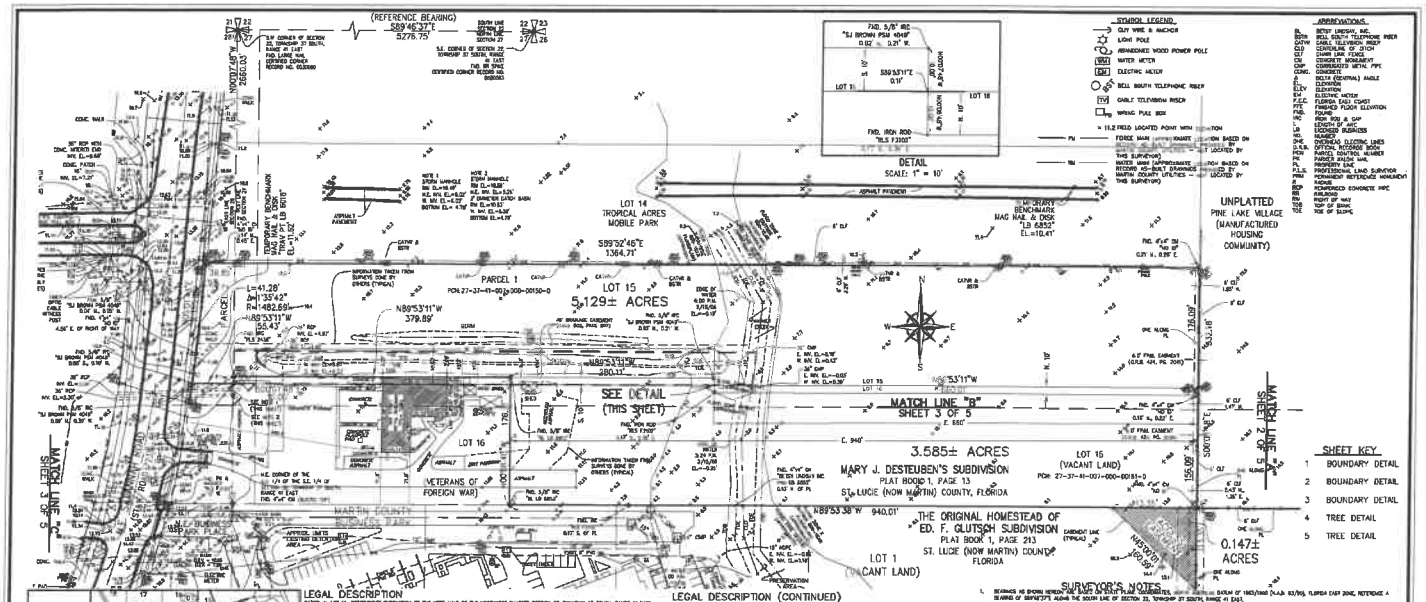
NOTE:

Steven M. Valente of P.E.
Florida Reg. No. 62157

PROJECT NO. 18-103
ISSUE DATE 07/17/19
FILE No.
DRAWN By
REVIEW By Rob/JAY

REVISIONS
1 SUB. SITE COMMENTS 11/01/19
2 SUB. SITE COMMENTS 01/06/20

E1.2



LEGAL DESCRIPTION

PARCEL 1: LOT 15, DESTEUBEN'S SUBDIVISION OF THE WEST HALF OF THE NORTHWEST QUARTER SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, AS RECORDED IN PLAT BOOK 1, PAGE 13, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. ALSO DESCRIBED AS THE NORTH FIVE (5) ACRES OF THE SOUTH TEN (10) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, LESS THE SOUTH 10 FEET OF THE WESTERLY 660 FEET OF SAID LOT 15. TOGETHER WITH THE NORTH TEN (10) FEET OF THE EASTERLY 660 FEET OF LOT 16, DESTEUBEN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 13, ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS, AND LOT 16 ALSO BEING DESCRIBED AS THE SOUTH FIVE (5) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA.

PARCEL 2: PARCEL OF LAND LYING IN THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, BEING BOUNDED ON THE WEST BY THE EASTERLY LINE OF LOT 16, DESTEUBEN'S SUBDIVISION, AS RECORDED IN PLAT BOOK 1, PAGE 13, ON THE NORTH BY THE SOUTHERLY LINE OF LOT 15 OF DESTEUBEN'S SUBDIVISION, ON THE EAST BY THE EASTERLY LINE OF SAID SECTION 28, AND ON THE SOUTH BY THE WESTERLY EXTENSION OF THE SOUTH LINE OF SAID LOT 15 OF DESTEUBEN'S SUBDIVISION. LOT 15 OF DESTEUBEN'S SUBDIVISION IS ALSO DESCRIBED AS THE NORTH FIVE (5) ACRES OF THE SOUTH TEN (10) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST.

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

CONTAINING 223,455 SQUARE FEET, OR 5.129 ACRES MORE OR LESS. PCN: 27-37-41-00-00-000-00130-0

AND TOGETHER WITH

THE EAST ONE HUNDRED FIFTY (150) FEET OF THE FOLLOWING DESCRIBED PARCEL:

THE SOUTH FIVE (5) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS LOT 16, DESTEUBEN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 13, ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA PUBLIC RECORDS, LESS HOWEVER, THE NORTH TEN (10) FEET OF THE EASTERLY 510 HUNDRED SIXTY (560) FEET THEREOF.

TOGETHER WITH THE SOUTH TEN (10) FEET OF THE EASTERLY 510 HUNDRED SIXTY (560) FEET OF THE LOT 15, BEING PARALLEL WITH THE SOUTH LINE OF LOT 15 OF SAID DESTEUBEN'S SUBDIVISION, SAID STRIP OF LAND BEING TEN (10) FEET WIDE AND 510 HUNDRED SIXTY (560) FEET IN DEPTH ON THE FRONT PORTION OF SAID LOT 15.

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

CONTAINING 68,182 SQUARE FEET, OR 3.585 ACRES MORE OR LESS. PCN: 27-37-41-00-00-000-00131-0

LEGAL DESCRIPTION (CONTINUED)

AND TOGETHER WITH

ALL THAT PART OF LOTS 3 THRU 8, INCLUSIVE, OF J.E. CLEVELAND'S SUBDIVISION OF FRACTIONAL LOTS 3 & 4, SECTION 22, TOWNSHIP 37 SOUTH, RANGE 41 EAST LYING NORTHERLY OF THE F.E.C. RIGHT-OF-WAY, AS SUBDIVIDED MARCH 31, 1924 IN PLAT BOOK 1, PAGE 2-3 PUBLIC RECORDS OF ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA.

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

CONTAINING 651,704 SQUARE FEET, OR 14.960 ACRES MORE OR LESS. PCN: 27-37-41-000-000-00010-8

CONTAINING A TOTAL OF 1,002,291 SQUARE FEET, OR 23.009 ACRES MORE OR LESS.

AND TOGETHER WITH

AN ACCESS EASEMENT BEING A PORTION OF LOT 1 OF THE ORIGINAL HOMESTEAD OF ED. F. GLUTSCH SUBDIVISION, AS RECORDED IN PLAT BOOK 1 AT PAGE 213, PUBLIC RECORDS OF ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE S89°53'37"E ALONG THE EAST LINE OF SAID LOT 1, A DISTANCE OF 113.35 FEET; THENCE S01°07'16"E, A DISTANCE OF 160.04 FEET TO A POINT ON NORTH LINE OF SAID LOT 1; THENCE N89°53'38"W, ALONG SAID NORTH LINE, A DISTANCE OF 113.33 FEET TO THE NORTHWEST CORNER OF SAID LOT 1, AND THE POINT OF BEGINNING.

CONTAINING 18,131 SQUARE FEET OR 0.417 ACRES, MORE OR LESS.

SAID EASEMENT BEING SUBJECT TO ANY ALL EASEMENTS, RESERVATIONS, DEDICATIONS OR RESTRICTIONS.

SURVEYOR'S NOTES

1. BEARINGS AS SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES, EAST ZONE, NORTH AMERICAN DATUM OF 1983/1990 (N.A.D. 83/90). FLORIDA EAST ZONE. REFERENCE A BEARING OF S89°46'37"E ALONG THE SOUTH LINE OF SECTION 22, TOWNSHIP 37 SOUTH, RANGE 41 EAST.
2. ELEVATIONS AS SHOWN HEREON REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). REFERENCE MARTIN COUNTY BENCHMARK "SAW-3", ELEVATION = 10.24 FEET (NAVD 88) AND "D-36", ELEVATION = 8.07 FEET (NGVD 29) CONVERTED TO NAVD 88 BY BENCHMARK LOC.
3. THIS SURVEY WAS DONE WITH THE BENEFIT OF A TITLE COMMITMENT PREPARED BY ATTORNEYS' TITLE INSURANCE FUND, INC., REFERENCE FUND FILE NO. 43-3055-46694, EFFECTIVE DATE NOVEMBER 2, 2005.
4. THIS SURVEY IS BASED ON A CLOSED GEOMETRIC FIGURE EXHIBITING A HORIZONTAL CLOSURE OF 1:10,000.
5. THERE WAS NO ATTEMPT TO LOCATE ANY SUBSURFACE FOUNDATIONS.
6. NO UNDERGROUND UTILITIES WERE LOCATED OR SHOWN HEREON.
7. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR.
8. THE PROPERTY IS LOCATED IN FEDERAL FLOOD ZONE AE (C130) and (X) (X, FEDERAL FLOOD ZONE X DESIGNATES AREAS OUTSIDE 500-YEAR FLOODPLAIN AND ZONE X (SHADED) DESIGNATES AREAS WITHIN THE 500-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD), REFERENCE FEMA MAP COMMUNITY NO. 120161, PANEL 0461, SUFFIX G, EFFECTIVE DATE MARCH 18, 2010.
9. ALL SURVEY DATA RELATING TO EXISTING FEATURES LOCATED WITHIN THE SITE ILLUSTRATED IN A LIGHTER SHADE WERE TAKEN FROM SURVEYS DONE BY OTHERS. NO INTERNAL IMPROVEMENTS WERE LOCATED BY THIS SURVEY.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE "BOUNDARY SURVEY" AS SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A FIELD SURVEY MADE UNDER MY DIRECTION AND CHARGE ON OCTOBER 13, 2005 AND LAST UPDATED ON AUGUST 16, 2010 AND SAID "BOUNDARY SURVEY" IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. IT IS FURTHER CERTIFIED THAT THIS "BOUNDARY SURVEY" COMPLIES WITH THE MINIMUM STANDARDS, ESTABLISHED FOR "BOUNDARY SURVEY" AS ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING

ELIZABETH A. LINDSAY P.S.M.
FLORIDA REGISTRATION NO. 5724

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

SHEET NO.	1
OF	5 SHEETS
PROJECT NO.	05-80 C

DATE	REVISIONS
10/18/2005	ADD BOUNDARY DATA
11/14/2005	ADD EASEMENTS & TITLE DATA
01/17/2006	REVISE DRAFTING OF NO DRAINAGE EASE.
02/02/2006	ADD TOPOGRAPHICAL DATA
03/16/2006	
06/22/2006	ADD TOPOGRAPHICAL DATA/FIRST BOUNDARY
08/22/2007	
08/28/2007	ADD TREE DATA/FIRST BOUNDARY
09/04/2007	ADD TOPOGRAPHICAL BOUNDARY
03/18/2010	ADD METES AND BOUNDS
08/16/2010	ADD TOPOGRAPHICAL BOUNDARY

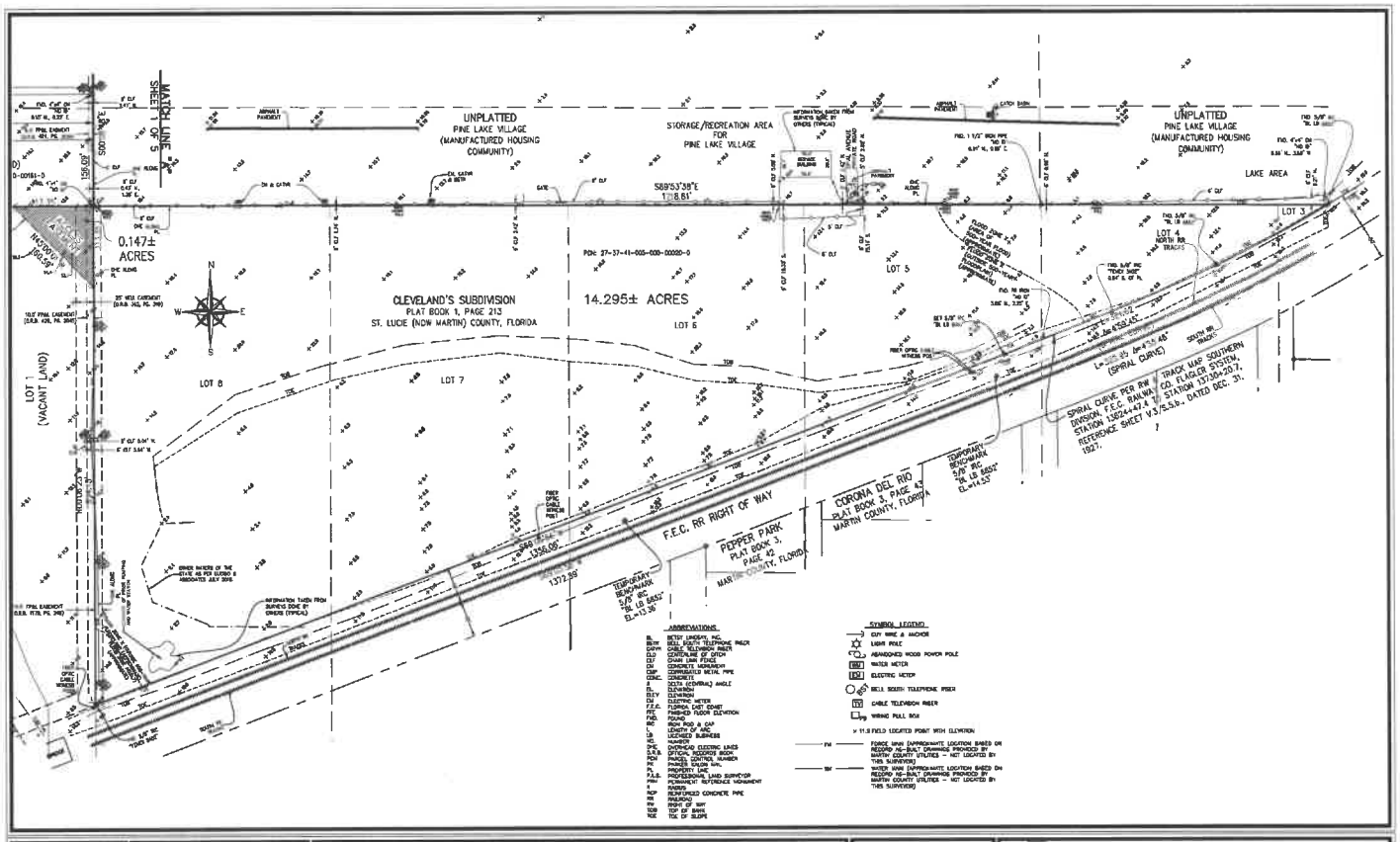
LOT 15 & A PORTION OF LOT 16, MARY J. DESTEUBEN'S SUBDIVISION & LOTS 3-8, CLEVELAND'S SUBDIVISION – MARTIN COUNTY, FLORIDA

BOUNDARY SURVEY

RICH PROPERTIES, FL

DATE	10/13/2005
SCALE	1"=60'
FIELD BK.	JB 2
DRAWN BY	D.B.
CHECKED BY	E.A.L.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING
7997 S.W. JACK JAMES DRIVE STUART, FLORIDA 34997
(772)286-5753 (772)286-5833 FAX
LICENSED BUSINESS NO. 6852



SHEET NO. 2
OF 5 SHEETS
PROJECT NO. 05-80 C

DATE	REVISIONS
	ADD LANDOWNER & TITLE DATA
	REVISE PROLINE OF NO DRAINAGE EASE. ADD TOPOGRAPHICAL DATA
	ADD TOPOGRAPHICAL DATA/EDIT BOUNDARY
	ADD DATA SHEET 2
	ADD DATA SHEET 3
	ADD DATA SHEET 4
	ADD DATA SHEET 5

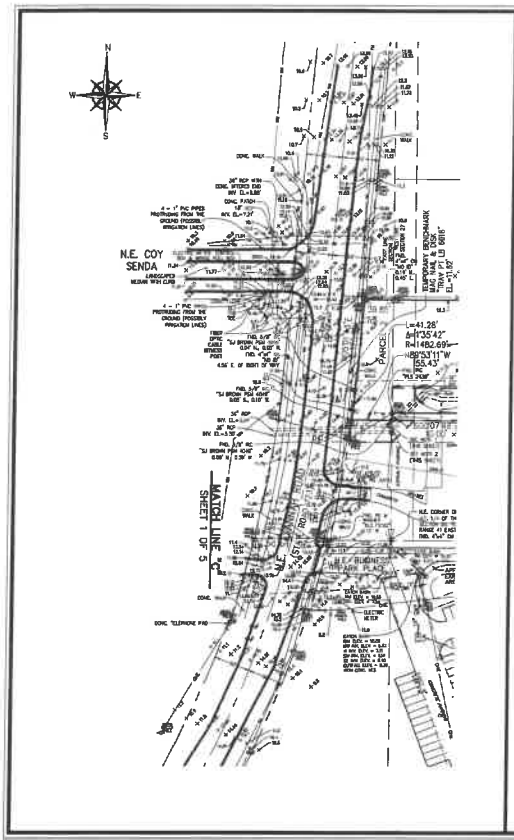
LOT 15 & A PORTION OF LOT 16, MARY J. DESTEUBEN'S SUBDIVISION & LOTS 3-8, CLEVLAND'S SUBDIVISION -- MARTIN COUNTY, FLORIDA

BOUNDARY SURVEY

RICH PROPERTIES, FL

DATE 02/03/2006
SCALE 1"=60'
FIELD BK. JB 2
DRAWN BY R.S.
CHECKED BY E.A.L.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING
7997 S.W. JACK JAMES DRIVE STUART, FLORIDA 34997
(772)286-5753 (772)286-5933 FAX
LICENSED BUSINESS NO. 6852

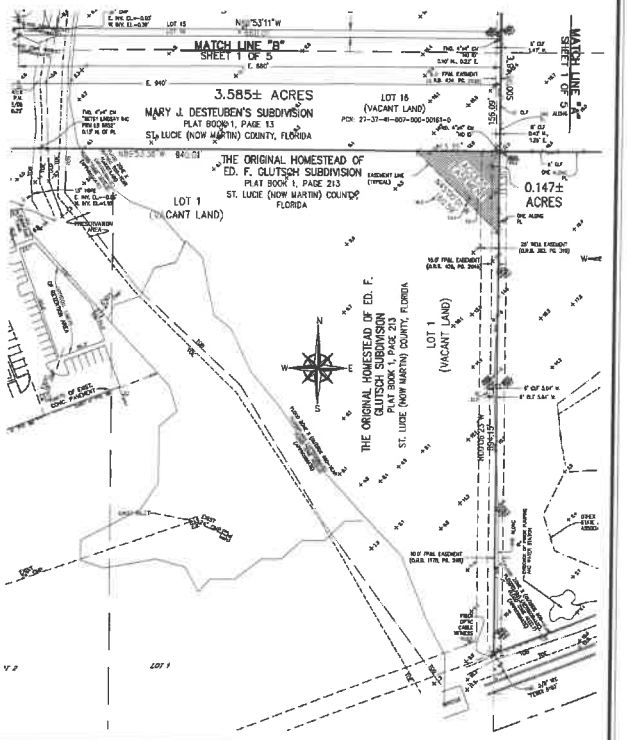


ABBREVIATIONS

BL	BETSY LINDSAY, INC.
BSTS	BELL SOUTH TELEPHONE RISER
CATV	CABLE TELEVISION RISER
CLD	CENTERLINE DITCH
CO	CLEAN OUT PIPE
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
Δ	DELTA (CENTRAL) ANGLE
D	DEGREE
ELEV	ELEVATION
EM	ELECTRIC METER
F.E.C.	FLORIDA EAST COAST
FFE	FINISHED FLOOR ELEVATION
FND	FOUND
BFC	BACK FACE OF CURB
IP	IRON PIPE
LB	LICENSED BUSINESS
NO.	NUMBER
OHW	OVERHEAD ELECTRIC LINES
O.R.B.	OFFICIAL RECORDS BOOK
P.B.	PLAT BOOK / PAGE NUMBER
PCP	PARKER KALON NAIL
PL	PROPERTY LINE
P.L.S.	PROFESSIONAL LAND SURVEYOR
PRM	PERMANENT REFERENCE MONUMENT
RGE	RANGE
RCP	REINFORCED CONCRETE PIPE
RW	RAILROAD
R/W	RIGHT OF WAY
TOB	TOP OF BANK
TOE	TOE OF SLOPE

SYMBOL LEGEND

- GUY WIRE & ANCHOR
- LIGHT POLE
- ABANDONED WOOD POWER POLE
- WM WATER METER
- EM ELECTRIC METER
- BELL SOUTH TELEPHONE RISER
- TV CABLE TELEVISION RISER
- WRING PULL BOX
- × 11.2 FIELD LOCATED POINT WITH ELEVATION
- FM FORCE MAIN (APPROXIMATE LOCATION BASED ON RECORD AS-BUILT DRAWINGS PROVIDED BY MARTIN COUNTY UTILITIES – NOT LOCATED BY THIS SURVEYOR)
- WM WATER MAIN (APPROXIMATE LOCATION BASED ON RECORD AS-BUILT DRAWINGS PROVIDED BY MARTIN COUNTY UTILITIES – NOT LOCATED BY THIS SURVEYOR)



SHEET NO. 3	DATE	REVISIONS
OF 5 SHEETS	11/08/2005	ADD PROPERTY DATA
PROJECT NO.	11/10/2005	ADD EASEMENTS & TITLE DATA
05-80 C	02/01/2006	REVISE GRAPHS OF 10' DRAINAGE EASE.
	02/13/2006	ADD TOPOGRAPHICAL DATA

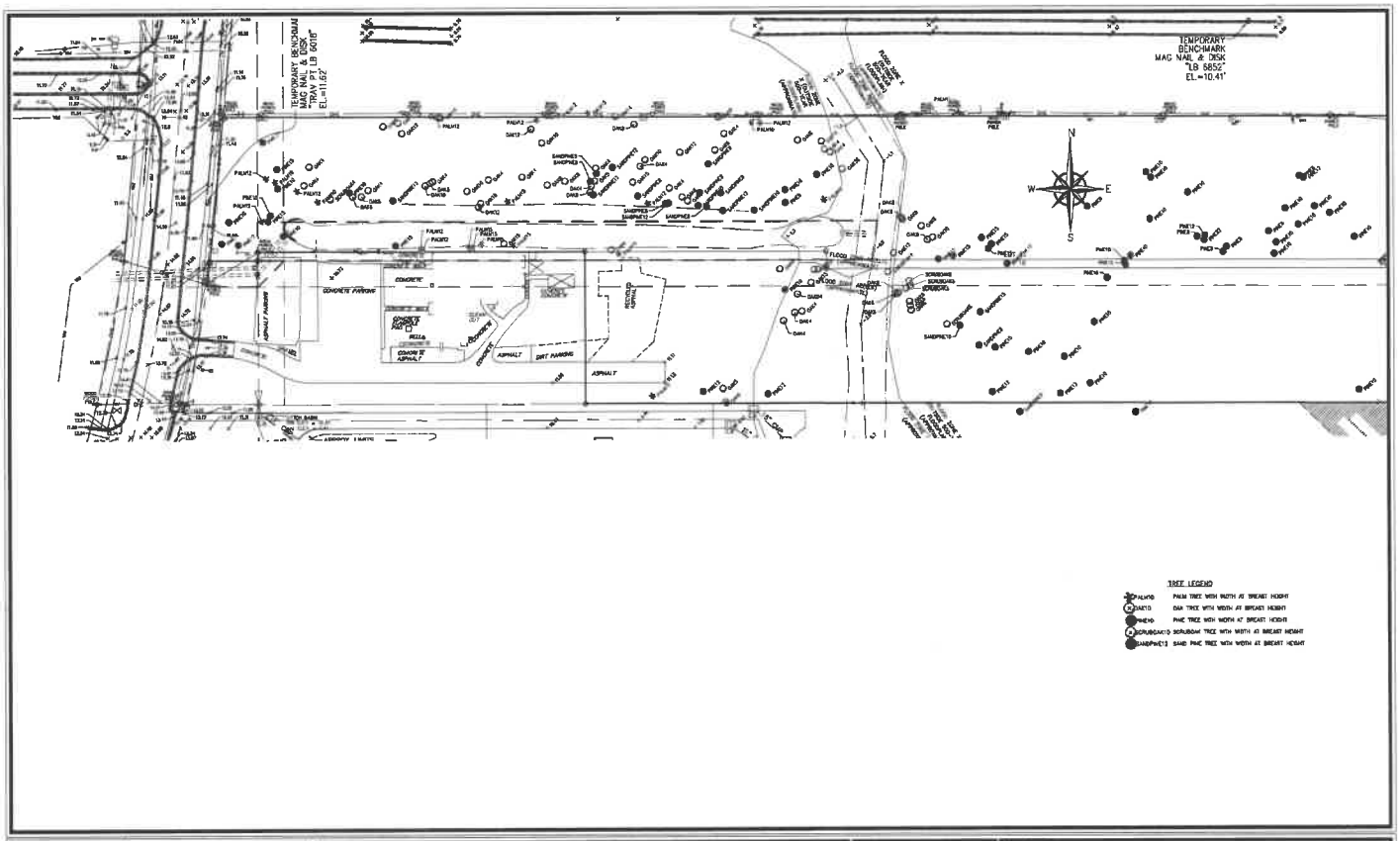
LOT 15 & A PORTION OF LOT 16, MARY J. DESTEUBEN'S SUBDIVISION & LOTS 3–8, CLEVLAND'S SUBDIVISION – MARTIN COUNTY, FLORIDA

BOUNDARY SURVEY

RICH PROPERTIES, FL

DATE 02/03/2006
SCALE 1"=60'
FIELD BK. JB 2
DRAWN BY R.S.
CHECKED BY E.A.L.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING
7967 S.W. JACK JAMES DRIVE STUART, FLORIDA 34997
(772)285-5753 (772)286-5933 FAX
LICENSED BUSINESS NO. 6852



SHEET NO. 4

OF 5 SHEETS

PROJECT NO 05-80 C

DATE	REVISIONS
10/13/2005	ADD PROPERTY DATA
11/15/2005	ADD LEGAL DESCRIPTION & TITLE DATA
01/17/2006	REVISE ORB/PB OF 15' DRAINAGE EASE.
02/22/2006	ADD SUPERVISOR, INC.
03/13/2006	ADD TOPOGRAPHICAL DATA/EXIST BOUNDARY
05/15/2007	
06/08/2007	ADD TREE DATA/UPDATE BOUNDARY
07/16/2007	ADD TREE DATA/UPDATE BOUNDARY
12/04/2007	ADD REVISED DATA
08/14/2008	ADD TEMPORARY BENCHMARK

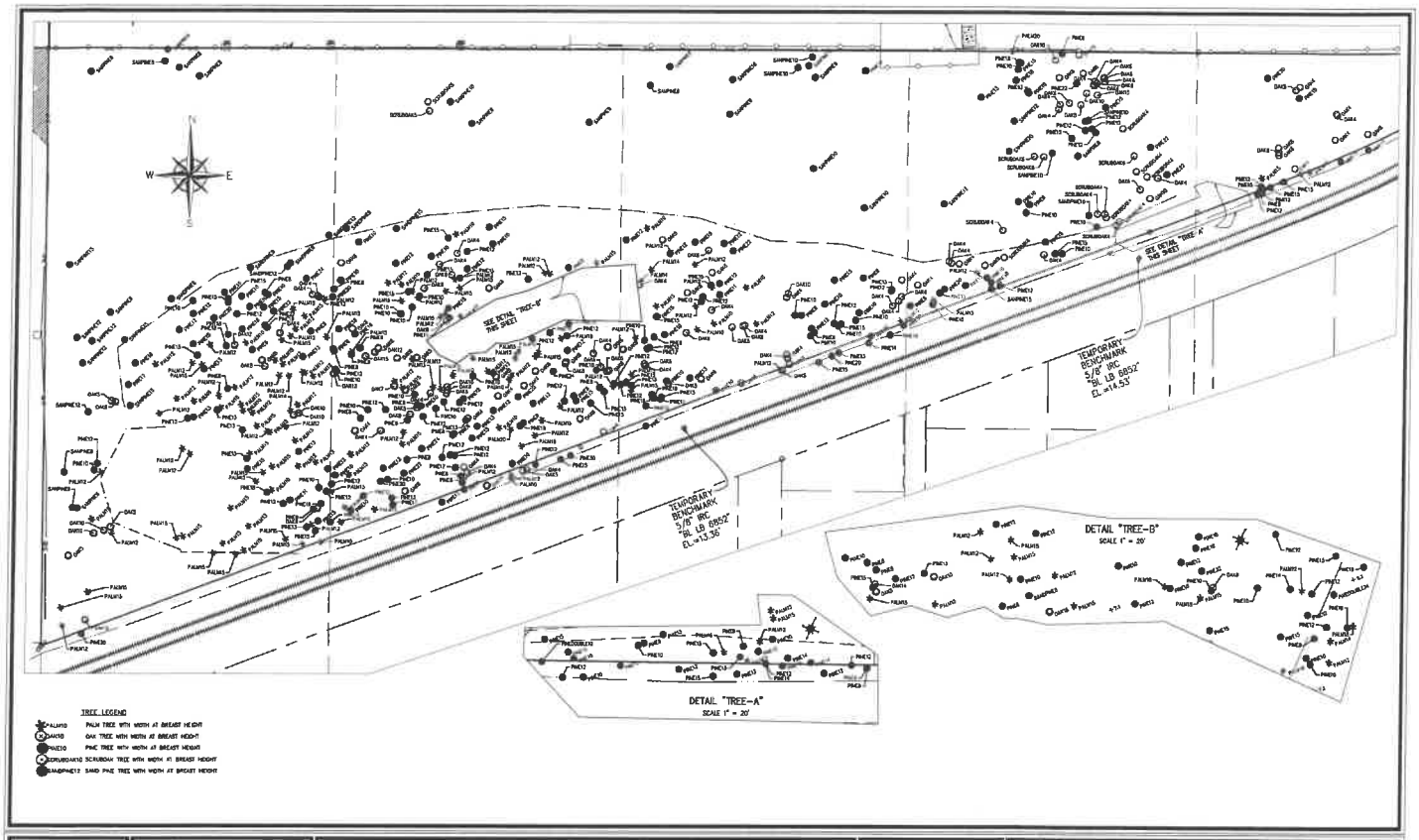
LOT 15 & A PORTION OF LOT 16, MARY J. DESTEUBEN'S SUBDIVISION & LOTS 3-8, CLEVLAND'S SUBDIVISION - MARTIN COUNTY, FLORIDA

BOUNDARY SURVEY-TREE DETAIL

RICH PROPERTIES, FL

DATE 10/13/2005
SCALE 1"=50'
FIELD BK. NB 8
DRAWN BY C.R.
CHECKED BY C.A.L.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING
7997 S.W. JACK JAMES DRIVE STUART, FLORIDA 34997
(772)286-5753 (772)288-5933 FAX
LICENSED BUSINESS NO. 6852



SHEET NO. 5	DATE	REVISIONS
OF 5 SHEETS	11/06/2000	ADD PROPOSED BLDG.
PROJECT NO.	8/17/2004	ADD EASEMENTS & TITLE DATA
05-80 C	10/13/2005	REVISE PROPOSED FIT DRAINAGE CANL
	10/13/2005	ADD TOPOGRAPHICAL DATA
	06/15/2011	ADD TOPOGRAPHICAL DATA/EDIT BOUNDARY
	06/28/2011	ADD TREE DATA/UPDATE BOUNDARY
	12/8/2011	ADD TOPOGRAPHICAL BOUNDARY
	12/16/2011	ADD WETLAND DATA
	06/14/2012	ADD TOPOGRAPHICAL BOUNDARY

LOT 15 & A PORTION OF LOT 16, MARY J. DESTEUBEN'S SUBDIVISION & LOTS 3-8, CLEVLAND'S SUBDIVISION - MARTIN COUNTY, FLORIDA

BOUNDARY SURVEY-TREE DETAIL

RICH PROPERTIES, FL

DATE 10/13/2005
SCALE 1"=50'
FIELD BK. JB 8
DRAWN BY C.H.
CHECKED BY E.A.L.

BETSY LINDSAY, INC.
SURVEYING AND MAPPING
7997 S.W. JACK JAMES DRIVE STUART, FLORIDA 34997
(772)286-5753 (772)286-5933 FAX
LICENSED BUSINESS NO. 6852

DISCLOSURE OF INTEREST AFFIDAVIT

BEFORE ME, the undersigned authority, duly authorized to take acknowledgments and administer oaths, personally appeared the undersigned person on the date set forth below, who, first being duly sworn, deposes and says under penalties of perjury:

1. That the record property owner(s) of the Real Property described in **Exhibit "A"** to this Affidavit is (are) as follows:

Name	**Address**
Jensen CAP Investments, LLC, a Florida limited liability company	105 Foulk Road Wilmington, DE 19803

(If more space is needed attach separate sheet)

2. That the following is a list of every natural person and entity with any legal or equitable interest in the property (as defined in Section 10.2.B.3. Land Development Regulations, Martin County Code):

Name	**Address**	**Interest**
Jensen Cap, a Delaware general partnership	105 Foulk Road Wilmington, DE 19803	100% owner property owner in section 1
Comprised of the following partners:		
Louis J. Capano, Jr.	105 Foulk Road Wilmington, DE 19803	30%
Louis J. Capano, III	105 Foulk Road Wilmington, DE 19803	30%

Name	Address	Interest
The Restated Trust f/b/o the issue of Louis J. Capano III, dated 6/30/17	105 Foulk Road Wilmington, DE 19803	20%
The Louis J. Capano III Irrevocable Trust dated 12/27/12	105 Foulk Road Wilmington, DE 19803	20%

(If more space is needed attach separate sheet)

3. That the following is a list of those, who have any interest in a contract for sale of the property, or a conveyance of any interest in the property, including but not limited to, real estate brokers and salespersons; and any and all mortgagees of the property:

Name	**Address**	**Interest**

(If more space is needed attach separate sheet)

4. That the following is a list of all other applications for which the applicant has an interest as defined in subsection b. and c. of Section 10.2.B.3. Land Development Regulations, Martin County Code currently pending before Martin County. The list shall

include any development applications, waiver applications, road opening applications, and lien reduction requests.

Application Name and/or Project Number	Names & Addresses of Parties involved	Date	Type of Application	Status of Application *
S185-012	Jensen CAP Investments, LLC 105 Foulk Road Wilmington, DE 19803	9-20-18	Revised master & final site plan	Pending

(If more space is needed attach separate sheet)

- Status defined as:
  A = Approved
  P = Pending
  D = Denied
  W = Withdrawn

This Affidavit is given for the purpose of establishing compliance with the provisions of Section 10.2.B.3 Land Development Regulations; Martin County Code.

FURTHER AFFIANT SAYETH NOT.

AFFIANT

Louis J. Capano, Jr.

STATE OF Florida
COUNTY OF Palm Beach

The foregoing Disclosure of Interest Affidavit was sworn to, affirmed and subscribed before me by means of [✓] physical presence or [ ] online notarization, this 17 day

of July 2020, by LOUIS J. CAPANO, JR., who [✓] is personally known to me or [ ] has produced _____ as identification.

STEPHEN COHEN
Notary Public - State of Florida
Commission # GG 963277
My Comm. Expires Feb 27, 2024
Bonded through National Notary Assn.

(Notary Seal)

_____

Notary Public, State of Florida

Print Name: Stephen Cohen

My Commission Expires: _____

EXHIBIT A
THE RESERVE AT JENSEN BEACH
LEGAL DESCRIPTION

PARCEL 1: LOT 15, DESTEUBEN'S SUBDIVISION OF THE WEST HALF OF THE NORTHWEST QUARTER SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, AS RECORDED IN PLAT BOOK 1, PAGE 13, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; ALSO DESCRIBED AS THE NORTH FIVE (5) ACRES OF THE SOUTH TEN (10) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, LESS THE SOUTH 10 FEET OF THE WESTERLY 660 FEET OF SAID LOT 15. TOGETHER WITH THE NORTH TEN (10) FEET OF THE EASTERLY 660 FEET OF LOT 16, DESTEUBEN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 13, ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA, PUBLIC RECORDS, SAID LOT 16 ALSO BEING DESCRIBED AS THE SOUTH FIVE (5) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA.

PARCEL 2: A PARCEL OF LAND LYING IN THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 37 SOUTH, RANGE 41 EAST, BOUNDED ON THE WEST BY THE EASTERLY RIGHT OF WAY OF STATE ROAD 723, ON THE NORTH BY THE WESTERLY EXTENSION OF THE NORTH LINE OF LOT 15 OF DESTEUBEN'S SUBDIVISION: ON THE EAST BY THE EASTERLY LINE OF SAID SECTION 28, AND ON THE SOUTH BY THE WESTERLY EXTENSION OF THE SOUTH LINE OF SAID LOT 15 OF DESTEUBEN'S SUBDIVISON, LOT 15 OF DESTEUBEN'S SUBDIVISION IS ALSO DESCRIBED AS THE NORTH FIVE (5) ACRES OF THE SOUTH TEN (10) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 27 SOUTH, RANGE 41 EAST.

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

CONTAINING 223,405 SQUARE FEET, OR 5.129 ACRES MORE OR LESS. PCN :27-37-41-007-000-00150-0

AND TOGETHER WITH

THE EAST NINE HUNDRED FORTY (940) FEET OF THE FOLLOWING DESCRIBED PARCEL:

THE SOUTH FIVE (5) ACRES OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA; ALSO DESCRIBED AS LOT 16, DESTEUBEN'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 1, PAGE 13, ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA PUBLIC RECORDS; LESS HOWEVER, THE NORTH TEN (10) FEET OF THE EASTERLY SIX HUNDRED SIXTY (660) FEET THEREOF.

TOGETHER WITH THE SOUTH TEN (10) FEET OF THE EASTERLY SIX HUNDRED SIXTY (660) FEET OF THE LOT 15, BEING PARALLEL WITH THE SOUTH LINE OF LOT 15, OF SAID DESTEUBEN'S SUBDIVISION, SAID STRIP OF LAND BEING TEN (10) FEET WIDE AND SIX HUNDRED SIXTY (660) FEET IN DEPTH ON THE FRONT PORTION OF SAID LOT 15.

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

CONTAINING 156,182 SQUARE FEET, OR 3.585 ACRES MORE OR LESS. PCN: 27-37-41-007-000-00161-0

AND TOGETHER WITH

ALL THAT PART OF LOTS 3 THRU 8, INCLUSIVE, OF J.T. CLEVELAND'S SUBDIVISION OF GOVERNMENT LOTS 2 AND 3, SECTION 27, TOWNSHIP 37 SOUTH, RANGE 41 EAST LYING NORTHERLY OF THE F.E.C. RIGHT-OF-WAY, AS SUBDIVIDED MARCH 21, 1894 IN PLAT BOOK 1, PAGE 213 PUBLIC RECORDS OF ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA.

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

CONTAINING 622,704 SQUARE FEET, OR 14.295 ACRES MORE OR LESS. PCN: 27-37-41-005-000-00020-0

CONTAINING A TOTAL OF 1,002,291 SQUARE FEET, OR 23.009 ACRES MORE OR LESS.

AND TOGETHER WITH

AN ACCESS EASEMENT BEING A PORTION OF LOT 1 OF THE ORIGINAL HOMESTEAD OF ED. F. GLUTSCH SUBDIVISION, AS RECORDED IN PLAT BOOK 1 AT PAGE 213, PUBLIC RECORDS OF ST. LUCIE (NOW MARTIN) COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 1; THENCE S00°06'23"E ALONG THE EAST LINE OF SAID LOT 1, A DISTANCE OF 113.35 FEET; THENCE N45°00'01"W, A DISTANCE OF 160.59 FEET TO A POINT ON NORTH LINE OF SAID LOT 1; THENCE S89°53'38"E ALONG SAID NORTH LINE, A DISTANCE OF 113.35 FEET TO THE NORTHEAST CORNER OF SAID LOT 1, AND THE POINT OF BEGINNING.

CONTAINING 6,423.78 SQUARE FEET OR 0.147 ACRES, MORE OR LESS.

SAID EASEMENT BEING SUBJECT TO ANY/ALL EASEMENTS, RESERVATIONS, DEDICATIONS OR RESTRICTIONS.

Jensen CAP Investments, LLC
105 Foulk Road
Wilmington, DE 19803

July 2, 2020

Paul Schilling, Director
Martin County Growth Management Department
2401 S.E. Monterey Road
Stuart, FL 34996

Re: The Reserve at Jensen Beach

Dear Mr. Schilling:

As owner of the property referenced above, please consider this correspondence formal authorization for Lucido & Associates to represent **Jensen CAP Investments, LLC** during the governmental review process of the Revised Master and Final Site Plan application.

Sincerely,

Jensen CAP Investments, LLC,
a Florida limited liability company

By: _____
Louis J. Capano, Jr., Manager

STATE OF Florida
COUNTY OF Palm Beach

The foregoing was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this 7th day of July, 2020, by Louis J. Capano, Jr., Manager of Jensen CAP Investments, LLC, a Florida limited liability company. He [X] is personally known to me or [ ] has produced _____ as identification.

_____
NOTARY PUBLIC
My Commission Expires: July 11th, 2021

(Notarial Seal)

LAURA FAJARDO
Notary Public - State of Florida
Commission # GG 123032
My Comm. Expires Jul 11, 2021
Bonded through National Notary Assn.

Recorded in Martin County, FL 11/18/2019 3:32 PM
Carolyn Timmann, Clerk of the Circuit Court & Comptroller
Rec Fees: $35.50Deed Tax: $0.70
CFN#2785550 BK 3095 PG 779 PAGE 1 of 4

Prepared by and return to:
Donald M. Allison, Esquire
Graner, Platzek & Allison, P.A.
720 East Palmetto Park Road
Boca Raton, Florida 33432
(561) 750-2445
File Number: OPT-2036
Parcel ID No.: 27-37-41-00-5000-00020.00000; 27-37-41-007-000-00150.00000 & 27-37-41-007-000-00161.00000

(space above this line for recording data)

Corrective Warranty Deed

THIS WARRANTY DEED, made this 24th day of October, 2019, by **Savannah Investments, LLC**, a Florida limited liability company, whose address is P.O. Box 2393, Stuart, Florida 34995 (as to Parcels 1 through 4) and **Davelu, LLC**, a Florida limited liability company, whose address is 759 S. Federal Highway, Suite 217 Stuart, Florida 34994 (as to Parcles 1 and 2) ("Grantor"*), to **Jensen CAP Investments, LLC, a Florida limited liability company**, whose address is 105 Foulk Road, Wilmington, DE 19803 ("Grantee"*):

Witnesseth that said Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said Grantor in hand paid by said Grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and Grantee's heirs and assigns forever, the following described land, situate, lying and being in Martin County, Florida, to-wit:

SEE ATTACHED LEGAL DESCRIPTION

Subject to taxes for 2019, and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

and said Grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

* "Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set Grantor's hand and seal the day and year first above written.

THIS CORRECTIVE DEED IS RE-EXECUTED, RECORDED AND DELIVERED BY THE GRANTORS TO GRANTEE TO CORRECT THE GRANTEE'S NAME WHICH WAS MISSTATED IN THAT CERTAIN ORIGINAL WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 3090, PAGE 2358, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

Signed, sealed and delivered in our presence:

DAVELU, LLC, a Florida limited liability company

By: _____
David Christenson, Manager

Witness printed name: April Dunlap

Witness printed name: Kristin Giles

State of Florida
County of Martin

The foregoing instrument was acknowledged before me this 13th day of November, 2019, by David Christenson, as Manager for and on behalf of Davelu, LLC, a Florida limited liability company, who { } is personally known or { } has produced a driver's license as identification.

{Notary Seal}

GRACE A. WARNER
MY COMMISSION # GG 337659
EXPIRES: September 22, 2023
Bonded Thru Notary Public Underwriters

Grace A. Warner
Notary Public

Signed, sealed and delivered in our presence:

SAVANNAH INVESTMENTS, LLC, a Florida limited liability company

Witness printed name: April Daniels

By: _____
Alex Aydelotte, Manager

Witness printed name: Cadie Fann

State of Florida
County of Martin

The foregoing instrument was acknowledged before me this 13th day of November, 2019, by Alex Aydelotte, as Manager for and on behalf of Savannah Investments, LLC, a Florida limited liability company, who {✓} is personally known or { } has produced a driver's license as identification.

{Notary Seal}

GRACE A. WARNER
MY COMMISSION # GG 337659
EXPIRES: September 22, 2023
Bonded Thru Notary Public Underwriters

Grace A. Warner
Notary Public

Legal Description

PARCEL 1:

All that part of Lots 3 through 8, inclusive, of J.T. Cleveland's Subdivision of Government Lots 2 and 3, of Section 27, Township 37 South, Range 41 East, Martin County, Florida, lying Northwesterly of Florida East Coast Railway Company's Northwesterly right-of-way limit, said right-of-way limit being located 50 feet Northerly of the centerline of said Railway's main track; said Subdivision being transcribed from Deed Book "X", page 752, Public Records of Brevard County, Florida and recorded in Plat Book 1, page 213, Public Records of St. Lucie (now Martin) County, Florida.

TOGETHER WITH a non-exclusive easements for the benefit of the above described parcel as created by and set forth in those certain Grants of Easement and Consent, Acknowledgment and Acceptance by Grantee recorded in Official Records Book 2107, pages 1544, Official Records Book 2128, page 1845 and Official Records Book 2128, page 1853, of the Public Records of Martin County, Florida.

PARCEL 2:

The East 940.00 feet of the following described parcel: The South 5 acres of the Southwest quarter of the Northwest quarter of Section 27, Township 37 South, Range 41 East, Martin County, Florida; also described as Lot 16, Desteuben's Subdivision, according to the map or plat thereof, recorded in Plat Book 1, page 13, Public Records of St. Lucie (now Martin) County, Florida; LESS however the North 10 feet of the Easterly 660 feet thereof. TOGETHER WITH the South (10) feet of the Westerly 660 feet of Lot 15, being parallel with the South line of Lot 15, said Desteuben's Subdivision, said strip being 10 feet wide and 660 feet in depth on the front portion of said Lot 15.

PARCEL 3:

Lot 15, DESTEUBEN'S SUBDIVISION of the West half of the Northwest quarter Section 27, Township 37 South, Range 41 East, as recorded in Plat Book 1, Page 13, Public Records of St. Lucie County, Florida; also described as the North five (5) acres of the South ten (10) acres of the Southwest quarter of the Northwest quarter Section 27, Township 37 South, Range 41 East, Martin County, Florida, LESS the South 10 feet of the Westerly 660 feet of said Lot 15. TOGETHER WITH the North ten (10) feet of the Easterly 660 feet of Lot 16, DESTEUBEN'S SUBDIVISION, according to the Plat thereof recorded in Plat Book 1, Page 13, St. Lucie (now Martin) County, Florida, Public Records, said Lot 16 also being described as the South five (5) acres of the Southwest quarter of the Northwest quarter of Section 27, Township 37 South, Range 41 East, Martin County, Florida.

PARCEL 4:

A parcel of land lying in the Southeast quarter of the Northeast quarter of Section 28, Township 37 South, Range 41 East, bounded on the West by the Easterly right of way of State Road 723, on the North by the Westerly extension of the North line of Lot 15 of DESTEUBEN'S SUBDIVISION: on the East by the Easterly line of said Section 28, and on the South by the Westerly extension of the South line of said Lot 15 of DESTEUBEN'S SUBDIVISION, Lot 15 of Desteuben's Subdivision is also described as the North five (5) acres of the South ten (10) acres of the Southwest quarter of the Northwest quarter of Section 27, Township 27 South, Range 41 East.

Doug Fitzwater
220 Hibiscus Avenue
Stuart, FL 34996

Ms. Shirley Lyders
Lucido & Associates
701 SE Ocean Blvd.
Stuart, FL 34994

Notice of Proposed Development
The Reserve at Jensen Beach
File Number: S185-012

Dear Ms. Lyders:

This is to certify that the above referenced signs were installed per Martin County requirements and comply with the standards of the notice provisions of Article 10, Section 10.6: Development Review Procedures.

Doug Fitzwater

State of Florida
County of Martin

Doug Fitzwater, who is personally known to me, acknowledged the forgoing instrument before me on September 19, 2018.

Notary Public, State of Florida

KATHLEEN ANDERSON
MY COMMISSION # GG 173271
EXPIRES: January 31, 2022
Bonded Thru Notary Public Underwriters

NOTICE PROPOSED DEVELOPMENT
THE RESERVE AT JENSEN BEACH
DATE, TIME AND PLACE OF HEARING(S) AND
OTHER INFORMATION AVAILABLE FROM
MARTIN COUNTY GROWTH MANAGEMENT DEPARTMENT
CALL 772-288-5495
FILE NUMBER S185-012

Prepared By:
Martin County Growth Management Department
2401 S.E. Monterey Road
Stuart, FL 34996

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BEFORE THE BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA
DEVELOPMENT ORDER

RESOLUTION NUMBER _____

[REGARDING DENIAL OF A REVISED MASTER/FINAL SITE PLAN FOR THE RESERVE AT JENSEN BEACH]

WHEREAS, this Board has made the following determinations of fact:

1. Jensen CAP Investments, LLC, submitted an application for revised master/final site plan approval for The Reserve at Jensen Beach project, located on lands legally described in Exhibit A, attached hereto.
2. Review of this application by the Local Planning Agency was not required.
3. This Board held a public meeting on the application on August 11, 2020.
4. At the public meeting, all interested parties were given an opportunity to be heard.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA, THAT:

A. The request for approval of a revised master/final site plan for The Reserve at Jensen Beach project is hereby denied for the following reasons: XXXX.

B. This resolution shall be recorded in the public records of Martin County. A copy of this resolution shall be forwarded to the applicant(s) by the Growth Management Department subsequent to recording.

DULY PASSED AND ADOPTED THIS 11TH DAY OF AUGUST, 2020.

ATTEST:

BY:_____
CAROLYN TIMMANN
CLERK OF THE CIRCUIT COURT
AND COMPTROLLER

BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

BY: _____
HAROLD E. JENKINS II, CHAIRMAN

APPROVED AS TO FORM & LEGAL SUFFICIENCY:

BY:_____
KRISTA A. STOREY
SENIOR ASSISTANT COUNTY ATTORNEY

ATTACHMENTS:
Exhibit A, Legal Description

DPQJ-1

Peter W. Walden
Principal Planner
Martin County Growth Management Department

pwalden@martin.fl.us Office772-219-4923
2401 SE Monterey Road Stuart, FL 34996

COUNTY EXHIBIT # 2

Experience

Public Sector Work History

Principal Planner, AICP Martin County, FL 2018- present

- Project Coordinator- development application and land development regulation review
- Project Coordinator for all County projects for development review.
- Manage and process all zoning variances.
- Provide assistance with building permitting and zoning inquires.
- Draft Land Development Regulation amendments.

Senior Planner, Martin County, Fl. 2015- 2018

- **Development Review**: Project coordinator for development and zoning applications.
- Provide review of development applications for consistency with the Comprehensive Growth Management Plan and the Land Development Regulations.

Development Compliance Planner, City of Palm Beach Gardens, Palm Beach Gardens, Fl. 2014- 2015

- **Development Review:** Review development and permit applications for compliance with land development code. Monitor development construction for compliance with development orders and environmental compliance. Provide related documents; draft time extensions, build out determinations, administrative amendments.

Zoning Compliance, Village of North Palm Beach, NPB, Fl. 2012- 2014

- **Plan Review**: Member of the DRC, participate in all development review, focus on zoning regulations and land development policy and compliance. Review building permits for code compliance. Prepare and present projects to the Planning Commission, and maintain all corresponding files.

Private Sector Work History

- Over 20 years' experience in community development and home construction including landscape design and construction, infrastructure development and vertical construction.

Education & Certifications

Florida Atlantic University, Boca Raton, FL
B.P.M. **Bachelor of Public Management** (Administration), minor in Geography, Magna Cum Laude
Course work in; Urban Planning, GIS, Emergency Management, Program Evaluation, Transportation

Indian River State College, Stuart, FL
A.A, **Environmental Science**, Magna Cum Laude

Government Internship, Town of Jupiter, Fl. 2011 Planning and Zoning, Business Development

Member of the American Institute of Certified Planners, AICP

FILED FOR RECORD
COMMISSION RECORDS
MARTIN COUNTY, FL
CAROLYN TIMMANN
CLERK OF CIRCUIT COURT
Date 8/11/2020
By MAV D.C.