# CITY OF GREEN COVE SPRINGS PLANNING & ZONING BOARD MEETING



321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA TUESDAY, APRIL 22, 2025 – 5:00 PM

### **AGENDA**

### GENERAL INFORMATION

Anyone wishing to address the Planning and Zoning Board regarding any topic on this evening's agenda is requested to complete a card available at the Clerk's desk. Speakers are respectfully requested to limit their comments to three (3) minutes.

The Planning and Zoning Board prohibits the use of cell phones and pagers which emit an audible sound during all meetings with the exception of Law Enforcement, Fire and Rescue, or Health Care Professionals on call. Persons in violation will be requested to leave the meeting.

### **ROLL CALL**

### APPROVAL OF MINUTES

1. Approval of the March 25, 2025 Meeting Minutes

### **PUBLIC HEARINGS**

- 2. Request for a variance to allow a gazebo to be placed within required setbacks of the property located at 462 Vermont Ave
- 3. Ordinance O-06-2025 for the Modification of the Graylon Oaks PUD

### **ACTION ITEMS**

4. Review of a Site Development Plan for the Preserve at Green Cove Springs, a Multi-Family Residential Complex

### **BOARD BUSINESS**

**Board Discussion / Comments** 

**Staff Comments** 

### **ADJOURNMENT**

NEXT MEETING: TUESDAY, MAY 27, 2025 AT 5:00PM

Minutes of the Planning & Zoning Board Meeting can be obtained from the City Clerk's office. The Minutes are recorded, but are not transcribed verbatim.

Persons requiring a verbatim transcript may make arrangements with the City Clerk to duplicate the recordings, or arrange to have a court reporter present at the meeting. The cost of duplication and/or court reporter will be at the expense of the requesting party.

### **ADA NOTICE**

In accordance with Section 286.26, Florida Statutes, persons with disabilities needing special accommodations to participate in this meeting should contact the City Clerk's office no later than 5:00 p.m. on the day prior to the meeting.

### **EXPARTE COMMUNICATIONS**

Oral or written exchanges (sometimes referred to as lobbying or information gathering) between a Planning and Zoning Board member and others, including staff, where there is a substantive discussion regarding a quasi-judicial decision by the Planning and Zoning Board. The exchanges must be disclosed by the Planning and Zoning Board.

# CITY OF GREEN COVE SPRINGS PLANNING & ZONING BOARD MEETING



321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA TUESDAY, MARCH 25, 2025 – 5:00 PM

### **MINUTES**

The meeting was called to order by Chairman Danley at 5:00pm.

### ROLL CALL

Board Members Present: Board Member Henrietta Francis, Board Member Justin Hall, Vice Chairman Joshua Hobbs, Chairman Josh Danley

Board Members Absent: Board Member Phil Vetter

Staff Members Present: Lyndie Knowles, Development Services Representative, Gabriel Barro, Planner 1, Heather Fincher, Public Information Officer, Erin West, City Clerk, Michael Daniels, Development Services Director, Jim Arnold, City Attorney, Mike Null, Assistant City Manager, Steve Kennedy, City Manager

### APPROVAL OF MINUTES

1. Approval of the Minutes of the February 25, 2025

Motion was made to approve the minutes of the February 25, 2025 meeting.

Motion made by Board Member Francis, Seconded by Vice Chairman Hobbs. Voting Yea: Board Member Francis, Board Member Hall, Vice Chairman Hobbs, Chairman Danley

Motion passed.

### **PUBLIC HEARINGS**

2. Ordinance No. O-5-2025 regarding Affordable Housing Related Land Development Code Changes *Michael Daniels* 

Michael Daniels, Development Services Director, presented the ordinance regarding affordable housing. This ordinance would exempt affordable housing projects from the current garage requirement, would reduce minimum building sizes in all residential zoning districts, allow additional dwelling unit to be built on a homesteaded property and add a modification of street requirements to allow for narrower right of ways to allow for a greater density of development.

Chairman Danley opened the public hearing.

Erick Saks of Operation Lifeline, Carolina Morrow of Clay County Habitat, and Joe Wiggins of Wiggins Construction spoke in support of the ordinance. Mr. Saks asked that the

March 25, 2025 **Minutes** 

City explore using proof of restrictive funding as proof of the affordable housing qualification. Ms. Morrow noted that all of Clay Habitat's builds are affordable housing and that the elimination of the garage requirement would be very beneficial for them. Mr. Wiggins asked the board to consider increasing the percentage of the ADUs to allow for a larger living space.

Mr. Daniels agreed that the percentage and the lot area requirements should likely be increased to allow for larger ADUs.

Chairman Danley closed the public hearing.

Board discussion followed. The board asked staff to review an increase of the allowable percentage for the Additional Dwelling Units (ADUs) related to the Primary Structure and to review the language for the affordable housing exemption for the enclosed garage requirement for new residential development.

City Attorney, Jim Arnold, noted the homestead requirement and how the city might need to go about ensuring properties with ADUs are under homestead exemption. Mr. Daniels said he would look into options. Further board discussion followed.

Motion was made to recommend to City Council the approval of Ordinance No. O-5-2025, amending City Code Chapter 113 Article II, Chapter 117 Article I, II, and establishing Chapter 117, Article XI, Section 117-798 Accessory Dwelling Units with staff comments.

Motion made by Board Member Hall, Seconded by Vice Chairman Hobbs. Voting Yea: Board Member Francis, Board Member Hall, Vice Chairman Hobbs, Chairman Danley

Motion passed.

### **ADJOURNMENT**

Chairman Danley adjourned the meeting at 5:37pm.

**NEXT MEETING:** TUESDAY, APRIL 22, 2025 AT 5:00PM

	CITY OF GREEN COVE SPRINGS, FLORIDA
Attest:	Joshua Danley, Chairman

Item # 1.

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# **STAFF REPORT**

### CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning and Zoning Board MEETING DATE: April 22, 2025

FROM: Gabriel Barro, Planning & Zoning

**SUBJECT:** Request for a variance to allow a gazebo to be placed within required setbacks of the

property located at 462 Vermont Ave

### PROPERTY DESCRIPTION

**APPLICANT:** Ravindra Armogan **OWNER:** Ravindra Armogan

PROPERTY LOCATION: 462 Vermont Avenue

**PARCEL NUMBER:** 017136-001-10

FILE NUMBER: VAR-25-001

**CURRENT ZONING:** R-2

FUTURE LAND USE DESIGNATION: NEIGHBORHOOD

### **SURROUNDING LAND USE**

NORTH: FLU: Neighborhood SOUTH: FLU: Neighborhood

**Z**: R2

Use: Single Family Residential
Use: Single Family Residential

**EAST:** FLU: Neighborhood WEST: FLU: Neighborhood

**Z**: R3 **Z**: R3

Use: Single Family Residential Use: Single Family Residential

### **BACKGROUND**

Ravindra Armogan, the owner and occupant of the property located at 462 S Vermont Ave, has requested a variance to allow a gazebo to be placed within the minimum setbacks required by the R2 zoning district. On July 2, 2024, a Code Enforcement case was opened for the property for an accessory structure, a wooden gazebo, placed without a permit. On July 11, 2024, the applicant submitted a Building Permit Application (BLD-24-0502) for the gazebo. The gazebo's location places it 3 feet from the side property line and 8 feet from the primary structure. Minimum setbacks for the R2 zoning district require a side setback of 7.5 feet per Sec. 117-88 of the Green Cove Springs city code. All properties within Green Cove Springs require that accessory structures placed within the designated side or rear yard be at least 6 feet from the primary structure.

The Building Permit Application was given a deficiency notice for not meeting the aforementioned setback requirements. There is no possible way for the gazebo to meet the 7.5 foot side setback and the 6-foot primary structure setback.

The applicant was cited for a code enforcement violation and scheduled to appear in front of the Magistrate at the March meeting for failing to secure a building permit as a result of encroachment within the required setback requirements. Subsequently, the applicant applied for a variance to allow the gazebo to be placed within the required setbacks, remaining in its current location. As a result, staff postponed the Magistrate action pending the findings of the variance request.

### **Definition of a Structure**

Green Cove Springs – Structure means anything which is built, constructed or erected, the use of which requires permanent location in or upon the ground, an edifice of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, or attachment to something having permanent location on the land. The term "structure" shall be construed as if followed by the words "or part thereof and includes a building and any tents, lunch wagons, diners, camp cars or trailers on wheels or other supports, intended for business use or for use as living quarters.

Florida Building Code, 8<sup>th</sup> Edition – That which is built or constructed.

Orange Park - Anything which is built or constructed in or upon the ground, an edifice of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner. The term structure shall be construed as if followed by the words "or part thereof."

Jacksonville - That which is built or constructed, an edifice of any kind or a piece of work artificially built up or composed of parts joined together in some definite manner. The term structure shall be construed as if followed by the words or part thereof and shall include tents, awnings, cabanas and buildings.

Clay County – Anything vertically constructed or erected with a fixed location on the ground or attached to something having or requiring a fixed location on the ground, excluding bulkheads.

### Variances To Be Considered as Part of Site Plan Review

- (1) Any person desiring to undertake a development activity not in conformance with this subpart may apply for a variance in conjunction with the application for site plan review. The variance shall be granted or denied in conjunction with the approval for site plan review.
- (2) All applications for a variance to this subpart shall be in writing and in such form as may be determined by the development services department. Applications shall state fully upon what grounds of hardship the request is made. The planning and zoning board may grant a variance varying terms of this subpart, providing such conditions and circumstances are:
  - a. Peculiar to the specific land, structure or building;
  - b. Do not apply generally to neighboring properties;
  - c. That the strict application of the provisions of this subpart would deprive the applicant of the reasonable use of such land, structure or building;
  - d. The peculiar conditions and circumstances are not the result of the actions of the applicant.
- (3) Any variance granted will be the minimum variance that will make possible the reasonable use of such land, structure or building.

(4) A nonconforming use of neighboring lands, structures or buildings, legal or illegal, in the same district, or a permitted use in adjacent districts shall not be considered as grounds for issuance of a variance permitting any use not otherwise allowed in the district.

### **Limitations on Granting Variances**

Initial determination. The planning and zoning board shall first determine whether the need for the proposed variance arises out of the physical surroundings, shape, topographical condition, or other physical or environmental conditions that are unique to the specific property involved. If so, the planning and zoning board may grant the variance, based on the required findings, for that site alone. If, however, the condition is common to numerous sites so that requests for similar variances are likely to be received, the planning and zoning board shall make the required findings, based on the cumulative effect of granting the variance, to all who may apply.

The neighboring properties are of the same size and zoning. There are no physical or environmental conditions that are unique to the specific property involved that is different from adjacent and other nearby properties.

The planning and zoning board shall not grant the variance varying the requirements of any provision of this subpart unless it makes a positive finding, based on substantial competent evidence, on each of the following:

- (1) There are no reasonable uses of the property because of the practical or economic difficulties in carrying out the strict letter of the regulation and the hardship is not the result of the applicant's own actions.
  - The primary use of the property is a single-family home. There is no practical or economic difficulty depriving the owner from this use. The variance request is as a result of the applicant's actions.
- (2) If the applicant complies strictly with the provisions of this subpart, he is deprived of any rights that others in the district are allowed.
  - The neighboring properties are of the same size and zoning. The neighboring properties also have the same utility easement along the rear of the properties.
- (3) The hardship is suffered only by the applicant rather than by neighbors or the general public.
  - *Neighboring properties are required to meet the same setbacks as the subject property.*
- (4) The hardship relates to the land, rather than personal circumstances.

  The land is not a contributing factor. All neighboring properties have a similar layout and are held to the same standards.
- (5) The variance requested is the minimum variance that will make reasonable use of the land, building or structure and will not result in the creation or extension of a nonconforming use or structure.
  - The applicant can make reasonable use of the land without encroaching on the required setback.
- (6) The proposed variance will not substantially increase congestion on surrounding public streets, the danger of fire, or other hazard to the public.
  - The proposed variance will not increase congestion or hazards.
- (7) The proposed variance will not substantially diminish property values in, nor alter the essential character of, the area surrounding the site.
  - The proposed variance could impact the character of the area because it would create a precedence for future variance approvals for surrounding properties encroaching on approved setback requirements.

### Attachments Include:

- Variance Application
- Boundary Survey showing gazebo location

### STAFF RECOMMENDATION

Staff is recommending denial of the requested variance based on noncompliance with the following required findings for variance approval set forth in Section 101-159(c)(2):

- There are no reasonable uses of the property because of the practical or economic difficulties in carrying out the strict letter of the regulation and the hardship is not the result of the applicant's own actions.
- If the applicant complies strictly with the provisions of this subpart, he is deprived of any rights that others in the district are allowed.
- The hardship is suffered only by the applicant rather than by neighbors or the general public.
- The hardship relates to the land, rather than personal circumstances.
- The variance requested is the minimum variance that will make reasonable use of the land, building or structure and will not result in the creation or extension of a nonconforming use or structure.



# City of Green Cove Springs Variance Application

### FOR OFFICE USE ONLY

PZFile # VAC-25-001

Application Fee: 275°

Filing Date: 3 18 25 Acceptance Date: 3 25/25

Review Type: SRDT 🔯 P & Z 🥱 CC 🗖

A. PROJECT		
1. Project Name: Grill Gazebo DIY Installation		
2. Address of Subject Property: 462 S Vermont Avenue		
3. Parcel ID Number(s) 017 36 - 001 - 10		
4. Existing Use of Property:		
5. Future Land Use Map Designation: Ncurborhood		
6. Zoning Designation: L-L	<u> </u>	
7. Acreage:		
B. APPLICANT		
1. Applicant's Status →Owner (title holder) □ Agent		
Name of Applicant(s) or Contact Person(s): Ravindra Armogan  Title:	<del></del> 6:	
Company (if applicable):		
Mailing address: 462 S Vermont Avenue		
City: Green Cove Springs State: FL ZIP: 32043		
Telephone: (904)373-8059 FAX: ()e-mail: myarmoganfamily@gmail.com	1	
3. If the applicant is agent for the property owner*:		
Name of Owner (title holder):		
Company (if applicable):		
Mailing address:		
City:State:State:		
Telephone: ()FAX: ()e-mail:	*	
Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.	C. ADDITIONAL	
INFORMATION		
1. Is there any additional contact for sale of, or options to purchase, the subject property?	If yes, list names of all	
parties involved:	If yes, is the	
contract/option contingent or absolute? □ Contingent □ Absolute	Γ	D,

### D. STATEMENT OF VARIANCE SOUGHT

- 1. Requested Variance: Install DIY Grill Gazebo off property line 2FT
- 2. Section of Land Development Regulations under which the variance is sought: Section 14-23
- 3. Reason Variance is requested: Either side of our property is 10FT from the property line. Except for the backyard which sits on an easement and has a steep slant to it away from the home to the rear fence line. This severely hinders my family from putting together something as small as a DIY Grill Gazebo that is 12x6 and cost \$1000 on either side of our property.
- 4. Statement of Facts for Requested Variance (Use additional pages if necessary)

My family has lived at 462 S Vermont Avenue for 20 years now. We are a hard working family who is proud to be part of this community. We have a daughter who attends Clay High School with Honors and she wanted a space outside the home to invite her friends over to entertain after school or on the weekends. This space also serves as a space for small family gatherings and a space where we can grill some food and enjoy the time with one another. I never thought this would be an issue as a neighbor a few homes down from us at 456 S Vermont Avenue built a structure attached to the home and on the property (fence) line itself. Below is a recent image of this.



So I just didn't realize this was going to be an issue with that being the case. As you can see with what we have put together is solid and rated for up to 100 MPH winds.

(PLEASE ANSWER THE FOLLOWING QUESTIONS TO THE BEST OF YOUR ABILITY. THESE FACTS WILL BE USED BY THE STAFF TO MAKE A RECOMMENDATION AND THE PLANNING AND ZONING BOARD IN MAKING THEIR DECISION)

a. Extraordinary and Exceptional Conditions- What are the extraordinary and exceptional conditions (such as topographic conditions, narrowness, shallowness, or the shape of a parcel of land) pertaining to the particular piece of land for which the variance is sought, that do not generally apply to other land or structures in the same district?

This property is severely narrow on either side of the home and the rear of the property is on an easement with a steep slant to it.

b. Not Result of Action by Applicant- Why are the special circumstances not the result of the actions of the applicant?

Due to violation served by Rico Armstrong referencing Section 14-23. After speaking with the

Planning and Zoning team Michael Daniels and Gabriel Barro it was brought to my attention that
the DIY removable Grill Gazebo was to close to the property line. Both Gabriel and Michael came
and visited me at 462 S Vermont Avenue and we discussed an option of moving the DIY Grill
Gazebo to the rear of the property but as referenced above the rear of the property is on an
easement and has a steep slant to it. It was brought to my attention by both Gabriel Barro and
Michael Daniels that if I have the DIY Grill Gazebo moved to the rear of the property and have it
permitted, then at any point I could move the DIY Grill Gazebo back to its original location. I was
not comfortable with that option at all.

c. No Special Privilege- Does the granting of the variance confer any special privilege on the applicant that is denied to other lands or structures in the same zone district?

### <u>No</u>

**d. Strict Application Deprives Use-**Would the strict interpretation of the Land Development Regulations to this property effectively prohibit or unreasonably restrict the utilization of the land and result in unnecessary and undue hardship?

### Yes

e. **Minimum Variance-** Is the variance the minimum action that will make possible the reasonable use of the land or structure which is not contrary to the public interest, and which would carry out the spirit of these Land Development Regulations?

### Yes

f. Not Detrimental-Is the granting of the variance detriment to the adjacent land, and the character of the zone district in which the land is located?

### <u>No</u>

- E. ATTACHMENTS (One hard copy or one copy in PDF format)
  - 1. Copy of Warranty Deed or other proof of ownership
  - 2. Legal description
  - 3. Survey or plot diagram indicating setbacks, proposed construction and requested variance.

### F. FEE.

NOTARY SE

**JULIA ENNIS** 

Commission # HH 295823 Expires November 25, 2026

Residential property - \$250 Non- residential - \$500

- a. The Cost of postage, signs, advertisements, and outside consultants are in addition to the application fee.
- b. The applicant is responsible to pay the cost of the advertisement and signs.
  - c. All applications are subject 10% administrative fee and must pay the cost of any outside consultants fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees for advertising, signs, necessary technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 3 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Signature of Notary Public, State of FL

City of Green Cove Springs Development Services Department ♦321 Walnut Street ♦ Green Cove Springs, FL 32043 ♦ (904297-7500 Page 3 of 3 Revised 12/31/2012

# BOUNDARY SURVEY

### DESCRIPTION:

### Parcel H

Parcel H.

The Southerly 26 feet of Lot 6 of Block 35 and the Northerly 54 feet of a 50 foot platted road (Bisnop Avenue) which is not in use, bounded on the Southeast by a Southeast prolongation of the Southeast line of Block 35 and bounded on the Northeast by a Southeast prolongation of the Northeast line of 50 f of Block 35 att in DLEMED PARK as per plot thereof recorded in Plat Book 2, Page 62 of the public records of Day County, Florida, Subject to a 20 foot electrical distribution line essement as per Official Records Book 807, page 651, and Official Records Book 761, pages 414 and 415. Also Reserving a 25 foot essement for drainage and utilities across the Northeast 25 feet thereof.



NOTE. All corpers are Found 1,2" iron had Sop 2081, unless otherwise foliad

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BY James Date Signed S. W. an Date of Fleid Lucrey M. October G. Willes & Certificate to Joe

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# STAFF REPORT

### CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning and Zoning Board MEETING DATE: April 22, 2025

**FROM:** Gabriel Barro, Planning and Zoning

**SUBJECT:** Ordinance O-06-2025 for the Modification of the Graylon Oaks PUD

### PROPERTY DESCRIPTION

**APPLICANT:** John Nicols, Trustee **OWNER:** John Nicols, Trustee

**PROPERTY LOCATION:** Vermont Ave, north of Green Cove Springs Ave

**PARCEL NUMBER:** 016748-000-00 & 016742-000-00

FILE NUMBER: MOD-25-001

**CURRENT ZONING:** Planned United Development, PUD

FUTURE LAND USE DESIGNATION: Neighborhood

### SURROUNDING LAND USE

NORTH: FLU: Neighborhood SOUTH: FLU: Neighborhood

**Z**: R3 **Z**: R1

Use: Single Family
Use: Single Family

**EAST:** FLU: Neighborhood WEST: FLU: Neighborhood

**Z**: R3/R2 **Z**: R1

Use: Single Family
Use: Single Family

### **BACKGROUND**

The property is approximately 3.8 acres and is located on Vermont Ave north of Green Cove Avenue. The property was approved for a Zoning redesignation to PUD with the The property was approved for a Future Land Use change from Low Density Residential to Medium Density Residential and a zoning change to PUD with the intent of developing 14 duplex lots totaling 28 residential units. The ordinance for the approved Planned Unit Development (O-05-2020) is included in the packet. A Preliminary Plat and Improvement Plan were approved by City Council on September 3, 2024.

The PUD Zoning includes a PUD concept plan, development and buffering requirements set forth in the PUD written description. The project is planned to be completed in a single phase. The approved PUD ordinance and concept plan is enclosed.

### **DEVELOPMENT DESCRIPTION:**

The applicant, John Nicols, is proposing a modification to the written description to split the proposed parcels into two properties, allowing for each half of a duplex to be legally owned separately. The original plat showed 14 lots and a stormwater retention pond. No new plat has been submitted. The updated written description states it will allow for a maximum of 28 lots. This will not make any tangible change to the previously approved PUD plan, it will only change the ownership status from a duplex (2 lots on each) vs a single family attached unit that will have separate owners and share a common wall.

### **Development Plan**

The approved construction plans include 14 residential lots that have a minimum lot size of 60 feet in width and 6,000 square feet in lot area. All of the dwelling units will be a minimum of 1,200 square feet with an enclosed garage.

### **Ingress, Egress and Circulation**

Access shall be provided off of Vermont Avenue. A 6' sidewalk shall also be provided along Vermont Avenue adjacent to the subdivision. Each individual unit shall have a minimum of two parking spaces including an enclosed garage that is a minimum of 10' \* 20'.

### **Drainage Retention**

The drainage retention area is shown in the northeastern portion of the site and has been reviewed and approved by the City's stormwater consultant. The project's Civil Engineer, William Schaefer with the Dominion Engineering Group, will self-certify pursuant to the requirements set forth by the Florida Department of Environmental Protection.

### **Landscaping and Buffer Plan**

The landscape plan shows the removal of 1,247 inches of trees. Per code the City requires a mitigation of 440" of trees. The applicant is preserving 6 trees onsite that accounts for 179.5 inches and they will be planting an additional 58 trees for an additional 271 caliper inches in order to comply with the tree planting requirement. In addition, the applicant will provide 9 shrubs per 100 feet along the southern and western perimeters and provide one shade tree per every 50' as required by the approved PUD plan.

A certified arborist shall be hired to evaluate all of the trees to be saved on the site and ensure adequate root area is provided and grade changes and tree protection is not altered during the construction process.

### **Management of Common Areas**

All common areas and stormwater management facilities /drainage areas shall be maintained by a legally established Homeowner's or Property Owner's Association. All finalized legal documents demonstrating the creation of the HOA or POA and its responsibilities must be submitted with the Final Plat submittal for the Graylon Oaks PUD. Regulations regarding Guarantees and Sureties as stipulated in Chapter 101, Article II, Division 5 and Subdivision 5 shall be provided as part of the subdivision approval process.

The Preliminary plat and Improvement Plan have been submitted to staff and have been approved by the Site Development Review Team. This includes the performance bond as required per the City Land Development Code, Chapter 101, Article II, Division 5, Subdivision V which is enclosed.

### **Development Plan Modifications**

The proposed modification would modify the 14 lots to be split into 28 lots allowing for each half of a duplex to be legally owned as a separate property.

The density controls for two family residential buildings will be modified as follows:

	Original Written Description	Modified Written Description
Minimum Lot Area	6,000 SF	3,000 SF
Minimum Lot Width	60 ft	30 ft
Minimum Lot Depth	100 ft	100 ft
Minimum living area	1,000 SF	1,000 SF
Maximum Lot Coverage	40%	40%
Side Setback	7.5 ft / 15 ft (combined)	7.5 ft / 0 ft on common wall

### **Public Facilities Impact**

### **Traffic Impacts**

Land Use <sup>1</sup>	Units	Da	aily	AM	Peak	PM	Peak
(ITE)	Units	Rate	Trips	Rate	Trips	Rate	Trips
Proposed		•		•			
Residential Condo/TH (ITE 230)	28	5.81	174	0.52	16	0.54	16
Total	-	-	174	-	16	-	16

<sup>1.</sup> Source: Institute of Transportation Engineers: Trip Generation Manual 9th Edition

**Conclusion:** The proposed development of 28 dwelling units on the  $\pm 3.8$ -acre site would result in a potential net increase of 30 Annual Average Daily Trips (AADT).

### Potable Water Impacts

System Category	Gallons Per Day (GPD)
Current Permitted Capacity <sup>1</sup>	4,200,000
Less actual Potable Water Flows <sup>1</sup>	1,013,000
Residual Capacity <sup>1</sup>	3,187,000
Projected Potable Water Demand from Proposed Project <sup>2</sup>	11,130
Residual Capacity after Proposed Project	3,176,870

- 1. Source: City of Green Cove Springs Public Works Department
- 2. Source: City of Green Cove Springs Comprehensive Plan. Formula Used: 30 dwelling units x 2.72 persons per du x 150 gal per person

*Conclusion:* As shown in the table above, the City of Green Cove Springs has the capacity to meet the demands from the estimated impacts.

### Sanitary Sewer Impacts – South Plan WWTP

Santary Sewer Impacts South Flan WWII	
System Category	Gallons Per Day (GPD)
Current Permitted Capacity <sup>1</sup>	350,000
Current Loading <sup>1</sup>	270,000
Committed Loading <sup>1</sup>	330,000
Projected Potable Water Demand from Proposed Project <sup>2</sup>	9,139
Residual Capacity after Proposed Project	260,861 Page

- 1. Source: City of Green Cove Springs Public Works Department
- 2. Source: City of Green Cove Springs Comprehensive Plan. Formula Used: 28 dwelling units x 2.65 persons per du x 120 gal per person

Conclusion: The project site is served by the South Plant Wastewater Treatment Plant (WWTP).

Solid Waste Impacts

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project <sup>1</sup>	609 lbs. / 111 tons
Solid Waste Facility Capacity <sup>2</sup>	Minimum 3 Years Capacity

- 1. Source: City of Green Cove Springs Comprehensive Plan. Formula Used: (28 dwelling units x 2.72 persons per dwelling unit x 8 lbs. per day) x 365
- 2. Source: Clay County Comprehensive Plan

Conclusion: The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility.

**Public School Facilities Impact** 

Land Use	Units	[B]	lem.	Mid	dle	H	igh
(ITE)	Units	Rate <sup>1</sup>	Total	Rate <sup>1</sup>	Total	Rate <sup>1</sup>	Tota
Proposed							
Condo/TH (ITE 230)	28	0.0329	0.987	0.0099	0.297	0.0205	0.61:
Net Generation	-	-	1	-	1	-	1

<sup>1.</sup> Source: School District of Clay County, Educational Facilities Plan, FY 2018/19-2022/23, based on multifamily

**Conclusion:** The applicant had reserved capacity until April 2023 but because the project did not move forward the applicant has resubmitted their school concurrency application. Payment/concurrence on school concurrency must be approved prior to issuance of building permitting.

MULTI FAMILY RESIDENCE		
Impa	ct Fees	
Must be par	id at Final Plat	
Electric	\$61,000 (\$2,200 per lot)	
Must be pa	id at Issuance	
Water	\$28,000 (\$1,000 per ERU)	
Sewer	\$56,000 (\$2,000 per ERU)	
To be paid BEFO	RE equipment check	
County Parks	\$25,340 (\$905 per unit)	
County Fire	\$26,376 (\$942 per unit)	
County Jails	\$11,592 (\$414 per unit)	
County Library	\$7,308 (\$261 per unit)	
Transportation Mobility	\$85,232 (\$3044 per unit)	
School	\$246,204 (\$8793 per unit)	

### **Attachments Include:**

- Proposed PUD Written Statement
- Proposed PUD Concept Plan
- Approved Subdivision Improvement Plan
- Approved Subdivision Landscape Plan
- PUD Modification Application
- Approved PUD Ordinance
- Proposed PUD modification Ordinance

### STAFF RECOMMENDATION

Staff is recommending approval of the proposed PUD modification to split proposed lots into two parcels and adjust setback requirements and minimum lot area.

### **Recommended motion:**

Motion to recommend to City Council the approval Ordinance O-06-2025 to amend the Graylon Oaks Planned Unit Development.

### Type of Development: Two- Family Residential

### **PROPERTY CHARACTERISTICS**

*Vegetation, Soils, & Drainage:* 

Vegetation on the site consists of large oak trees, laurel oaks, cabbage palms, saw palmetto bushes and pine. There are no wetlands onsite. Site has sandy soils throughout with site sloping from west to east to Vermont St. Site has a topography of 51' to the west and dropping to 39' to the east fronting Vermont St.

### Utilities:

Central water and wastewater service will be provided by the City of Green Cove Springs; electric service will be provided by the City of Green Cove Springs and installed underground.

### **ACREAGE SUMMARY**

Total Property	3.8 Acres
Wetlands	0 Acres

DEVELOPABLE 3.8 Acres

### **MAXIMUM UNITS**

Maximum units  $\underline{2830}$  units

### Proposed development

### Residential Single Family & Two- Family Development

The property is consistent with the land use and zoning of the surrounding areas. The character of the proposed development is consistent with those of adjacent multi-family residential developments on Vermont Ave and abutting State Road 16. The parcels directly adjacent to the east and north currently have high-density land use and R-3 zoning. In addition, the subject property is consistent with other similar properties in the surrounding areas of the city and is in conformity with local land use plans and zoning ordinances. The subject property will also create a much-needed affordable housing neighborhood that will have a great economic and fiscal benefit to the area and the community. The affordable

housing community can be achievable by allowing a higher density similar to that of the adjacent properties.

### **Access**

Access is provided from Vermont Ave. The subdivision will not be gated and roads within the development will be turned over to the city and would meet city requirements.

### **Proposed Density Standards**

### **Residential-Single Family Dwelling**

Minimum Lot Area	5000SF
Minimum Lot Width	50 Feet
Minimum Lot Depth	100 Feet
Minimum Living Area	1200 SF
Maximum Lot Coverage	40%

### Residential- Two Family Dwelling

Minimum Lot Area (Per attached unit)	<del>6000</del> - <u>3000</u> SF
Minimum Lot Width (Per attached)	<del>60</del> - <u>30</u> feet
<u>unit)</u>	
Minimum Lot Depth	100 feet

Minimum Lot Depth 100 feet
Minimum required living area 1000 SF
Maximum Lot Coverage 40%

Yard Requirements – Primary Structures\*

Front Porch 15 feet

Front Façade 20 feet

Side 7.5 feet from property

lines, 0 feet for interior lots with common wall lines, minimum of 15 feet of separation between buildings.7.5 feet;

combined 15 feet

Rear 10 feet

Max Building Height- Primary Structures 35 Feet

### **Permitted Uses**

-Single Family detached residential dwelling units

Two family residential dwelling units

-Home occupations (pursuant to City Code Requirements).

### **Ingress, Egress and Circulation**

- a. Minimum of 2 parking spaces per dwelling unit (4 per duplex). One parking space will be in driveway and one will be in the attached garage.
- b. The dimension of each driveway must be 10' x 20'.
- c. Each unit must include an attached garage at least 10' x 20'.
- d. There will be a 6' sidewalk along proposed street and along Vermont Avenue.

### Landscaping

Landscaping per Section 113-244 of the Land Development Regulations

- a. Landscape requirements for each two-family dwelling (duplex) shall be as follows:
  - 1. At least one canopy tree, 2.5 inches DBH, shall be located in the required front yard of each dwelling unit. Each duplex will have two canopy trees.
- b. Perimeter Landscaping shall be as follows:
  - 1. Provide additional perimeter landscaping along Vermont Avenue with one new shade tree per 50' of road frontage subject to the requirements of Sec. 113-244(d)(3) and installation and maintenance requirements set forth in Section 113-247(b).
  - 2. A minimum of 4 understory/subcanopy trees shall be planted around the intersection of Vermont and the proposed new roadway.
  - 3. Provide the following buffer to the south and west of the property:

### A. Single-Family development:

- Provide a 10' landscape buffer of one new shade tree every 50 feet of width and nine (9) shrubs every 100 feet of width adjacent to properties subject to the requirements set forth in Section 113-244(d)(3) and installation and maintenance requirements set forth on Sec. 113-247(b). Or
- Provide an opaque privacy fence, 6' in height and a landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape design requirements set forth ion Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

- B) Two-Family Development:
  - Provide a 20' landscape buffer of one new shade tree every 50 feet of width and nine (9) shrubs every 100 feet of width adjacent to the properties subject to the requirements set forth in Section 113-244(d)(3) and installation and maintenance requirements set forth in Sec. 113-247(b). Or
  - Provide an Opaque privacy fence, 6' in height and an landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape design requirements set forth in Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

### **Tree Survey**

a. A tree survey measuring trees 12" or greater shall be required as part of the subdivision review. Tree removal mitigation will be required as stipulated in City Code Section 113-279

### **Tree Preservation**

- 1. Trees to be preserved onsite:
  - a. Live Oak Trees
  - b. The rear 20' along the south and west property lines shall be kept in a natural condition with all canopy/shade trees preserved
  - c. Viable shade/canopy trees within 15' of Vermont Avenue shall be preserved.
- 2. Tree protections requirements shall comply with Section 113-248, and in addition: an ISA certified arborist or equivalent horticulture professional shall be hired to evaluate trees to be saved, ensure adequate root area is provided and grade changes are not altered within critical root area, prescribe treatments to preserve the trees and oversee tree protection during the construction process. Trees or branches of trees that are adjacent to or hanging over into adjacent neighboring properties shall be evaluated for the safety by the certified arborist and removed or appropriately pruned or other measures as required by the certified arborist.

### **Miscellaneous**

Development requirements not specifically mentioned shall be consistent with all requirements for the City of Green Cove Springs R-2 Zoning district and all other applicable Land Development Code Requirements

### **Development Plan**

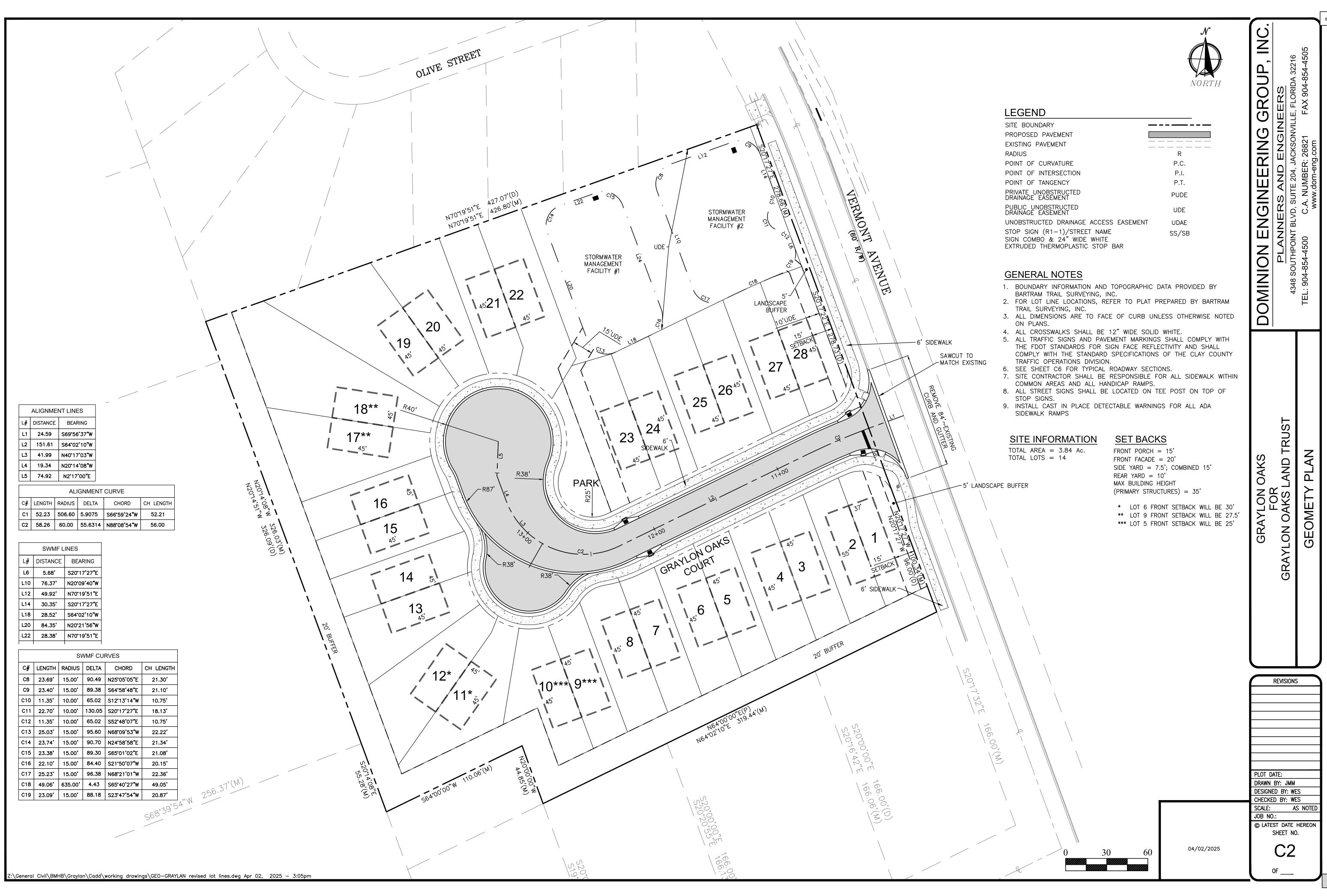
The project will be developed in a single phase. The required right of way buffers shall be constructed by the developer and completed prior to the issuance of a certificate of

occupancy for any residential dwelling not constructed as a model unit within the subdivision.

All common areas and stormwater management facilities /drainage areas shall be maintained by a legally established Homeowner's or Property Owner's Association. All finalized legal documents demonstrating the creation of the HOA or POA and its responsibilities must be submitted with the Final Plat submittal for the Graylon Oaks PUD.

Stormwater analysis shall be required with the subdivision application that demonstrates consistency with the City of Green Cove Springs and St Johns River Water Management District requirements.

Regulations regarding Guarantees and Sureties as stipulated in Chapter 101, Article II, Division 5 and Subdivision 5 shall be provided as part of the subdivision approval process.



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CRAYLON OAKS

PART OF CLARKE'S MILL GRANT, SECTION 38, TOWNSHIP 6 SOUTH, RANGE 26 EAST,
CITY OF GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA

PLAT BOOK
SHEET 3 OF 3 SHEETS

POINT OF

BEGINNING (S.E.'LY CORNER OF LOT 1)

> 1501 COUNTY ROAD 315 SUITE 106 GREEN COVE SPRINGS, FL 32043 (904) 284-2224 FAX (904) 284-2258

GRAPHIC SCALE

BEING A REPLAT OF LOT C, TOGETHER WITH A PORTION OF LOT B, BLOCK 102, PALMER & FERRIS TRACT, ACCORDING TO PLAT BOOK 1, PAGE 44 OF THE PUBLIC RECORDS OF CLAY COUNTY, FLORIDA

OLIVE CIRCLE

Legend	
G.C.S. — denotes City of Green Cove Spri	ngs
🖟 — denotes Centerline	
ESMT. — denotes Easement	
(NR) - denotes Non-Radial Line	

N.A.D. — denotes North American Datum N.T.S. — denotes not to scale

O.R.B. — denotes Official Records Book P.B. — denotes Plat Book

P.C. — denotes Point of Curvature

P.I. — denotes Point of Intersection P.T. — denotes Point of Tangency

(R) — denotes Radial Line R.P. — denotes Radius Point

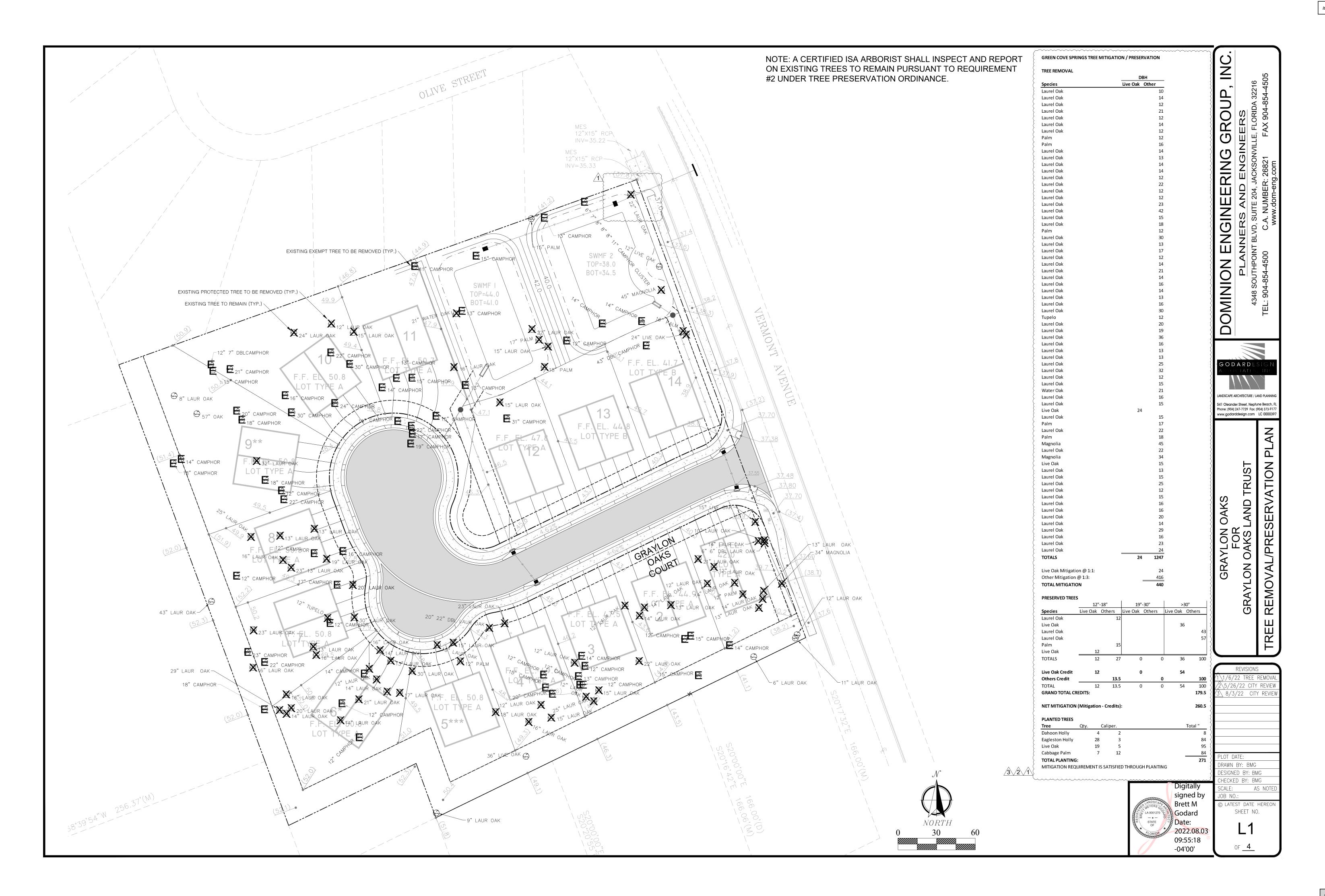
R/W — denotes Right—of—Way R — denotes Radius

Lot A - denotes part of PALMER & FERRIS TRACT

CURVE TABLE					
CURVE	RADIUS	ARC DISTANCE	CHORD BEARING	CHORD DISTANCE	DELTA
C1	506.60	49.80	S66°51'08"W	49.78	5°37'55"
C2	60.00	58.26	N88*08'54"W	56.00	55*37'53"
С3	60.00	41.99	N40°17'03"W	41.14	40°05'49"
C4	60.00	100.25	N68°05'59"W	88.99	95*43'42"
C5	25.00	16.09	N38°43'33"W	15.81	36 <b>°</b> 52'12"
C6	25.00	24.57	N85°18'49"W	23.59	5618'20"
C7	105.00	29.46	N72°04'27"E	29.36	16°04'34"
C8	25.00	20.68	S56°24'39"W	20.10	47°24'10"
C9	45.00	1.70	N33°47'26"E	1.70	2°09'44"
C10	45.00	50.67	N67°07'42"E	48.03	64°30'47"
C11	45.00	34.24	S58°49'13"E	33.42	43*35'22"
C12	45.00	37.81	S12*57'21"E	36.71	48*08'23"
C13	25.00	18.31	N09°51'49"W	17.90	41*57'18"
C14	25.00	1.99	N33°07'18"W	1.99	4°33'40"
C15	105.00	27.79	S27*49'08"E 27.71		1510'00"
C16	50.00	7.83	S16°25'52"E	8°58'41"	
C17	50.00	37.35	S09*27'24"W	36.49	42°47'50"
C18	50.00	44.80	S56°31'21"W	43.31	51°20'04"
C19	50.00	51.57	N68°15'46"W	49.31	59*05'42"
C20	50.00	54.49	N07°29'47"W	51.83	62 <b>°</b> 26'17"

CURVE TABLE					
CURVE	RADIUS	ARC DISTANCE	CHORD BEARING	CHORD DISTANCE	DELTA
C21	25.00	60.95	S46*07'14"E	46.94	139°41'12"
C22	25.00	22.05	N41*50'34"E	21.34	50*31'38"
C23	25.00	16.09	N01°51'21"W	15.81	36 <b>°</b> 52'12"
C24	635.00	33.43	S65*32'39"W	33.42	3*00'58"
C25	530.00	28.40	S65*34'16"W	28.40	3*04'13"
C26	480.00	20.92	S65°17'06"W	20.92	2*29'51"





PLAN	IT SCHEDULE					
TREES	BOTANICAL / COMMON NAME	CONT	CAL		QTY	REMARKS
IC	llex cassine / Dahoon Holly	45-Gallon			4	Min. 8`-10` ht. x 3`-4 sprd., 2" DBH
IOE	llex opaca `Eagleston` / Eagleston Holly	65-Gal.	2.5" DBH		28	Mln. 11` - 13` ht. x 3`-4` sprd., 3` CT, 2.5" DBH
QV	Quercus virginiana / Southern Live Oak	_	5"-Cal.		19	Min. 17` - 20` ht. x 8`-10` sprd.
SP15	Sabal palmetto / Cabbage Palmetto	15` CT			7	Shaved trunk, regen.
		•	•	•		
SHRUBS	BOTANICAL / COMMON NAME	CONT		SPACING	QTY	
VOW	Viburnum obovatum 'Withlacooche' / Withlacooche Walter's Viburnum	7-Gallon		48" o.c.	76	Min. 36" ht. x 24" sprd.

1. ALL PLANT MATERIAL SHALL BE FLORIDA NO. 1 OR BETTER.

- ALL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER OR THE LANDSCAPE ARCHITECT.
- 2. MULCH ALL BEDS WITH MIN. 3" SHREDDED CYPRESS MULCH. PULL AWAY FROM SHRUB & TREE STEMS.
- WHERE NUMBERS ON PLANTING PLAN AND PLANT SCHEDULE DIFFER, THE PLANTING PLAN SHALL TAKE PRECEDENCE.
  WHERE SIZES INDICATED DO NOT MATCH CONTAINER SIZE, THE LARGER OF THE TWO SPECIFICATIONS SHALL BE USED.
- 6. SOD ALL DISTURBED AREAS ON THE PROJECT SITE NOT OTHERWISE LANDSCAPED WITH ARGENTINE BAHIA SOD.
- 7. INSTALL ROOT BARRIER PER DETAIL AT RIGHT FOR ALL TREES INDICATED WITH SHADED DOT TO INDICATE 5' OR LESS SEPARATION FROM R.O.W. OR UTILITIES.
- 8. ALL NEW LANDSCAPING WILL BE PROVIDED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM SUPPLIED BY A DEDICATED IRRIGATION METER.

# STREET TREES SHALL BE PLANTED AT THE TIME THE LOT ON WHICH THEY ARE PLACED ARE DEVELOPED.

# **GENERAL NOTES**

- It is expected that appropriate substitutions of plant material with the intent to improve the quality and appearance of the project relative to the availability of material and freeze considerations meet with the approval of the Landscape Architect.
- 2. All sod areas shall be verified on plan and on site.
- 3. It is the responsibility of the Landscape Contractor to follow all guidelines set forth from the Landscape Specifications when provided. All plant materials shall be Florida #1 or better (Florida Fancy) as described in "Grades and Standards for Nursery Plants".
- All specimen trees must meet the specifications provided in the plant schedule and plans. Any substitutions for Specimen Trees must meet with the approval of the Landscape Architect.
   Contact the Landscape Architect for any major site changes which alter landscape
- 5. Contact the Landscape Architect for any major site changes which alter landscape beds or berming areas.

### EARTHWORK

- 1. All site work for rough grading of berms, planters, and planting areas is to be provided by the General Contractor, unless otherwise specified by these plans. Fill for all berms and planters shall be of a suitable, sandy gradation which is porous and percolates well, to insure proper water runoff and drainage. Absolutely no plastic, clayey soil may be used in any planting area.
- 2. The General Contractor shall be responsible for verifying the cubic yard quantities of proposed berms or planter areas.
- 3. The Landscape Contractor is responsible for all final grading of berms, bed areas, and sod areas until acceptable by the Landscape Architect, both before and after landscape installation has begun.
- 4. The Landscape Contractor is to verify soil condition of all planting areas as to pH level and organic stability before planting begins. Recommendations, if any, for improvement to existing soil shall be submitted to Godard Design Assoc. for review and record before installation begins. If soil conditions are found to be unsatisfactory the soil must be amended in accordance with test results and recommendations.
- 5. Any unsuitable material found in landscape beds of berms shall be removed by the General Contractor to a depth of not less than twelve (12) inches and backfilled with said suitable material with reasonable (90%) compaction.
- 6. Any debris, such as wood, concrete, stucco, bricks, etc., shall be removed by the General Contractor and backfilled with suitable mat-erial as described in Item

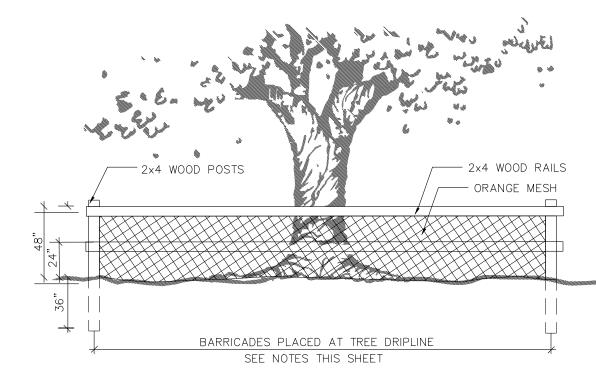
# TREE SPADING CONTRACTOR IS RESPONSIBLE FOR:

- 1. Locating and verifying all existing underground utilities in or near proposed tree locations before any trees are placed, and shall coord-inate closely with respective utility contractors involved in those areas.
- Scheduling tree spading operations in any area before sidewalks or other impassable structures are installed.
- 3. Replacing any tree which has died due to improper transplanting, as directed by the Landscape Architect and\or Owner.
- Watering in and fertilizing all spaded trees, as well as amending the surrounding soil, until said trees are established. Established shall mean when tree shows no signs of shock, lack of water, or overall poor health until such time as normal
- Tree spade contractor shall amend soil in the immediate area of the tree if said soil
  is not acceptable for transplanting. Notify Landscape Architect in writing of
  proposed soil amendments.

watering as supplied by irrigation system can maintain tree in good health.

# LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR: 1. Watering in and guaranteeing all other trees as per

- 1. Watering in and guaranteeing all other trees as per specifications listed on these plans or the written sections.
- 2. Providing mulch, peat, potting soil, and/or fertilizer on site as directed by the plans, specifications, or Landscape Architect.
- Providing positive drainage of all landscaped areas around build-ings, islands, amenities, and other areas negatively affected by poor drainage. This note covers all areas not specified on engineering or landscape grading plans.



# TREE PROTECTION BARRICADE DETAIL

- PROTECT DESIGNATED EXISTING TREES SCHEDULED TO REMAIN AGAINST:
   -UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS

  SKINNING AND PRINCIPLE OF PARK

  OF THE PROTECT OF THE PROPERTY O
  - -SKINNING AND BRUISING OF BARK -SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION OR EXCAVATION MATERIALS WITHIN DRIP-LINE -FOOT OR VEHICULAR TRAFFIC -PARKING VEHICLES WITHIN DRIP-LINE
- 2. ERECT TEMPORARY WOODEN BARRICADES AS SHOWN ON THIS SHEET. BEFORE COMMENCEMENT OF ANY SITE CLEARING OR GRADING. FENCE TO BE 4' HIGH MINIMUM WITH 2 X 4 POSTS AND 2-2X4 RAILS AT 2' AND 4' ABOVE GRADE AND SHALL BE SET DEEP ENOUGH IN THE GROUND TO BE STABLE WITHOUT ADDITIONAL SUPPORT. ALL FENCING SHOULD BE A MINIMUM CLEAR DISTANCE AS NOTED BELOW:

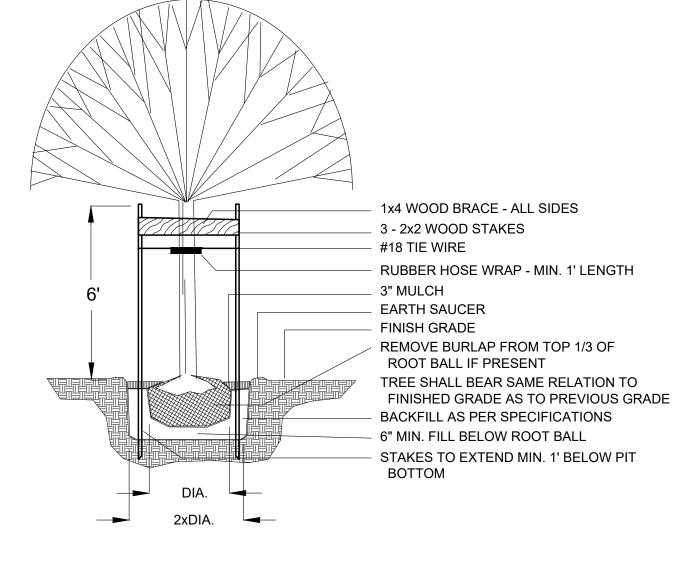
# TREES RECEIVING CREDITS FOR COUNTY APPROVAL

The area surrounding a retained tree described by a radius of one foot for each inch of the tree's diameter at breast height shall constitute the minimum undisturbed area required to receive points for that tree. During development activity, encroachment into the undisturbed area for purposes described in paragraph (a) ay be permitted up to twenty—five percent of the radius or up to fifty percent of the radius on one side, but no closer than six feet to the trunk of the protected tree in all events; provided, pavement, including foundation up to a depth of six inches may be permitted within four feet of the trunk of a protected tree.

- (a) Permitted Activities Within the Undisturbed Area A tree encroachment permit is required for all activities in the undisturbed area except the following:
   1. Tunneled Utility and Irrigation Lines Utility lines that are tunneled beneath tree roots in order to protect roots, rather than trenched.
   2. Sodding and Ground Cover Placement of sod or other ground covers, and the
- preparation of the ground surface for such covers.

  3. Pavement Pavement up to a depth of six inches may be permitted within four feet of the trunk.
- 3. NOTHING SHALL BE PLACED INSIDE OF PROTECTIVE BARRICADES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, MACHINERY, CHEMICALS, OR TEMPORARY SOIL DEPOSITS. WHEN PAVING, EXCAVATION, OR HARDSCAPE MUST BE DONE WITHIN BARRIERS, BARRIERS SHALL BE MOVED BACK TO A SECONDARY LOCATION AT EDGE OF WORK. EXTRA CARE MUST BE TAKEN AT THIS TIME BY THE CONTRACTOR TO INSURE THAT NO DAMAGE TO THE TREE OCCURS.
- 4. PROVIDE WATER TO TREES AS REQUIRED TO MAINTAIN THEIR HEALTH DURING CONSTRUCTION WORK.
  5. NO GRADE CHANGES ARE TO BE MADE WITHIN THE BARRICADES WITHOUT PRIOR APPROVAL OF THE COUNTY.
- 6. BARRICADES TO BE PLACED AT ALL TREES AS NOTED IN THE CIVIL AND LANDSCAPE DRAWINGS, WHERE INDICATED BY SYMBOLS DO NOT PLACE IN WETLANDS.
- 7. WHERE SHOWN ON THE CIVIL PLANS, SILT FENCING SHALL SERVE THE SAME PURPOSE AS TREE PROTECTION BARRICADES WITH RESPECT TO TREE PROTECTION AND PRESERVATION. THE SAME RESTRICTIONS AS NOTED ABOVE FOR STORAGE FILL, AND EXCAVATION SHALL BE ADHERED TO.

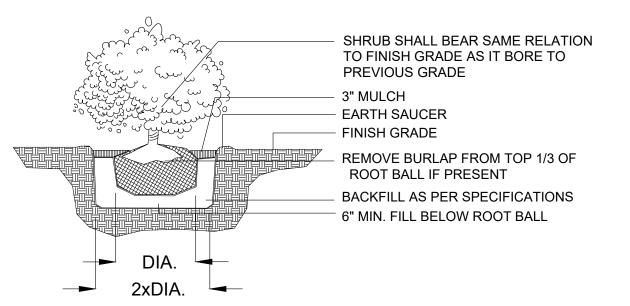
# PLANTING DETAILS



# TREE STAKING DETAIL

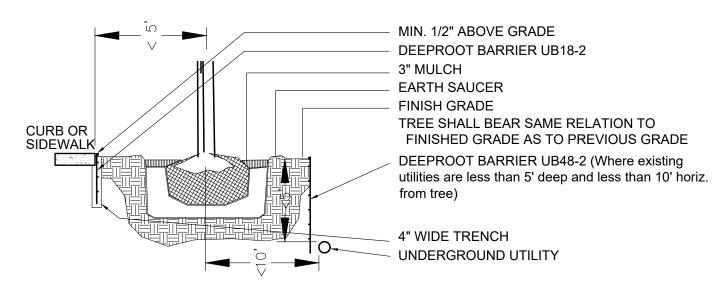
(FOR TREES TO 4" CAL.)

NOT TO SCALE



# SHRUB PLANTING DETAIL

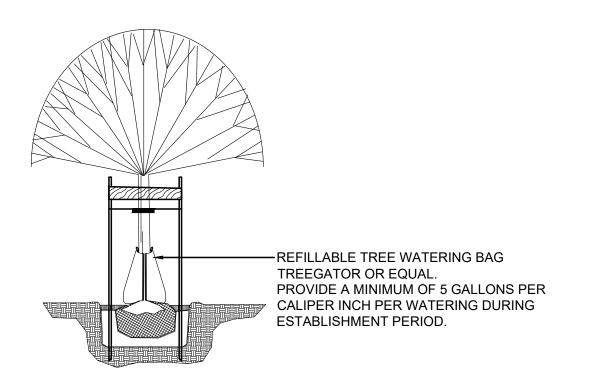
# NOT TO SCALE



# **ROOT BARRIER DETAIL**

# NOT TO SCALE

Follow manufacturer's installation requirements at www.deeproot.com



# TREE WATERING BAG

NOT TO SCALE

# DOMINION ENGINEERING GROUP

GRAYLON OAKS
FOR
AYLON OAKS LAND TRUST

SODARDE

LANDSCAPE ARCHITECTURE / LAND PLANNIN

541 Oleander Street, Neptune Beach, F

www.godarddesign.com LC 0000397

Phone: (904) 247-7729 Fax: (904) 373-91

PLOT DATE:

DRAWN BY: BMG

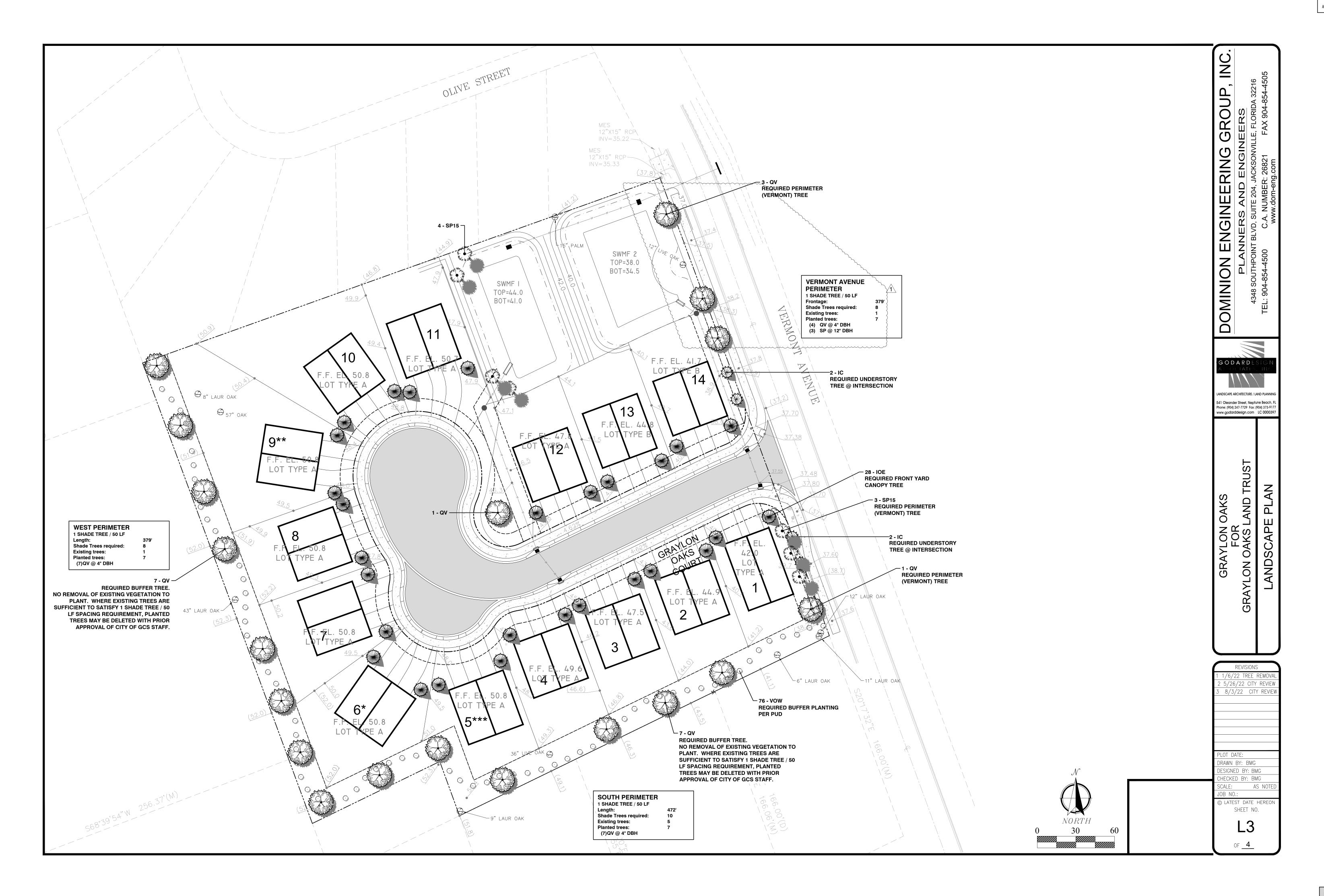
CHECKED BY: BMG

CHECKED BY: BMG
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OAKS

LANDSCAPE ARCHITECTURE / LAND PLANNIN

541 Oleander Street, Neptune Beach,

www.godarddesign.com LC 0000397

Phone: (904) 247-7729 Fax: (904) 373-9

### PART I-GENERAL

### 1.01 DESCRIPTION OF WORK

- A. The work under this section shall include all services, tools, apparatus, materials, labor and other means of construction required for the landscaping work in accordance with drawing and these specifications.
- 1. Lay out beds, tree locations, shrubs and ground cover as shown on the
- 2. The work shall include the preparation of the ground, finish grading, sodding, planting, fertilizing, mulching, preparation and applying peat and fertilizers and all other work required by the drawings and specifications.

### 1.02 APPLICATION DOCUMENTS

- A. The following specifications and standards of the issues listed and referenced to, form a part of this specification to the extent required by the references thereto.
- 1. American Association of Nurserymen, 1949 Edition of Horticultural
- Standards, (635 636 Southern Building, Washington, DC) 2. The Standard Cyclopedia of Horticulture, L.H. Bailey, 1953 Edition, 3
- Volumes by the MacMillian Company, New York, New York. 3. Grades and Standards for Nursery Plants, Part 1 and 11, Department of Agriculture State of Florida Division of Plant Industry Post office Drawer

### PART 2 - GENERAL CONDITIONS

1269, Gainesville, FL 32601.

### 2.01 GENERAL REQUIREMENTS

- A. Approval and Rejection of Materials and Work: The selection of all materials and execution of all operations required under the drawing and specifications shall be subject to the approval of the Landscape Architect. The Landscape Architect or his representative shall have the right to reject any and all work which in his opinion does not meet with the requirements of the specifications at any stage of the operations. All rejected materials shall be removed from the site.
- B. Scientific and Common Names: Attention is called to the fact that the scientific and common names used for the plants required under this contract are generally in conformity with the approved names given in the Standard Plant Names, published by the American Joint Committee on the Horticultural Nomenclature. The names of varieties not included therein are generally in conformity with the names accepted in the nursery trade,
- C. All plants shall conform to the varieties specified in the Plant Schedule. No substitutions of varieties or colors will be allowed without prior written or verbal approval of the Landscape Architect.
- D. All plant materials shall conform to a Florida No. 1 or better (Florida Fancy). Those not listed by "Grades and Standards for Nursery Plants", published by the Division of Plant Industry, shall conform to a Florida No. 1 as to
- Health and vitality
- 2. Condition of foliage
- 4. Freedom from pest or mechanical damage
- 5. Heavily branched and densely foliated according to the accepted normal shape of species of sport.

# 2.02 DEFINITION AND INTENT OF DOCUMENTS

- A. The contract documents consist of the contract agreement, the drawings and the specifications, including all modifications thereof incorporated in the documents before their execution, it is specifically agreed upon that this contract shall be in all aspects constructed and interpreted in accordance with the laws of the state in which it is executed.
- B. The contract documents are complimentary and what is called for by one shall be as binding as if called for by all. The intent of the documents is to include, unless otherwise stated, all labor, materials, equipment and transportation for the proper execution of the work.
- 1. Where there is a conflict between requirements called for in both these written specifications and the drawings, the more strict of the two shall be the contractual obligation, unless specifically noted buy the other.

# 2.03 OWNER'S AUTHORIZED REPRESENTATIVE

A. The Owner shall designate or appoint one (1) person as his representative to work with the Contractor. The Contractor shall be notified in writing of the name and address of this duty appointed representative. This representative shall have full authority to approve work performed by the Contractor, make field changes that are deemed necessary and approve estimate submitted by the Contractor for payment.

# 2.04 LIABILITY OF CONTRACTOR

- A. The contractor shall be liable for any and all damages to property which result from his performance. He shall, with extra cost restore to original condition any areas and/or construction damaged, defaced, disturbed or destroyed by him or his
- B. The contractor shall maintain adequate protection of all his work from damages and shall protect the Owner's and adjacent property from injury or loss arising from this
- C. The contractor shall not be obligated to replace, repair or restore any portion of this work which is damaged, defaced, disturbed or destroyed by others or by the owner and/or which results from Owner's negligence.

# 2.05 TAXES

A. The contractor shall pay all Federal. State and local sales and use tax applicable to materials, processes or devices purchased or used in connection with the work under this contract.

# 2.06 EXAMINATION AND VERIFICATION OF DRAWINGS AND SITE

A. It shall be the contracting installer's responsibility to report to the Owner's Representative any deviations between drawings, specifications, and the site. Failure to do so prior to installing of the plant material and resulting in replacing and/or relocating same shall be done at the contractor's own expense.

# 2.07 ORDINANCES AND REGULATIONS

A. All local, municipal and state laws and rules and regulations governing or relating to any portion of this work are hereby incorporated into and made a part of these specifications and their provisions shall be carried out by the contractor. Anything contained in these specifications shall not be construed to conflict with any of the above mentioned Rules and Regulations or requirements, and where the Rules, Regulations or Specifications and/or drawings call for or describe materials, workmanship or construction, or a better quality, higher standard or larger size, these specifications and/or drawings shall take precedent over the requirements of said rules, regulations or codes.

# 2.08 MATERIALS AND WORKMANSHIP

A. Whenever any material is specified by name or number thereof, such specification shall be deemed to be used for the purpose of facilitating a description of the materials and establishing quality, and shall be deemed and construed to be

- followed by the word "OR APPROVED EQUAL." No substitution will be permitted which has not been submitted for prior approval by the Owner's Representative. All materials shall be new and without flaws or defects and shall be the best of their class and kind. Sufficient literature and/or samples must be furnished for any materials submitted as "equal" substitutes. All materials shall be guaranteed for a period of one (1) year against material defects and workmanship.
- B. All materials and equipment shall be installed in a neat and workmanlike manner. The Owner's Representative reserves the right to direct the removal and replacement of any items, which in his opinion shall not represent an orderly and reasonably neat workmanlike appearance, provided such work can be properly installed in such and orderly way, by the usual methods in such work, Such removal and replacement shall be done, when directed in writing, at the Contractor's expense without additional cost.

### 2.09 PROJECT INSPECTION

A. It is the intention of these specifications, together with the accompanying drawings to accomplish the work in an efficient and satisfactory manner according to the workmanlike standards established for the nursery industry. Notwithstanding is the fact that these specifications and drawings may be deficient in setting forth a complete detailed description of the work to be done.

### 2.10 RECORD DRAWINGS

- A. The Owner will furnish the Contractor with two sets of blueline prints, showing all work required under this contract, for the purpose of having the Contractor record on one set of prints all changes that may be made during actual installation of the
- B. After final acceptance of the completed installation, the contractor shall be responsible for having complete drawings prepared showing all such changes and these shall be turned over to the Owner for recording purposes.

### 2.11 MATERIAL STORAGE AND CLEANUP

A. The contractor shall keep the premises free from rubbish and debris at all times and shall arrange for this storage so as not to interfere with Owners operation of the job. All unused materials, rubbish and debris shall be removed from the site.

### 2.12 EQUIPMENT, TOOLS AND LABOR

A. The Contractor shall furnish all such equipment, tools and labor necessary to push work, in an acceptable manner, to a speedy completion. This contract is based on the Contractor furnishing and using his equipment, tools and labor which are suitable to carry out this contract in a first class manner, unless otherwise hereinafter

# 2.13 CHANGES OR ADDITIONAL WORK

- A. The Owner may, without invalidating the original contract, order such changes or additions as may from time to time be deemed desirable or necessary. In doing so, the contract price shall be adjusted to the mutual agreement of the contractor and the Owner, with all work being done under the conditions of the original contract. except for such adjustments in price and in extension of time as may be necessary.
- B. The contractor shall bring to the attention of the Owner's Representative changes which may necessitate deviation(s) in construction form the original plans by other contractors on the job. Changes in price caused by such deviation(s) shall be agreed upon by both Contractor and Owner's Representative before work proceeds.

# PART 3 - MATERIALS

# 3.01 GENERAL

- A. Topsoil: Planting areas may use existing soil on the site as long as it has been cleared of unsightly underbrush and their roots, limbs, buried construction debris. pockets of clay, rocks and other extraneous matter.
- B. Unsuitable Soil Conditions: Absolutely no plastic or clayey soil is to be used in any planting landscape areas. If such a condition is found, it is to be removed to a depth of 3 feet and 1 foot outside of said planting bed. This area is to be backfilled with materials of suitable sandy gradation which is porous and percolates well with reasonable compaction. If any planting or sod area has a plastic or clayey soil condition which does not allow for proper drainage, then a system of underdrain, turf drain or some other means of releasing underground standing water must be incorporated under the direction of the Landscape Architect and Owner.
- C. Soil Tests: The landscape contractor is to test all soil conditions of all existing planting areas, or areas backfilled or composed primarily of existing soil where contents or PH is not previously known, as to its PH and organic content before planting to be sure all unsuitable material has been removed as per 3.1 B. Before any soil addenda are added to the soil, a soil test shall be taken to determine the type and amount of PH controlling materials needed to bring the soil to PH rating of 6.0. Results of soil tests shall be submitted to the Landscape Architect of his representative prior to application of soil addenda.
- 1. Soil samples shall be taken from 5 different locations throughout the work area. Samples may not be taken closer than 50 feet from any other samples
- 2. Samples shall be mixed and tested accordingly.

- 1. Slow-release commercial fertilizer 866 formula: 50% nitrogen requirement shall be derived from organic sources and the secondary plant foods consisting of 4.5% potash-magnesia, 0.5% manganese sulfate, 0.5% copper sulfate, .05% borax.
- 2. Wetable Sulphur: Shall be finely ground dusting or wetable but must pass a 375 mesh screen, Analysis of sulphur must be between 90% and 93%. 3. Iron Sulfate: Analysis of 18% to 19% metallic iron.
- 4. Guarantee of Fertilizer Analysis: Before delivery of fertilizer is made, the contractor shall submit the manufacturer's statement of analysis of the fertilizer indicating the properties of organic matter and the availability of the plan food. The fertilizer is to be delivered to the site in the original containers unopened and bearing a guaranteed analysis fulfilling the required specifications.
- E. Superabsorbent: White "Terra-Sorb AG" synthetic acrylamide co-polymer crystals with a particle size of 1 to 3 mm, available from Seedsmiths, 781-9400; Jacksonville, Florida, or approved equal.
- F. Mulch: Mulch shall consist of either pine straw or cypress (Grade A). Cypress mulch will be placed in all planting beds, planters or any other area whether or not specified on the plans. Pine straw is to be placed in all natural areas or any other area specified on the plan. All mulch is to be clean, bright and free of weeds, moss, sticks, sapwood, chips or other debris. Ali mulch is to be installed evenly to a depth as notedon the drawings and cover all areas of the planting beds, etc.
- G. Water: Water used for landscaping is to be from Owner provided sources. Water for planting occurring prior to final operation of irrigation system shall be supplied by the Contractor at no cost to the Owner,

# 3.02 TOPSOIL MIXTURE

A. All topsoil which is used to replace existing soil in tree, shrub and ground cover beds for planting operations as labeled shall be of similar organic content and PH as the existing surrounding soil. Where a topsoil mixture is specifically called for, it shall be prepared and conditioned as follows. These operations shall only be made after consulting with Landscape Architect.

- 1. Mix one part by volume peat and two parts by volume of existing soil and five pounds of 75% organic 6-6-4, 59-8 fertilizer and five pounds of commercial 50% organic 6-6-6 fertilizer to each cubic vard of the mixture. Add wetable sulfur and iron sulphate in quantities necessary to bring the soil to PH rating
- 2. Fill material for berm areas is to be provided by General Contractor unless otherwise directed by Landscape Architect.

### 3.03 PLANT MATERIAL

- A. Quantity and Size: All plants and trees shall be Florida No. 1 or better, as defined in and in accordance with "Horticultural Standards" (latest edition) of the rules and grading adopted by the American Association of Nurserymen and "Grades and Standards for Nursery Plants". All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free from insect infestations. Any tree with weak, thin trunks not capable of supporting itself when planted in the open will not be accepted. The minimum acceptable size of all plants, measured before pruning, with branches in normal position, shall conform to dimensions as shown in the Plant Schedule. Specific container sizes, when noted, may be used only when the minimum container size equals the minimum size indicated in the Plant Schedule. Reasonable effort shall be made to locate specific sizes. Smaller sizes may be acceptable only after notification of and approval by Landscape Architect. Larger plants of equal quality may be accepted at no additional cost to the Owner. Specimen trees may be specified to be installed by others at the direction of the Landscape Architect.
- B. Balled Plants: Plants that are balled and burlapped (B&B) shall be adequately balled with firm natural balls of soil sized as set forth in "Horticultural Standards". Balls shall be firmly wrapped in burlap or equal approved strong cloth. No balled plant shall be planted if the ball is cracked or broken before or during the process of planting.
- C. Balled and Wired Plants: Plants that are wire balled and burlapped (WB&B) shall be dug with solid balls of adequate size, the balls securely wrapped with heavy burlap or equal and tightly bound with mesh.
- D. Container Grown Plants: Plants that are container grown shall have been grown in pots, cans, tubs or boxes and shall have sufficient roots to hold earth together intact after removal from containers without being rootbound.
- E. Options as to Methods: Any plant may be furnished container grown instead of balled if all other requirements as met.
- F. Protection Against Drying Out: All plants shall be handled so that roots will be adequately protected at all times from drying out and from other injury. the balls or balled plants which cannot be planted immediately on delivery shall be well protected with soil or other acceptable material.
- G. Plant Labels: Durable, legible labels, stating in weather resistant ink or equal, the correct plant name and size, specified in the plant list, shall be securely attached to all plants, bundles and/or containers or plant material delivered at the planting site, for the purpose of inspection and planting identification.

### PART 4 - WORKMANSHIP AND INSTALLATION

- 4.01 SPECIAL TREATMENT AND HANDLING FOR SPECIMEN PLANTS
- A. Trees and shrubs for isolated specimen planting shall be selected for shape and symmetrical branching habit which at maturity will produce a strong, full-foliaged tree, bush or other specimen. Particular care shall be exercised in the digging, binding and wrapping of such specimens to assure safe loading, shipment and handling or the entire operation of transportation from growing location to the replanting locations shown on the drawings and in Plant Schedule.

# 4.02 SOIL TESTS

A. Four (4) weeks prior to planting operations, test existing soil for pH and submit report from the University of Florida Extension (IFAS) Soil Testing Laboratory. Collect soil samples in accordance with recommendations of the Laboratory. A soil test kit may be obtained from the County Extension Service

# 4.03 GUYING AND STAKING

- A. All trees shall be guyed or staked according to the details provided in the drawings.
- I. Hose: Hose shall be suitable garden hose not less than 1/2" inside diameter. 2. Stakes: Stakes for supporting trees and palms shall be of sound wood of uniform size, creosoted or pressure treated by an approved process. Stakes shall not be less than 2 inches by 4 inches nominal dimensions and not less than 2-1/2 feet in length for guying and not less than 9 feet for staking, and shall be in all cases of sufficient dimensions and length to satisfactorily and
- firmly guy each tree 3. Wire: Wire shall be galvanized pliable, zinc-coated iron not less than No. 12
- 4. Turnbuckles: Turnbuckles for guying trees shall be galvanized or cadmiumplated and shall be of adequate size and strength to properly maintain tight
- 5. Option of Contractor: at the option of the contractor, the staking and guying of trees may be omitted. The Contractor assumes all responsibility if he does not stake or guy.
- B Water in Trees: All trees, whether balled container or spaded, shall be watered in properly, immediately after planting. A water hose is to jet water around the perimeter of the ball at least in three separate places. Watering is to continue until all air pockets have been filled. Additional fill may be needed to bring fill to proper height. Retamp for compaction and grade.
- C. Tree Spading Operations (by outside contractor supervised by Landscape
- 1. Spades will be of sufficient size comparable to trunk caliper so as not to damage the root system.
- 2. Trees are to be set so as not to have any part of the root ball side exposed. If this occurs then the tree spade contractor is responsible for adding additional fill and hand grade to match existing slope. Landscape logs may be used by the contractor if the conditions warrant as directed by the
- Landscape Architect 3. Immediately after spading the tree it is to be watered in properly and a water dish built to retain the water around the root ball.

# 4.04 PLANT SCHEDULE

- A. The species, size, color or other specific requirements to be furnished, and the number of plants required to complete the planting as indicated on the Landscape Plan are given in the Plant Schedule.
- 1. All dimensions given under the plant schedule shall be the minimum acceptable sizes, unless otherwise approved per 3.3.A.

# 4.05 INSPECTION OF PLANTS

A. The contractor shall be responsible for all certificates of inspection of plant materials that may be required by Federal, State or other authorities to accompany shipment of plants. All plants shall be subject to inspection and approval by the Landscape Architect at any place and at any time. Part of the plants required for the work may be inspected at the place of growth but inspection should not in any way impair the right of rejection at the site. All plants must be inspected and approved before they are planted. All plants that are rejected shall be immediately removed from the site.

### 4.05 PLANTING SEASON

A. The planting of plant materials may proceed at any time or period or season agreed upon by the Landscape Architect or his representative as being satisfactory.

### 4.07 GRADING PREPARATIONS

- A. Before the preparations of the planting area begin, all barricades around the remaining trees and other protective areas shall be removed by the Landscape
- B. The finish grade of all planting areas shall be 2-1/2" below the top of abutting curbs, walks, paving and abutments.
- C. The General Contractor is responsible for removing all construction debris in any areas to be landscaped at least one day prior to the Landscape Contractors schedule of preparation for landscaping. No debris such as boards, drywall, paint containers, metal bands, pipe, cardboard boxes or any other item which may cause the Landscape Contractor any delayed time, shall be left on the site.

### 4.08 GRADING

plans and stock pile on job, if feasible.

A. General Contractor is to verify exact amount of fill needed as shown on civil grading

- B. All fill for berming, landscaping areas such as planters, planting beds and in curb islands shall be of suitable construction material.
- C. Absolutely no clay, mulch, gumbo or sandy clay may be used. Suitable material will
- D. Any unsuitable material found in the above landscaping area will be removed to a depth of three feet and one foot outside the planting bed perimeter, then will be filled with suitable material to reasonable compaction.
- E. Rough grading and intermediate rough grading will be done by the General Contractor. Fine grading will be done by the Landscape Contractor.

consist of only clean sand, porous gradation.

- 1. Rough grading is the placement of all dirt in designated areas (including planters), balanced to rough grade and shaped to the general intent of the
- plans as directed by the Landscape Architect 2. Intermediate rough grading is that work which is needed, by request of the
- Landscape Architect, to repair all erosion problems on site, including washouts, into the lake, roadway or around building pads. 3. Fine grading is that work which will be done by the Landscape Contractor
- exclusively. This work consists of hand grading all areas for sodding, all berms that have been properly balanced and shaped by the General Contractor under rough grading. 4. If fine grading has been completed and severe erosion has taken place
- before sod or plant material has been installed, then intermediate rough grading will be requested and approved by the Landscape Architect and the work shall be the responsibility of the General Contractor 5. If severe erosion has taken place after sod or plant material has been

installed, then intermediate rough grading will be requested and approved

by the Landscape Architect and the work will be the responsibility of the

# General Contractor. 4.09 PLANTING OPERATIONS

- A. Laying Out Plant Locations: Locations for all plants and outlines for planting areas shall be staked or appropriately laid out on the ground prior to digging pits. Before plants are set, orientation of plant faces, foliage and branchings shall be adjusted for best views.
- B. Preparation of Plant Pits: All pits shall be circular in outline, at least twice the width in diameter than that of the plant and excavation shall have near vertical sides. The specified for excavation of plant pits shall be the depths below the finished grades and shall be increased as much as may be necessary to accommodate a bed of the topsoil mixture as specified herein beneath the ball of roots
- C. Obstruction Below Ground: any extraneous matter shall be removed to the depths necessary to permit proper installation of planting. If obstruction is not feasible. remove. The Landscape Architect is to be notified and he is to make adjustment of the plant material.

# 4.10 SETTING PLANTS

- A. Shrubs and Ground Covers: All plants except as otherwise specified, shall be centered in pits. Deep planting shall be avoided and unless otherwise specified or directed, all plants shall be set at such a level that after settlement, they will bear the same relation to the required grade as they have to the natural grade before being transplanted. Make adjustments of position of plants where necessary and prior to complete planting.
- B. Compact topsoil mixture, as specified, around balls or roots the full diameter of plant pit and water thoroughly and form a ridge of soil around edge of pit to form a saucer.

A. All plant materials shall be trimmed and shaped to provide for the desired effect when indicated on plan. All pruning shall be in accordance with standard modem

# horticultural practice. 4.12 SHRUB & TREE PLANTING

- A. Shrubs, B&B 3 gallons and larger, shall be planted in pits, at least 2 times greater in diameter than the ball of earth. The depth of the pits shall be as deep as necessary to permit the required 6 inches of topsoil mixture beneath the ball and to accommodate the ball or roots when the plant is set to the required grade Backfill with topsoil mixture as specified and thoroughly settle by tamping and watering. A mound of soil shall be formed around each plant so as to produces a shallow
- B. Where required by the plans, spread superabsorbent around new trees only, at a rate recommended by the manufacturer for rapid growth / new plantings. Uniformly spread throughout a 6 foot diameter area centered on each tree. Omit the superabsorbent, if the tree is within an area with a normal high water table.

# 4.13 GROUND COVER PLANTS

- A. Plants planted at a spacing of up to 18 inches and plants of smaller size shall be treated as ground cover plants.
- B. Preparation of top six inches (6") of planting soil shall be prepared as follows (unless
- noted otherwise in Plant Schedule): 1. Fine grade to remove all extraneous matter.
- 2. Spread three inches (3") of peat moss or humus uniformly over entire ground cover area.
- 3. Spread the 50% organic fertilizer at the rote of 40 pounds per 1,000 square feet uniformly over the ground cover area. 4. Spread the 75% organic fertilizer at the rate of 25 pounds per 1,000 square
- feet uniformly over the ground cover area. 5. Rotor mix or mix by other method to a depth of six inches (6"). 6. Regrade to the finished grade before mulching.
- 7. Plant beds that have a spacing of plants that is 12" or less may be mulched before planting. 8. Thoroughly water and firm the plants into the ground cover mixture.

C. Plants shall be oriented so that the spread on the plants will uniformly cover the space between them.

- A. The finish level of all grass areas after settlement shall be one inch below the top
- B. The sub-grade soil shall be loosened by roto-tillier or other approved method to a minimum of six inches and graded to remove all ridges and depressions so that it will be after settlement everywhere parallel to and at the proper level to provide finished grades specified hereinbefore. All stones over two inches in dimensions,
- C. Soil Tests: Before any soil additives are applied to the soil, a soil test shall be taken to determine the type and amount of PH controlling materials needed to bring the soil to a PH rating of 6.0. Results of soil test shall be submitted to the Landscape Architect or his representatives prior to application of soil additives.
- F. Solid sod shall be sufficiently thick to secure a dense stand of live grass and shall be free from weeds or undesirable grasses. At the time the sod is cut, the grass
- G. Thickness shall be as uniform as possible, approximately 1-1/2 inches or more, depending on the nature of the sod, so that practically all the dense root system of the grasses will be retained, but exposed in the sod strip, and so that the sod can
- H. Sod shall be watered before lifting and in sufficient quantities to provide a well moistened condition of the sod, full depth to which it is to be cut.
- I. The sod shall be live, fresh and uninjured at the time of planting. It shall be planted as soon as possible after being dug and shall be shaded and kept moist from the time it is dug until is planted. The sod shall be approved by the Landscape Architect
- J. Sod shall be laid with broken joints and fitted together to form a uniform neat blanket effect. All poor grass, light spots and trash shall be cut out of the sod and patched
- K. Watering: The grassed areas shall be kept in moist condition for a least two weeks after it is planted and as long as required for a stand of grass.
- L. Patching: Weed sodded areas which have to be removed and replaced will be done so by cutting out the affected area - graded to a depth equal to bottom of existing sod adjacent and replaced tightly to form a uniform carpet not noticeable whether the grade is flat or on a slope.

### 4.15 MULCHING

- A. After all plants in a group or in a plant bed have been set and approved, the areas between plants shall be cultivated and raked to an even grade to conform to the required premulching finish grades. All plant beds and plant saucers shall then be uniformly covered with three-inch layer of cypress bark, or as specifically noted on
- B. Trees which are not located in plant beds shall be mulched to 3' radius from center
- C. Ground cover plants (spacing of more than 12 inches) shall be set in the plant beds

# PART V - FINAL COMPLETION AND ACCEPTANCE

# 5.01 CLEAN-UP AND PROTECTION

- materials and equipment due to landscape operations.
- determine the condition of plant materials. All plants not in a healthy, growing condition as determined by the Landscape Architect or his representative shall be removed from the site and promptly replaced with plants of the like, kind and size in the same manner as specified for the original planting, at no additional cost to the
- B. At the conclusion of this final inspection, if the Landscape Architect or Owner has reason to believe that the plants are not of the specified grade, he will request a regrading inspection by the Division of Plant Industry, and such evidence will be the basis for requesting replacement of plants, and for legal or other action taken by the

# Division of Plant Industry according to law, should this become necessary.

A. The Contractor shall not be held responsible for replacement or repairs of plants or planting areas killed or damaged by hurricanes or Acts of God provided he shall

# have taken all reasonable precautions to minimize their damage.

5.05 HARM TO PLANT MATERIAL which is harmed by foot traffic, ladders in beds, paint brush cleaning, spillage of chemicals in landscaped areas, heavy equipment traffic, construction debris left

# (End of Section)

# 4.14 SODDING

- abutting curbs, walks, paving and wood borders to allow for the building of turf.
- sticks, debris and other extraneous matter shall be moved during this operation.
- D. Correcting PH: Apply the necessary material to correct the PH.
- E. After preparation of subsoil, commercial fertilizer 6-6-6 50% organic shall be applied on all grass areas at the uniform rate of 20 pounds per 1,000 square feet.
- shall not have a length of more than two inches.
- be handled without undue tearing or breaking.
- with good sod.

- before mulching is applied to these areas.

- A. Upon completion of the work, the grounds shall be cleared of all debris, superfluous
- B. The Contractor shall protect all work included under his contract against trespassing and damage of any kind until final inspection and acceptance. If any material is

# injured it shall be treated, repaired or replaced as required. 5.02 FINAL INSPECTION

A. At the conclusion of the planting, a final inspection of the work will be made to

5.03 HURRICANE DAMAGE OR ACTS OF GOD

# 5.04 GUARANTEE A. All plants, ground cover materials, trees and palms shall be guaranteed for a period

A. The General Contractor is. responsible for damage to any plant materials or sod laying, roofing materials or any other circumstances which is obviously the result of construction work aftermath.

of one (1) year after final inspection and acceptance by the Owner.

OT DATE: RAWN BY: BMG ESIGNED BY: BMG HECKED BY: BMG AS NOT OB NO.: ) LATEST DATE HEREOI SHEET NO.

REVISIONS

/6/22 TREE REMOV/

5/26/22 CITY REVIEW

8/3/22 CITY REVIEW

Item # 3.



FOR OFFICE USE ONLY	
P Z File #	
Application Fee:	
Filing Date:Accepta	nce Date;
Review Date: SRDTP & Z	_cc

FUL	Rezoning Application
A. PRO	JECT Project Name: Graylon Oaks
	Graylon Oaks Court
2.	Address of Subject Property:
3.	Parcel ID Number(s):
4.	Existing Use of Property: Residential
5.	Future Land Use Map Designation : Neighborhood
6.	Existing Zoning Designation: PUD
	Proposed Zoning Designation: PUD
7.	Proposed Zoning Designation:
8.	Acreage: 3.8
B. APP	LICANT
1.	Applicant's Status
2.	Name of Applicant(s) or Contact Person(s): John Nicols Title: Trustee
	Company (if applicable):
	Mailing address: 1635 Eagle Harbor Pkwy
	City: Fleming Island State: FL ZIP: 32003
	Telephone: ( 904-264-1665 FAX: ( ) e-mail:
•	If the applicant is agent for the property owner*
3.	Name of Owner (titleholder):):
	Mailing address:
	City: State: ZIP:
	Telephone: (904-264-1665 FAX: ( ) e-mail:
	st provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner,
C. ADD	ITIONAL INFORMATION
	1. Is there any additional contact for sale of, or options to purchase, the subject property?
	□Yes □No If yes, list names of all parties involved:
	If yes, is the contract/option contingent or absolute? □Contingent □Absolute

### D. ATTACHMENTS

- Statement of proposed change, including a map showing the proposed zoning change and zoning designations on surrounding properties
- 2. A current aerial map (Maybe obtained from the Clay County Property Appraiser.)
- 3. Plat of the property (Maybe obtained from the Clay County Property Appraiser.)
- 4. Legal description with tax parcel number.
- 5. Boundary survey
- 6. Warranty Deed or the other proof of ownership
- Site Plan
- 8. Written Description
- 9. Binding Letter
- 10. Fee.
  - \$2,000 plus \$20 per acre

MY COMMISSION # HH 401995 EXPIRES: August 20, 2027

b. All applications are subject 10% administrative fee and must pay the cost of postage, signs, advertisements and the fee for any outside consultants.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 10 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge: Signature of Co-applicant Signature of Applicant JOHN NICHOLS, TRUST ER Typed or printed name of co-applicant Typed or printed name and title of applicant 3-3-25 Date Date FWRIDA CLAY County of day of MARCH , 2025 by JOHN NICHOLS The foregoing application is acknowledged before me this 3 who is/are personally known to me, or who has/have produced\_ as identification. **NOTARY SEAL** Signature of Notary Public, State of \_\_\_Fvor DA PAUL F. SVENDSEN

### ORDINANCE NO. O-05-2020

AN ORDINANCE OF THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA REZONING ±3.8 ACRES OF **PROPERTY** LOCATED ON VERMONT IDENTIFIED AS TAX ID NUMBERS 017642-000-00 AND 017648-000-00, MORE PARTICULARLY DESCRIBED BY EXHIBIT "A" AND SHOWN IN EXHIBIT "B", FROM R-TO PUD, PLANNED UNIT DEVELOPMENT, SPECIFICALLY DESCRIBED HEREIN AND THROUGH "C" **EXHIBIT** SITE PLAN; **PROVIDING** REPEALER, SEVERABILITY AND SETTING AN EFFECTIVE DATE.

### **RECITALS**

WHEREAS, an application for a site-specific amendment to the Official Zoning Map, as described below, has been filed with the City by Brent White ("Agent") on behalf of Graylon Oaks Land Trust ("Owner"); and

WHEREAS, the Owner desires to obtain approval for a Planned Unit Development ("PUD") in the City known as Graylon Oaks Planned Unit Development ("PUD" or "Project"); and

WHEREAS, the Owner wishes to construct the Project, consisting of a fourteen (14) lot subdivision, at 016742-000-00 & 016748-000-00, the legal description for which is attached hereto as Exhibit "A" and is herein referred to as the "Property"; and

WHEREAS, a duly advertised quasi-judicial public hearing on the proposed amendment was conducted on March 26, 2020 by the Planning and Zoning Board, sitting as the Local Planning Agency (LPA) and the LPA reviewed and considered comments received during the public hearing concerning the application and made its recommendation for approval to the City Council; and

WHEREAS, the City Council considered the recommendations of the LPA at duly advertised quasi-judicial public hearings on April 7, 2020 and April 21, 2020 and provided for and received public participation; and

WHEREAS, the City Council has determined and found said application for the amendment, to be consistent with the City of Green Cove Springs Comprehensive Plan and Land Development Regulations; and,

WHEREAS, for reasons set forth in this Ordinance that is hereby adopted and incorporated as findings of fact, that the Green Cove Springs City Council finds and declares that the enactment of this amendment is in the furtherance of the public health, safety, morals, order, comfort, convenience, appearance, prosperity, or general welfare.

# NOW, THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA AS FOLLOWS:

### Section 1. Findings of Fact and Conclusions of Law.

- 1. The above recitals are true and correct and incorporated herein by reference.
- 2. The proposed site-specific amendment to the Official Zoning Map is consistent with the Comprehensive Plan and Land Development Regulations.
- 3. The amendment will not cause a reduction in the adopted level of service standards for transportation, potable water, sanitary sewer, solid waste, stormwater, recreation, or public schools.
- Section 2. Official Zoning Map Amended. The Official Zoning Map is hereby amended from Single Family Residential R-1 to Planned Unit Development, PUD, for Tax Parcel Numbers 38-06-26-016742-000-00 and 38-06-26-016748-000-00, in accordance with the legal description found in Exhibit "A" and map found in Exhibit "B" attached hereto and incorporated herein.
- **Section 3. Development Parameters.** The development shall follow the parameters set forth in the PUD Written Description found in Exhibit "C", the PUD Site Plan found in Exhibit "D", and the elevations found in Exhibit "E" attached hereto and incorporated herein.
- Section 4. Ordinance to be Construed Liberally. This ordinance shall be liberally construed in order to effectively carry out the purposes hereof which are deemed to be in the best interest of the public health, safety and welfare of the citizens and residents of Green Cove Springs, Florida.
- **Section 5. Repealing Clause.** All ordinances or parts of ordinances in conflict herewith are, to the extent of the conflict, hereby repealed.

Ordinance No. O-05-2020 Page 3 of 14

Section 6. Severability. It is the declared intent of the City Council of the City of Green Cove Springs that, if any section, sentence, clause, phrase, or provision of this ordinance is for any reason held or declared to be unconstitutional, void, or inoperative by any court or agency of competent jurisdiction, such holding of invalidity or unconstitutionality shall not affect the remaining provisions of this ordinance, and the remainder of the ordinance after the exclusions of such part or parts shall be deemed to be valid.

**Section 7. Effective Date.** This Ordinance shall be effective upon its passage and adoption on the second and final reading.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, ON THIS  $7^{th}$  DAY OF APRIL 2020.

CITY OF GREEN COVE SPRINGS,

**FLORIDA** 

Steven R. Kelley, Mayor

ATTEST:

West, City Clerk

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PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, THIS 21<sup>ST</sup> DAY OF APRIL 2020.

CITY OF GREEN COVE SPRINGS,

### **FLORIDA**

Steven R. Kelley, Mayor

ATTEST:

Erin West, City Clerk

APPROVED AS TO FORM:

L. J. Arnold, III, City Attorney

# **EXHIBIT "A"**

#### **LEGAL DESCRIPTION:**

LEGAL DESCRIPTION AS SHOWN ON OFFICIAL RECORD BOOK 2815 PAGE 524
A PARCEL OF LAND SITUATED IN LOT "C", BLOCK 102, PALMER AND FERRIS
TRACT, GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA, ACCORDING TO
PLAT

THEREOF RECORDED IN PLAT BOOK 1, PAGE 44 OF THE PUBLIC RECORDS OF CLAY COUNTY, FLORIDA, SAID PARCEL BONG MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF LOT 1, ST. JOHNS MOBILE HOME VILLAGE, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 7, PAGE 32 OF SAID PUBLIC RECORDS; THENCE ON THE WEST LINE OF VERMONT STREET RUN SOUTH 20 DECREES 17 MINUTES 22 SECONDS EAST. 278.73 FEET TO THE SOUTH LINE OF SAID LOT "C"; THENCE ON SAID SOUTH LINE, SOUTH 64 DEGREE 00 MINUTES 00 SECONDS WEST, 429. 41 FEET TO THE WEST LINE OF SAID LOT "C"; THENCE ON SAID WEST LINE, NORTH 20 DEGREE 14 MINUTES 51 SECONDS WEST 326.09 FEET TO THE: SOUTH LINE OF SAID ST. JOHNS MOBILE HOME VILLAGE; THENCE ON SAID SOUTH LINE. NORTH 70 DEGREES 19 MINUTES 51 SECONDS EAST, 427.07 FEET TO THE POINT OF BEGINNING.

LEGAL DESCRIPTION AS SHOWN ON OFFICIAL RECORD BOOK 2815 PAGE 522 BEGINNING AT THE SE CORNER OF HENRY LENDERS LAND THENCE RUNNING

EASTERLY SIX CHAINS ANO THIRT'I SIX LINKS PARALLEL WITH CYLDEVIEW AVENUE TO VERMONT AVENUE, THENCE ALONG THE WEST SIDE OF VERMONT AVENUE NORTHERLY NINETY-SIX FEET, THENCE WESTERLY SIX CHAINS AND THIRTY-SIX LINKS TO H. LENDERS

EAST LINE, THENCE SOUTHERLY ALONG LENDERS EAST LINE ONE HUNDRED FEET TO THE PLACE OF BEGINNING; CONTAINING ONE ACRE MORE OR LESS, THE SAME BEING A PORTION OF A CERTAIN FOUR ACRE LOT CONVEYED BY WM. THOMPSON CO MRS. M.E. BEMIS BY DEED DATED DECEMBER 21ST, 1883, RECORDED IN BOOK "L" PAGES 605 & 606 OF THE PUBLIC RECORDS OF CLAY COUNTY. FLORIDA.

LESS AND EXCEPT OFFICIAL RECORDS BOOK 3331, PAGE 1520 PARCEL 1
A PARCEL OF LAND SITUATED IN LOT "A" AND LOT "B", BLOCK 102, PALMER AND

FERRIS TRACT, IN THE TOWN OF GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 1 OF THE PUBLIC RECORDS OF SAID COUNTY, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID LOT "A", BLOCK 102, PALMER AND FERRIS TRACT IN THE TOWN OF GREEN COVE SPRINGS, AND RUN NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE SOUTH LINE OF LOT "A",

Ordinance No. O-05-2020 Page 6 of 14

WHICH IS ALSO THE SOUTH LINE OF THE TOWN OF GREEN COVE SPRINGS, FOR A

DISTANCE OF 79.83 FEET TO THE POINT OF BEGINNING: THENCE CONTINUE ON LAST SAID LINE NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, 30.17 FEET; THENCE NORTH 20 DEGREES 00 MINUTES 00 SECONDS WEST, 211.16 FEET; THENCE

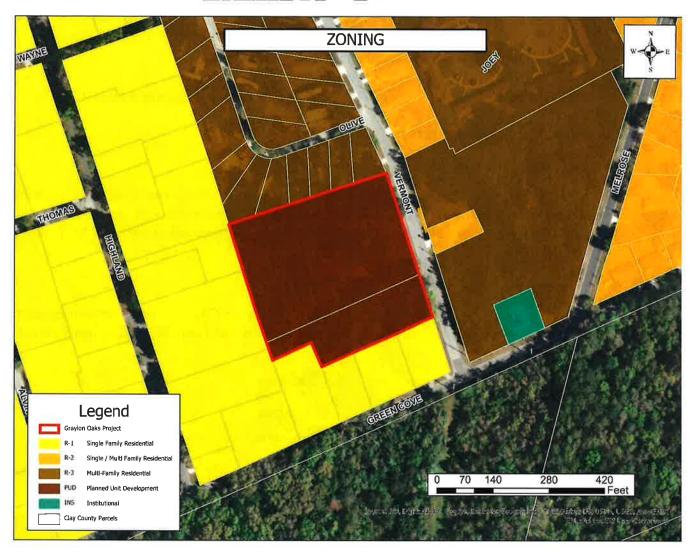
SOUTH 64 DEGREES 00 MINUTES 00 SECONDS WEST, 110. 21 FEET TO THE WEST LINE OF SAID

LOT "B"; THENCE ON LAST SAID LINE, AND ON THE WEST LINE OF SAID LOT "A", SOUTH 20 DECREES 00 MINUTES 00 SECONDS EAST, 100.55 FEET; THENCE NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, 79.83 FEET; THENCE SOUTH 20 DECREES 00 MINUTES 00 SECONDS EAST, 110.61 FEET TO THE POINT OF BEGINNING.

CONTAINING 3.8 ACRES, MORE OR LESS.

SAID LANDS SITUATED, LYING AND BEING IN CLAY COUNTY, FLORIDA.

# **EXHIBIT "B"**



# **EXHIBIT "C"**

#### **PUD Written Description**

Graylon Oaks PUD Written Description

**Type of Development:** 

Two- Family Residential or Single Family Residential

#### **PROPERTY CHARACTERISTICS**

Vegetation, Soils, & Drainage:

Vegetation on the site consists of large oak trees, laurel oaks, cabbage palms, saw palmetto bushes and pine. There are no wetlands onsite. Site has sandy soils throughout with site sloping from west to east to Vermont St. Site has a topography of 51' to the west and dropping to 39' to the east fronting Vermont St.

#### Utilities:

Central water and wastewater service will be provided by the City of Green Cove Springs; electric service will be provided by the City of Green Cove Springs and shall be installed underground.

#### **ACREAGE SUMMARY**

**Total Property** 

3.8 Acres

Wetlands

0 Acres

**DEVELOPABLE** 

3.8 Acres

#### **MAXIMUM UNITS**

Maximum units

30 units

#### Proposed development

#### Residential Single Family & Two- Family Development

The property is consistent with the land use and zoning of the surrounding areas. The character of the proposed development is consistent with those of adjacent multi-family residential developments on Vermont Ave and abutting State Road 16. The parcels directly adjacent to the east and north currently have high-density land use and R-3 zoning. In addition, the subject

property is consistent with other similar properties in the surrounding areas of the city and is in conformity with local land use plans and zoning ordinances. The subject property will also create a much-needed affordable housing neighborhood that will have a great economic and fiscal benefit to the area and the community. The affordable housing community can be achievable by allowing a higher density similar to that of the adjacent properties.

#### **Access**

Access is provided from Vermont Ave. The subdivision will not be gated and roads within the development will be turned over to the city and would meet city requirements.

#### **Proposed Density Standards**

#### Residential-Single Family Dwelling

Minimum Lot Area	5000SF
Minimum Lot Width	50 Feet
Minimum Lot Depth	100 Feet
Minimum Living Area	1200 SF
Maximum Lot Coverage	40%

#### Residential- Two Family Dwelling

Minimum Lot Area	6000 SF
Minimum Lot Width	60 feet
Minimum Lot Depth	100 feet
Minimum required living area	1000 SF
Maximum Lot Coverage	40%

#### Yard Requirements - Primary Structures\*

Front Porch	15 feet
Front Façade	20 feet
Side	7.5 feet; combined 15 feet
Rear	10 feet
Max Building Height- Primary Structures	35 feet

<sup>\*</sup>All corner lots have two front yards. However, structures oriented parallel to a street must have the required front yard on such street, but the front yard on the remaining street may be 15 feet.

#### **Permitted Uses**

- a. Single family detached residential dwelling units
- b. Two family residential dwelling units
- c. Home occupations (pursuant to City Code Requirements)

#### Ingress, Egress and Circulation

- a. Minimum of 2 parking spaces per dwelling unit (4 per duplex). One parking space will be in driveway and one will be in the attached garage.
- b. The dimension of each driveway must be 10' x 20'.
- c. Each unit must include an attached garage at least 10' x 20'.
- d. There will be a 6' sidewalk along proposed street and along Vermont Avenue.

#### Landscaping

Landscaping per Section 113-244 of the Land Development Regulations

- a. Landscape requirements for each one or two-family dwelling (duplex) shall be as follows:
  - 1. At least one canopy tree, 2.5 inches DBH, shall be located in the required front yard of each dwelling unit. Each duplex will have two canopy trees.
- b. Perimeter Landscaping shall be as follows:
  - 1. Provide additional perimeter landscaping along Vermont Avenue with one new shade tree per 50' of road frontage subject to the requirements of Sec. 113-244(d)(3) and installation and maintenance requirements set forth in Section 113-247(b).
  - 2. A minimum of 4 understory/subcanopy trees shall be planted around the intersection of Vermont and the proposed new roadway
  - 3. Provide the following buffer to the south and west of the property:
    - A) Single-Family development:
      - Provide a 10' landscape buffer of one new shade tree every 50 feet
        of width and nine (9) shrubs every 100 feet of width adjacent to
        properties subject to the requirements set forth in Section 113244(d)(3) and installation and maintenance requirements set forth
        in Sec. 113-247(b). Or
      - Provide an opaque privacy fence, 6' in height and a landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape

design requirements set forth in Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

#### B) Two-Family Development:

- Provide a 20' landscape buffer of one new shade tree every 50 feet of width and nine (9) shrubs every 100 feet of width adjacent to properties subject to the requirements set forth in Section 113-244(d)(3) and installation and maintenance requirements set forth in Sec. 113-247(b). Or
- Provide an opaque privacy fence, 6' in height and a landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape design requirements set forth in Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

#### Tree Survey

a. A tree survey measuring trees 12" or greater shall be required as part of the subdivision review. Tree removal mitigation will be required as stipulated in City Code Section 113279

#### **Tree Preservation**

- 1. Trees to be preserved onsite:
  - a. Live Oak Trees
  - b. The rear 20' along the south and west property lines shall be kept in a natural condition with all canopy/shade trees preserved
  - c. Viable shade/canopy trees within 15' of Vermont Avenue shall be preserved.
- 2. Tree protections requirements shall comply with Section 113-248, and in addition: an ISA certified arborist or equivalent horticulture professional shall be hired to evaluate trees to be saved, ensure adequate root area is provided and grade changes are not altered within critical root area, prescribe treatments to preserve the trees and oversee tree protection during the construction process. Trees or branches of trees that are adjacent to or hanging over into adjacent neighboring properties shall be evaluated for safety by the certified arborist and removed or appropriately pruned or other measures as required by the certified arborist.

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#### Miscellaneous

Development requirements not specifically mentioned shall be consistent with all requirements for the City of Green Cove Springs R-2 Zoning district and all other applicable Land Development Code Requirements

#### **Development Plan**

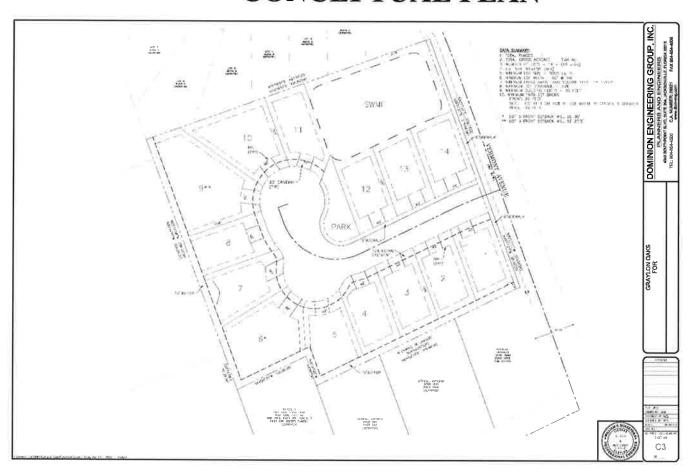
The project will be developed in a single phase. The required right of way buffers shall be constructed by the developer and completed prior to the issuance of a certificate of occupancy for any residential dwelling not constructed as a model unit within the subdivision.

All common areas and stormwater management facilities /drainage areas shall be maintained by a legally established Homeowner's or Property Owner's Association. All finalized legal documents demonstrating the creation of the HOA or POA and its responsibilities must be submitted with the Final Plat submittal for the Graylon Oaks PUD.

Stormwater analysis shall be required with the subdivision application that demonstrates consistency with the City of Green Cove Springs and St Johns River Water Management District requirements.

Regulations regarding Guarantees and Sureties as stipulated in Chapter 101, Article II, Division 5 and Subdivision 5 shall be provided as part of the subdivision approval process.

# EXHIBIT "D" PUD CONCEPTUAL PLAN



Ordinance No. O-05-2020

# **EXHIBIT "E" Elevations**



#### **ORDINANCE NO. 0-06-2025**

AN ORDINANCE AMENDING THE GRAYLON OAKS PLANNED UNIT DEVELOPMENT TO ALLOW FOR PROPOSED DUPLEXES TO BE SPLIT INTO TWO PARCELS PER LOT; AMENDING ATTACHMENT C TO REVISE THE MAXIMUM UNITS TO 28, REVISE THE MINIMUM LOT AREA (PER ATTACHED UNIT) TO 3000 SQUARE FEET, REVISE THE MINIMUM LOT (PER ATTACHED UNIT) WIDTH TO 30 FEET AND TO REVISE THE SIDE SETBACKS TO ALLOW FOR 0 FEET FOR INTERIOR LOTS WITH COMMON WALL LINES; PROVIDING FOR CONFLICTS, SEVERABILITY, AND SETTING AN EFFECTIVE DATE.

WHEREAS, the City Council (the "Council") of the City of Green Cove Springs, Florida (the "City") approved a planned unit development known as Graylon Oaks under Ordinance No. O-05-2020 on April 21, 2020; and

WHEREAS, the City has received a request to amend Exhibit C, to revise the maximum units to 28, revise the minimum lot area (per attached unit) to 3000 square feet, revise the minimum lot (per attached unit) width to 30 feet and to revise the side setbacks to allow for 0 feet for interior lots with common wall lines; and

WHEREAS, the PUD approved for the Rookery in O-05-2020 will be replaced by this ordinance; and

WHEREAS, the City has the authority pursuant to its home rule and other statutory powers to rezone properties within the City; and

WHEREAS, a duly advertised public hearing was conducted on the proposed amendment on April 22, 2025 by the Planning and Zoning Board, sitting as the Local Planning Agency ("LPA") and the LPA reviewed and considered comments received during the public hearing concerning the application and made its recommendation for approval to the City Council; and

WHEREAS, the City Council considered the recommendations of the LPA at duly advertised quasi-judicial public hearings on May 6, 2025 and May 20, 2025 and provided for and received public participation; and

WHEREAS, the City Council has determined and found said application for the amendment to be consistent with the City of Green Cove Springs Comprehensive Plan and Land Development Regulations; and,

WHEREAS, for reasons set forth in this Ordinance that is hereby adopted and incorporated as findings of fact, that the Green Cove Springs City Council finds and declares that the enactment of this amendment is in the furtherance of the public health, safety, morals, order, comfort, convenience, appearance, prosperity, or general welfare.

# NOW, THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AS FOLLOWS:

**SECTION 1. Recitals.** The above recitals are true and correct and are hereby incorporated herein by reference.

**SECTION 2. Graylon Oaks PUD Amended.** The Graylon Oaks PUD, for the real property described in Exhibit "A" hereto, is hereby revised.

**SECTION 4.** That Exhibit "C" regarding the PUD Written Description, is hereby revised and replaced.

**SECTION 5. ORDINANCE TO BE CONSTRUED LIBERALLY.** This ordinance shall be liberally construed in order to effectively carry out the purposes hereof which are deemed to be in the best interest of the public health, safety and welfare of the citizens and residents of Green Cove Springs, Florida.

**SECTION 6. REPEALING CLAUSE.** All ordinance or parts of ordinances in conflict herewith are, to the extent of the conflict, hereby repealed.

**SECTION 5. SEVERABILITY.** It is the declared intent of the City Council of the City of Green Cove Springs that, if any section, sentence, clause, phrase, or provision of this ordinance is for any reason held or declared to be unconstitutional, void, or inoperative by any court or agency of competent jurisdiction, such holding of invalidity or unconstitutionality shall not affect the remaining provisions of this ordinance, and the remainder of the ordinance after the exclusions of such part or parts shall be deemed to be valid.

**SECTION 7. EFFECTIVE DATE.** Upon its adoption by the City Council, this ordinance shall become effective immediately.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, IN REGULAR SESSION THIS 6TH DAY OF MAY 2025.

	CITY OF GREEN COVE SPRINGS, FLORIDA
	Steven R. Kelley, Mayor
ATTEST:	
Erin West, City Clerk	
APPROVED AS TO FORM ONLY:	
L. J. Arnold, III, City Attorney	
	INAL READING BY THE CITY COUNCIL OF SPRINGS, FLORIDA, IN REGULAR SESSION 25.  CITY OF GREEN COVE SPRINGS, FLORIDA
	CITT OF GREEN COVE SI KINGS, FLORIDA
	Steven R. Kelley, Mayor
ATTEST:	
Erin West, City Clerk	
APPROVED AS TO FORM ONLY:	

#### EXHIBIT "A" LEGAL DESCRIPTION

LEGAL DESCRIPTION AS SHOWN ON OEFICIAL RECORD BOOK 2815 PAGE 524

A PARCEL OF LAND SITUATED IN LOT "C", BLOCK 102, PALMER AND FERRIS TRACT, GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA, ACCORDING TO PLAT

THEREOF RECORDED IN PLAT BOOK 1, PAGE 44 OF THE PUBLIC RECORDS OF CLAY COUNTY, FLORIDA, SAID PARCEL BONG MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF LOT 1, ST. JOHNS MOBILE HOME VILLAGE, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 7, PAGE 32 OF SAID PUBLIC RECORDS; THENCE ON THE WEST LINE OF VERMONT STREET RUN SOUTH 20 DECREES 17 MINUTES 22 SECONDS EAST. 278.73 FEET TO THE SOUTH LINE OF SAID LOT "C"; THENCE ON SAID SOUTH LINE, SOUTH 64 DEGREE 00 MINUTES 00 SECONDS WEST, 429. 41 FEET TO THE WEST LINE OF SAID LOT "C"; THENCE ON SAID WEST LINE, NORTH 20 DEGREE 14 MINUTES 51 SECONDS WEST 326.09 FEET TO THE: SOUTH LINE OF SAID ST. JOHNS MOBILE HOME VILLAGE; THENCE ON SAID SOUTH LINE. NORTH 70 DEGREES 19 MINUTES 51 SECONDS EAST, 427.07 FEET TO THE POINT OF BEGINNING.

LEGAL DESCRIPTION AS SHOWN ON OFFICIAL RECORD BOOK 2815 PAGE 522

BEGINNING AT THE SE CORNER OF HENRY LENDERS LAND THENCE RUNNING

EASTERLY SIX CHAINS ANO THIRT'I' SIX LINKS PARALLEL WITH CYLDEVIEW AVENUE TO VERMONT AVENUE, THENCE ALONG THE WEST SIDE OF VERMONT AVENUE NORTHERLY NINETY-SIX FEET, THENCE WESTERLY SIX CHAINS AND THIRTY-SIX LINKS TO H. LENDERS

EAST LINE, THENCE SOUTHERLY ALONG LENDERS EAST LINE ONE HUNDRED FEET TO THE PLACE OF BEGINNING; CONTAINING ONE ACRE MORE OR LESS, THE SAME BEING A PORTION OF A CERTAIN FOUR ACRE LOT CONVEYED BY WM. THOMPSON CO MRS. M.E. BEMIS BY DEED DATED DECEMBER 21ST, 1883, RECORDED IN BOOK "L" PAGES 605 & 606 OF THE PUBLIC RECORDS OF CLAY COUNTY. FLORIDA.

LESS AND EXCEPT OFFICIAL RECORDS BOOK 3331, PAGE 1520 PARCEL 1 A PARCEL OF LAND SITUATED IN LOT "A" AND LOT "B", BLOCK 102, PALMER AND

FERRIS TRACT, IN THE TOWN OF GREEN COVE SPRINGS, CLAY COUNTY, FLORIDA, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 1 OF THE PUBLIC RECORDS OF SAID COUNTY, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHWEST CORNER OF SAID LOT "A", BLOCK 102, PALMER AND FERRIS TRACT IN THE TOWN OF GREEN COVE SPRINGS,

AND RUN NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, ALONG THE SOUTH LINE OF LOT "A",

WHICH IS ALSO THE SOUTH LINE OF THE TOWN OF GREEN COVE SPRINGS, FOR A

DISTANCE OF 79.83 FEET TO THE POINT OF BEGINNING: THENCE CONTINUE ON LAST SAID LINE NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, 30.17 FEET; THENCE NORTH 20 DEGREES 00 MINUTES 00 SECONDS WEST, 211.16 FEET; THENCE

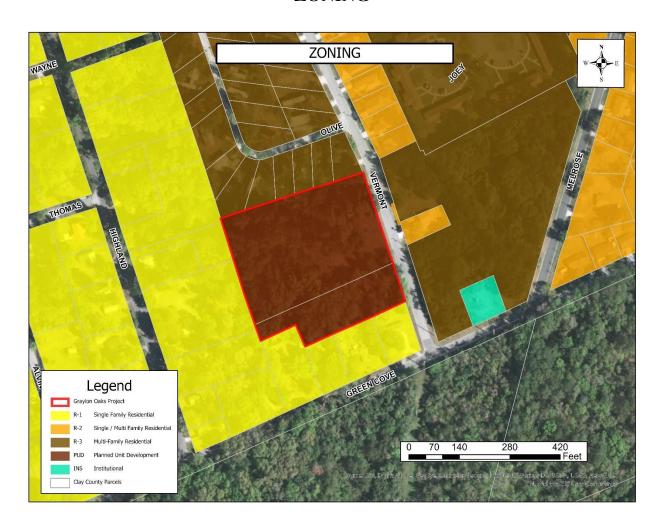
SOUTH 64 DEGREES 00 MINUTES 00 SECONDS WEST, 110. 21 FEET TO THE WEST LINE OF SAID

LOT "B"; THENCE ON LAST SAID LINE, AND ON THE WEST LINE OF SAID LOT "A", SOUTH 20 DECREES 00 MINUTES 00 SECONDS EAST, 100.55 FEET; THENCE NORTH 64 DEGREES 00 MINUTES 00 SECONDS EAST, 79.83 FEET; THENCE SOUTH 20 DECREES 00 MINUTES 00 SECONDS EAST, 110.61 FEET TO THE POINT OF BEGINNING.

CONTAINING 3.8 ACRES, MORE OR LESS.

SAID LANDS SITUATED, LYING AND BEING IN CLAY COUNTY, FLORIDA. EXHIBIT "B"

# EXHIBIT "B" ZONING



# EXHIBIT "C" PUD WRITTEN DESCRIPTION

**PUD WRITTEN DESCRIPTION** 

#### Type of Development: Two- Family Residential

#### **PROPERTY CHARACTERISTICS**

Vegetation, Soils, & Drainage:

Vegetation on the site consists of large oak trees, laurel oaks, cabbage palms, saw palmetto bushes and pine. There are no wetlands onsite. Site has sandy soils throughout with site sloping from west to east to Vermont St. Site has a topography of 51' to the west and dropping to 39' to the east fronting Vermont St.

#### **Utilities**:

Central water and wastewater service will be provided by the City of Green Cove Springs; electric service will be provided by the City of Green Cove Springs and installed underground.

#### **ACREAGE SUMMARY**

Total Property	3.8 Acres
Wetlands	0 Acres

DEVELOPABLE 3.8 Acres

#### **MAXIMUM UNITS**

Maximum units  $\frac{2830}{}$  units

#### Proposed development

#### Residential Single Family & Two- Family Development

The property is consistent with the land use and zoning of the surrounding areas. The character of the proposed development is consistent with those of adjacent multi-family residential developments on Vermont Ave and abutting State Road 16. The parcels directly adjacent to the east and north currently have high-density land use and R-3 zoning. In addition, the subject property is consistent with other similar properties in the surrounding areas of the city and is in conformity with local land use plans and zoning ordinances. The subject property will also create a much-needed affordable housing neighborhood that will have a great economic and fiscal benefit to the area and the community. The affordable

Graylon Oaks Page 54

housing community can be achievable by allowing a higher density similar to that of the adjacent properties.

#### **Access**

Access is provided from Vermont Ave. The subdivision will not be gated and roads within the development will be turned over to the city and would meet city requirements.

#### **Proposed Density Standards**

#### **Residential-Single Family Dwelling**

Minimum Lot Area	5000SF
Minimum Lot Width	50 Feet
Minimum Lot Depth	100 Feet
Minimum Living Area	1200 SF
Maximum Lot Coverage	40%

#### **Residential- Two Family Dwelling**

Minimum Lot Area (Per attached unit)	<del>6000</del> - <u>3000</u> SF
Minimum Lot Width (Per attached)	<del>60</del> - <u>30</u> feet
<u>unit)</u>	
Minimum Lat Danth	100 foot

Minimum Lot Depth 100 feet
Minimum required living area 1000 SF
Maximum Lot Coverage 40%

Yard Requirements – Primary Structures\*

Front Porch 15 feet

Front Façade 20 feet

Side 7.5 feet from property

lines, 0 feet for interior lots with common wall lines, minimum of 15 feet of separation between buildings.7.5 feet;

combined 15 feet

Rear 10 feet

Max Building Height- Primary Structures 35 Feet

Graylon Oaks

#### **Permitted Uses**

- -Single Family detached residential dwelling units
- Two family residential dwelling units
- -Home occupations (pursuant to City Code Requirements).

#### **Ingress, Egress and Circulation**

- a. Minimum of 2 parking spaces per dwelling unit (4 per duplex). One parking space will be in driveway and one will be in the attached garage.
- b. The dimension of each driveway must be 10' x 20'.
- c. Each unit must include an attached garage at least 10' x 20'.
- d. There will be a 6' sidewalk along proposed street and along Vermont Avenue.

#### Landscaping

Landscaping per Section 113-244 of the Land Development Regulations

- a. Landscape requirements for each two-family dwelling (duplex) shall be as follows:
  - 1. At least one canopy tree, 2.5 inches DBH, shall be located in the required front yard of each dwelling unit. Each duplex will have two canopy trees.
- b. Perimeter Landscaping shall be as follows:
  - 1. Provide additional perimeter landscaping along Vermont Avenue with one new shade tree per 50' of road frontage subject to the requirements of Sec. 113-244(d)(3) and installation and maintenance requirements set forth in Section 113-247(b).
  - 2. A minimum of 4 understory/subcanopy trees shall be planted around the intersection of Vermont and the proposed new roadway.
  - 3. Provide the following buffer to the south and west of the property:

#### A. Single-Family development:

- Provide a 10' landscape buffer of one new shade tree every 50 feet of width and nine (9) shrubs every 100 feet of width adjacent to properties subject to the requirements set forth in Section 113-244(d)(3) and installation and maintenance requirements set forth on Sec. 113-247(b). Or
- Provide an opaque privacy fence, 6' in height and a landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape design requirements set forth ion Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

Graylon Oaks
Page 56

- B) Two-Family Development:
  - Provide a 20' landscape buffer of one new shade tree every 50 feet of width and nine (9) shrubs every 100 feet of width adjacent to the properties subject to the requirements set forth in Section 113-244(d)(3) and installation and maintenance requirements set forth in Sec. 113-247(b). Or
  - Provide an Opaque privacy fence, 6' in height and an landscape buffer of one new canopy tree every 50 feet of width on the subject property side of the fence, subject to the buffer and landscape design requirements set forth in Section 113-244(d)(3) and 113-247 of the City's Land Development Code.

#### **Tree Survey**

a. A tree survey measuring trees 12" or greater shall be required as part of the subdivision review. Tree removal mitigation will be required as stipulated in City Code Section 113-279

#### **Tree Preservation**

- 1. Trees to be preserved onsite:
  - a. Live Oak Trees
  - b. The rear 20' along the south and west property lines shall be kept in a natural condition with all canopy/shade trees preserved
  - c. Viable shade/canopy trees within 15' of Vermont Avenue shall be preserved.
- 2. Tree protections requirements shall comply with Section 113-248, and in addition: an ISA certified arborist or equivalent horticulture professional shall be hired to evaluate trees to be saved, ensure adequate root area is provided and grade changes are not altered within critical root area, prescribe treatments to preserve the trees and oversee tree protection during the construction process. Trees or branches of trees that are adjacent to or hanging over into adjacent neighboring properties shall be evaluated for the safety by the certified arborist and removed or appropriately pruned or other measures as required by the certified arborist.

#### **Miscellaneous**

Development requirements not specifically mentioned shall be consistent with all requirements for the City of Green Cove Springs R-2 Zoning district and all other applicable Land Development Code Requirements

#### **Development Plan**

The project will be developed in a single phase. The required right of way buffers shall be constructed by the developer and completed prior to the issuance of a certificate of

Graylon Oaks Page 57

occupancy for any residential dwelling not constructed as a model unit within the subdivision.

All common areas and stormwater management facilities /drainage areas shall be maintained by a legally established Homeowner's or Property Owner's Association. All finalized legal documents demonstrating the creation of the HOA or POA and its responsibilities must be submitted with the Final Plat submittal for the Graylon Oaks PUD.

Stormwater analysis shall be required with the subdivision application that demonstrates consistency with the City of Green Cove Springs and St Johns River Water Management District requirements.

Regulations regarding Guarantees and Sureties as stipulated in Chapter 101, Article II, Division 5 and Subdivision 5 shall be provided as part of the subdivision approval process.

Graylon Oaks



# STAFF REPORT

#### CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning and Zoning Board MEETING DATE: April 22, 2025

**FROM:** Gabriel Barro, Planning and Zoning

**SUBJECT:** Review of a Site Development Plan for the Preserve at Green Cove Springs, a Multi-

Family Residential Complex

#### PROPERTY DESCRIPTION

**APPLICANT:** Eric Conkright, PC Acquisitions, **OWNER:** JP Hall Jr Revocable Trust

LLC 12/17/1993 Et Al

**PROPERTY LOCATION:** US Highway 17 & CR 209

**PARCEL NUMBER:** 016499-007-01

FILE NUMBER: SPL-25-001

CURRENT ZONING: PUD

**FUTURE LAND USE DESIGNATION:** Mixed Use

#### SURROUNDING LAND USE

NORTH: FLU: Industrial SOUTH: FLU: Mixed-Use

**Z**: Public Ownership (County) **Z**: C-2

Use: Lodge Use: Service Shop

**EAST:** FLU: Mixed-Use RP WEST: FLU: Industrial

Z: M-2 Z: IB Heavy Industrial (County)

Use: Manufacturing
Use: Manufacturing

#### **BACKGROUND**

The applicant has applied for Site Development approval for the subject property for the development of multiple apartment buildings.

The property was annexed by Green Cove Springs in June of 2022. The Future Land Use and Zoning designations were changed to Mixed-Use and PUD, respectively.

In July of 2022, Pegasus Technologies, Inc. and the property owner, Clay County Port, Inc, filed an appeal against the future land use and zoning changes, citing obstruction of air traffic and a lack of consistency with the city's comprehensive plan. In January of 2025, the Florida 5<sup>th</sup> District Court of Appeals found in favor of the City, affirming the Future Land Use and Zoning Amendments thus allowing the development project to proceed.

The project shall be subject to the PUD conceptual plan, written description and conditions approved by council with the approval of the PUD plan, ordinance O-13-2022:

- 1. The applicant shall be required to comply with tree preservations requirements set forth in Sec. 113-279. Due to the proposed amount of onsite development and potential grade changes, an ISA certified arborist or equivalent horticulture professional shall be hired to evaluate trees, ensure adequate root area is provided and grade changes are not altered within critical root area, prescribe treatments to preserve the trees and oversee tree protection during the construction process and ensure compliance set forth in City Code Sec. 113-248.
- 2. Traffic Study pursuant to the requirements set forth in the City's Traffic Impact Analysis Guidelines shall be approved concurrent with the approval of the site development plan.
- 3. Dumpster shall be screened with landscaping and concrete enclosure as required during the site plan submittal.
- 4. A disclosure notification shall be provided within the lease agreements for the multifamily units located on the property informing the tenants that the proposed development is located in close proximity to the runway for the Reynolds Airpark.

#### PROPERTY DESCRIPTION

The site consists of 13.92 acres along the eastern side of US 17 at the intersection of CR 209. It is close in proximity to Reynolds Airpark. As a result, the owner will be required to disclose that information to anyone interested in occupying one of the apartments.

#### DEVELOPMENT DESCRIPTION

The applicant is proposing the construction of an apartment complex. The site will consist of 7 apartment buildings consisting of 1, 2, and 3 bedroom apartments (260 units), a parking lot, an amenity center, and a drainage retention pond. The site will have two ingress/egress points, one on CR 209, and another on US 17. The amenity center will include a swimming pool for residents of the apartment complex. The parking lot is designed as a loop around the center of the site. An outdoor recreation will be included within the center of the parking area.

Dwelling Units	Number of Units	Spaces per Unit	Total
Studio	20	1.0	20
1 Bedroom	84	1.0	84
2 Bedrooms	122	2.0	244
3 Bedrooms	34	2.0	68
Garage Enclosures			30
Employees & Guests			11
Total	260		457
Parking Ratio			1.75

#### PARKING, LOADING, & STACKING

The plan shows 437 parking spaces, 20 of which are ADA. The site also includes 30 garage parking spaces.

#### DRAINAGE RETENTION

The drainage plan shows a retention pond consisting of 61,319 square feet.

#### TRAFFIC AND ACCESS

The site will include an ingress/egress point on CR 209 and another on US 17. The access point on US 17 is a right-in/right-out only.

#### **UTILITY CONNECTIONS & SOLID WASTE**

The project site is within the City's water and electric district.

#### LANDSCAPE PLAN

A landscape plan has been submitted. The plan shows a combination of existing trees and trees to be planted along the entire perimeter of the project site. An area within the center of the site is to remain untouched and utilized as a park/recreation area. Every parking island contains one shade tree as required by the City's parking landscape standards. The tree preservation plan is showing a deficit of trees being removed on the site, trees removed in excess of the City's tree preservation requirement shall be mitigated for through payment to the City tree bank.

#### **PUBLIC FACILITIES IMPACT**

Land Use <sup>1</sup>	Square Footage/Dwelling	Da	aily	AM Po	eak	PM Peak		
(ITE)	Units	Rate Trips		Rate Trips		Rate	Trips	
		<u> </u>		<u> </u>		1		
Apartment	260	6.41	1,742	0.31	103	0.43	132	

<sup>1.</sup> Source: Institute of Transportation Engineers: Trip Generation Manual 9th Edition

#### **Traffic Study Area**

					Adopted LOS Peak							Year 2019 Peak Hour		Year 2022 Peak Hour	Existing Conditions	Existing
			Speed	Adopted	Hour	Length		Facility	Area		2019 ADT	Traffic	Growth	Traffic	V/C	Conditions
Roadway	Segment	Agency	Limit	LOS	MSV	(Miles)	Lanes	Туре	Type	Source	Collected	Volumes	Rate	Volumes	Ratio	LOS
	•															
US 17	Green Cove Springs to SR 16 West	FDOT	35	D	2,920	1.26	4 - DIV	Prin. Arterial	Urban	FDOT	24,000	2,160	4.07%	2,435	83.39%	D
US 17	SR 16 West to SR 16 East	FDOT	55	D	3,580	0.63	4 - DIV	Prin. Arterial	Urban	FDOT	21,500	1,935	3.93%	2,172	60.67%	D
US 17	SR 16 East to CR 209	FDOT	55	D	3,580	1.61	4 - DIV	Prin. Arterial	Transition	FDOT	14,100	1,269	5.37%	1,485	41.48%	С
US 17	CR 209 to CR 226	FDOT	55	D	3,580	3.18	4 - DIV	Prin. Arterial	Transition	FDOT	10,900	981	1.14%	1,015	28.35%	С
US 17	CR 226 to Putnam County Line	FDOT	60	В	4,460	10.20	4 - DIV	Highway	Rural	FDOT	12,803	1,152	6.01%	1,372	30.76%	С
SR 16	Oak Ridge Avenue to US 17	FDOT	35	D	2,774	1.12	4-Un Div	Major Arterial	Urban	FDOT	11,500	1,035	4.13%	1,169	42.14%	С
SR 16	US 17 to Slow Tide Road	FDOT	45	E	3,070	1.26	4 - Div	Highway	Transition	FDOT	19,694	1,772	5.92%	2,106	68.60%	D
Oak Ridge Avenue	SR 16 to Green Cove Avenue	GCS	35	D	1,161	0.59	2	Minor Collector	Urban	FDOT	2,200	198	5.26%	231	19.90%	С
Oak Ridge Avenue	Green Cove Avenue to US 17	GCS	35	D	1,161	3.1	2	Minor Collector	Urban	FDOT	2,200	198	5.26%	231	19.90%	C
Green Cove Avenue	US 17 to Oak Ridge Avenue	GCS	25	D	1,161	1.14	2	Local Road	Urban	FDOT	1,600	144	3.85%	161	13.87%	С
First Coast Expressway	SR 16 to US 17	FDOT	65	D	6,700	6.45	4 - DIV	Freeway	Urban	FDOT	-	-	2.00%	- 1	0.00%	С
CR 209	East of US 17	Clay County	55	D	2,110	1.69	2	Highway	Rural	All Traffic Data	-	-	0.00%	174	8.25%	C

			Speed	Adopted	Adopted LOS Peak Hour	Growth	Year 2022 Peak Hour Traffic	Existing Conditions V/C	Year 2027 Background Peak Hour	Year 2027 Background Peak Hour	Year 2027 Background	Residential Project Traffic	Project Traffic	Roadway Segment	Year 2027 Build-Out Peak Hour	Year 2027 Build-Out Traffic	Roadway Segment Adversely	Year 2027 Build-Out
Roadway	Segment	Agency	Limit	LOS	MSV	Rate	Volumes	Ratio	Traffic Volumes	V/C Ratio	LOS	Assignment	% of MSV	Impacted	Traffic Volumes	% of MSV	Impacted	LOS
US 17	Green Cove Springs to SR 16 West	FDOT	35	D	2,920	4.07%	2,435	83.39%	2,973	101.82%	F	32	1.10%	No	3,005	102.91%	No	F
US 17	SR 16 West to SR 16 East	FDOT	55	D	3,580	3.93%	2,172	60.67%	2,634	73.58%	D	45	1.26%	No	2,679	74.83%	No	D
US 17	SR 16 East to CR 209	FDOT	55	D	3,580	5.37%	1,485	41.48%	1,929	53.88%	D	88	2.46%	No	2,017	56.34%	No	D
US 17	CR 209 to CR 226	FDOT	55	D	3,580	2.00%	1,015	28.35%	1,121	31.31%	С	41	1.15%	No	1,162	32.46%	No	c
US 17	CR 226 to Putnam County Line	FDOT	60	В	4,460	6.01%	1,372	30.76%	1,837	41.19%	С	9	0.20%	No	1,846	41.39%	No	c
SR 16	Oak Ridge Avenue to US 17	FDOT	35	D	2,774	4.13%	1,169	42.14%	1,431	51.59%	D	11	0.40%	No	1,442	51.98%	No	D
SR 16	US 17 to Slow Tide Road	FDOT	45	E	3,070	5.92%	2,106	68.60%	2,808	91.47%	D	44	1.43%	No	2,852	92.90%	No	D
Oak Ridge Avenue	SR 16 to Green Cove Avenue	GCS	35	D	1,161	5.26%	231	19.90%	298	25.67%	c	2	0.17%	No	300	25.84%	No	c
Oak Ridge Avenue	Green Cove Avenue to US 17	GCS	35	D	1,161	5.26%	231	19.90%	298	25.67%	С	2	0.17%	No	300	25.84%	No	c
Green Cove Avenue	US 17 to Oak Ridge Avenue	GCS	25	D	1,161	3.85%	161	13.87%	194	16.71%	С	-	0.00%	No	194	16.71%	No	c
First Coast Expressway	SR 16 to US 17	FDOT	65	D	6,700	2.00%	-	0.00%	-	0.00%	C	31	0.46%	No	31	0.46%	No	c
CR 209	East of US 17	Clay County	55	D	2,110	2.00%	174	8.25%	192	9.10%	C	3	0.14%	No	195	9.24%	No	C

Note: A minimum of 2.0% Growth Rate was applied to US 17, First Coast Expressway and CR 209

*Conclusion:* The daily generated trips were calculated in a Traffic Impact Study provided by the applicant in 2022. The traffic study was approved by FDOT as part of the driveway permit on US 17. The traffic study is showing 66% of the traffic heading north on US 17, 31% heading south on US 17 and 2% heading south on CR 209. Pursuant to the mobility fee schedule the applicant shall be required to pay at time of electrical equipment check.

#### **Potable Water Impacts**

#### Commercial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity <sup>1</sup>	4,200,000
Less actual Potable Water Flows <sup>1</sup>	1,013,000
Residual Capacity <sup>1</sup>	3,187,000
Projected Potable Water Demand from Proposed Project <sup>2</sup>	11,066.33
Residual Capacity after Proposed Project	3,175,933.67

- 1. Source: City of Green Cove Springs Public Works Department
- 2. Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)

*Conclusion:* The impact was calculated based on proposed residential use. As shown in the table above, there is adequate capacity for this use. The City has existing water lines installed at this location

#### Sanitary Sewer Impacts - South Plant WWTP

#### Commercial

System Category	Gallons Per Day (GPD)
Current Permitted Capacity <sup>1</sup>	350,000
Current Loading <sup>1</sup>	270,000
Committed Loading <sup>1</sup>	330,000
Projected Sewer Demand from Proposed Project <sup>2</sup>	11,066.33
Residual Capacity after Proposed Project	318,933.67

- 1. Source: City of Green Cove Springs Public Works Department
- 2. Source: City of Green Cove Springs Comprehensive Plan. Formula Used: .11 x sq ft (based on historical data)

*Conclusion:* The impact was calculated based on the proposed residential use. The project site is served by the South Wastewater Treatment Plant (WWTP). There is adequate capacity for this use. The city has existing sewage lines in place.

#### Solid Waste Impacts

#### Commercial

System Category	LBs Per Day / Tons per Year
Solid Waste Generated by Proposed Project <sup>1</sup>	None
Solid Waste Facility Capacity <sup>2</sup>	Minimum 3 Years Capacity

Source: City of Green Cove Springs does not provide commercial sanitation services, prospective sanitation collection franchisees shall comply with City Code Section 66-10.

#### Solid Waste Impacts

The City of Green Cove Springs' solid waste is disposed of at the Rosemary Hill Solid Waste Management Facility operated by Clay County. Per the Clay County Comprehensive Plan, a minimum of three (3) years capacity shall be maintained at the County's solid waste management facility. For commercial developments, the City does not provide Curbside Service; commercial locations must instead contract with an approved franchisee for containerized collection.

Public School Facilities Impact

Land Use	Units	Elem.		Middle		High	
(ITE)		Rate <sup>1</sup>	Total	Rate <sup>1</sup>	Total	Rate <sup>1</sup>	Total
Proposed							
Condo/TH (ITE 230)	260	0.0314	8.164	0.0095	2.47	0.0197	5.122
Net Generation	-	-	8	-	3	-	5

<sup>1.</sup> Source: School District of Clay County, Educational Facilities Plan, FY 2018/19-2022/23, based on multifamily

**Conclusion:** The applicant had reserved capacity until April 2022 but because the project did not move forward the applicant has resubmitted their school concurrency application.

MULTI FAMILY RESIDENCE		
Impact Fees		
Must be paid at Building Permit Issuance		
Electric	TBD	
Water	\$260,000 (\$1,000 per ERU)	
Sewer	\$520,000 (\$2,000 per ERU)	
To be paid BEFORE equipment check		
County Parks	\$235,000 (\$905 per unit)	
County Fire	\$244,920 (\$942 per unit)	
County Jails	\$107,640 (\$414 per unit)	
County Library	\$67,860 (\$261 per unit)	
Transportation Mobility	\$184,800 (\$3080 per unit)	
Transportation Mobility	\$415,000 (\$2075 per unit)	
School	\$841,360 (\$3236 per unit)	

#### **Project Attachments:**

- Construction Plans
- Landscape and Tree Preservation Plans
- PUD Written Description
- PUD Concept Plan
- Extracted portion of Traffic Study
- Fire Truck Turn Analysis
- Compactor Details
- Application

#### STAFF RECOMMENDATION

Staff is recommending approval of the Preserve Site Plan subject to addressing outstanding staff comments provided in the attached deficiency report

#### **Recommended motion:**

Motion to recommend to City Council the approval of the Preserve Site Plan subject to addressing the outstanding staff comments.

# CONSTRUCTION PLANS FOR PRESERVE AT GREEN COVE SPRINGS CITY OF GREEN COVE SPRINGS

### GENERAL NOTES:

A. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY, AS CONTRACTORS TO THE OWNER:

A & J LAND SURVEYORS, INC 5847 LUELLA STREET JACKSONVILLE, FLORIDA 32207 CONTACT: JONATHON B. BROWN PHONE: (904) 346-1736

MATTHEWS DESIGN GROUP, LLC AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES.

B. ADDITIONAL PROJECT INFORMATION HAS BEEN PROVIDED BY THE FOLLOWING SUB-CONSULTANT AS CONTRACTOR TO THE OWNER:

#### UNIVERSAL ENGINEERING SCIENCES

TYPE: GEOTECHNICAL 5561 FLORIDA MINING BOULEVARD SOUTH JACKSONVILLE, FLORIDA 32257-3648 CONTACT: STEPHEN R. WEAVER, P.E. PHONE: (904) 296-0757

C. THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER OF ANY DISCREPANCIES BETWEEN THE SURVEY AND FIELD VERIFICATION OF INFORMATION ABOVE OR BELOW GROUND THAT MAY BE CRITICAL TO THE DESIGN OF THIS PROJECT THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION OF THIS PROJECT.

# ). WARRANTY / DISCLAIMER:

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER IS INVOLVED WITH THE PHYSICAL CONSTRUCTION ON AN ONGOING BASIS AT THE SITE.

MATTHEWS DESIGN GROUP (MDG) IS THE PROJECTS ENGINEER OF RECORD (EOR). MDG IS NOT A GENERAL CONTRACTOR, UTILITY CONTRACTOR, SITE CONTRACTOR, OR ANY OTHER TYPE OF CONTRACTOR.

# E. SAFETY NOTICE TO CONTRACTOR:

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON OR NEAR THE CONSTRUCTION SITE.

# F. CONSTRUCTION TESTING:

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, TESTING, LABORATORY ANALYSES, REPORTS, COSTS, ETC., CONCERNING SOILS AND PAVEMENT RELATED DESIGN REQUIREMENTS AND SPECIFICATIONS AS SET FORTH IN THESE PLANS.

# G. AS-BUILT SURVEY NOTE:

UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS REQUIRED TO PROVIDE OWNER / ENGINEER WITH A SIGNED AND SEALED AS-BUILT SURVEY AND ANY OTHER RELATED CONSTRUCTION DOCUMENTS, IN ACCORDANCE WITH APPLICABLE PERMITTING AGENCY REQUIREMENTS, AS THE BASIS FOR PROJECT CERTIFICATIONS AND CLOSE-OUT.

# H. RIGHT-OF-WAY:

ANY AND ALL WORK CONDUCTED WITHIN THE CITY OF GREEN COVE SPRINGS RIGHT-OF-WAYS MUST BE IN ACCORDANCE WITH THE APPLICABLE LAND DEVELOPMENT CODES.

# PRE-CONSTRUCTION MEETING:

IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE A PRE-CONSTRUCTION / PRE PERMIT ISSUANCE MEETING WITH CITY OF GREEN COVE SPRINGS STAFF AFTER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE CITY AND PRIOR TO STARTING ANY SITE ACTIVITIES. THE PRE-CONSTRUCTION MEETING WILL BE HELD IN CONJUNCTION WITH THE CITY MANDATORY PRE-CONSTRUCTION MEETING. HOWEVER, IF THE PROJECT FALLS OUTSIDE OF CITY JURISDICTION, PLEASE CALL CITY OF GREEN COVE SPRINGS TO SCHEDULE MEETING.

J. ALL ELEVATIONS SHOWN HEREIN ARE REFERENCED TO NAVD 88.

# I. FIRE SEVICES

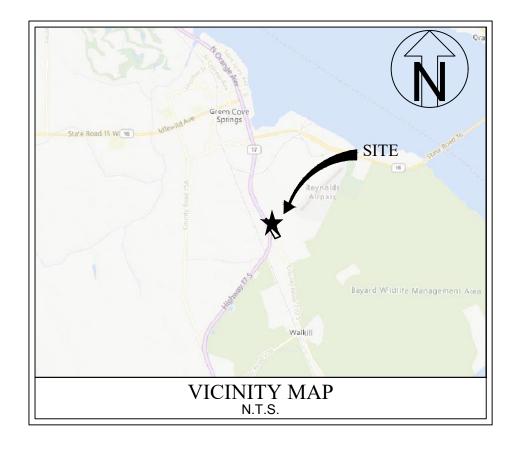
WHEN VERTICAL CONSTRUCTION BEGINS, FIRE DEPT. ACCESS IS REQUIRED

\*FIRE DEPT ACCESS ROADS SHALL BE PROVIDED AT THE START OF THE PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1, CHP 16)

\*FIRE DEPT ACCESS ROAD SHALL BE LINORSTRUCTED 20 FEET WIDE. STARILIZED SUPEACE TO SUPPORT 80 000 LBS AND

\*FIRE DEPT ACCESS ROAD SHALL BE UNOBSTRUCTED 20 FEET WIDE, STABILIZED SURFACE TO SUPPORT 80,000 LBS AND PROVIDE TURNAROUND FOR A 50 FOOT FIRE APPARATUS. (NFPA 1, CHP 18)





OWNER:
PC ACQUISITION LLC
3475 PIEDMONT ROAD NE, SUITE 1125
ATLANTA, GA 30305
PHONE: (803) 381-5850

CONTACT: JOHN D. CATTANO

# Matthews DECM

P.O. BOX 3126, 7 WALDO STREET ST. AUGUSTINE, FL 32084 PHONE: 904.826.1334 mdg.info@dccm.com

PERMITS / APPROVALS
CITY OF GREEN COVE SPRINGS
CLAY COUNTY UTILITY AUTHORITY
ST JOHNS RIVER WATER MANAGEMENT DISTRICT
FDEP - WATER
FDEP - SEWER

# Sheet List Table

Sneet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES
3	UTILITY NOTES
4	SURVEY
5	EROSION CONTROL & DEMOLITION PLAN
6	MASTER SITE PLAN
7	SITE PLAN
8	SITE PLAN
9	SITE PLAN
10	GRADING & DRAINAGE PLAN
11	GRADING & DRAINAGE PLAN
12	GRADING & DRAINAGE PLAN
13	MASTER UTILITY PLAN
14	UTILITY PLAN
15	UTILITY PLAN
16	UTILITY PLAN
17	CONSTRUCTION DETAILS
18	CONSTRUCTION DETAILS
19	CONSTRUCTION DETAILS
20	CONSTRUCTION DETAILS
21	CONSTRUCTION DETAILS
22	UTILITY DETAILS
23	UTILITY DETAILS
24	UTILITY DETAILS
25	SWPPP

# RESOURCE LIST

CITY OF GREEN COVE SPRINGS	FDOT	SJRWMD - PALATKA HEADQUARTERS
321 WALNUT STREET	3600 DOT ROAD	PO BOX 1429
GREEN COVE SPRINGS, FL 32043	ST. AUGUSTINE, FL 32084	PALATKA, FL 32178
(904) 297-7500	(904) 825-5026	(386) 329-4500
FDEP - WATER & SEWER		

# 8800 BAYMEADOWS WAY, SUITE 100

JACKSONVILLE, FL 32256

(904) 256-1700

# FLOOD CERTIFICATION:

THIS SITE IS SHOWN IN FLOOD ZONE "X" AS DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 12109C0257H, FOR CITY OF GREEN COVE SPRINGS,

FLORIDA, EFFECTIVE DECEMBER 7, 2018.

REGISTERED ENGINI
ALEX R. ACREE, P. Cast been digitally signed and sealed by ALEX R. ACREE P. E. on the date add

 DESCRIPTION

 04-02-25
 REVISED PER CITY COMMENTS

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STREET
32084

LNEWS | L O. BOX 3126, 7 WALDO ST. AUGUSTINE, FL 3 VE: 904.826.1334 • FAX:

Matthev
P.O. BOX 31
ST. AUG

T GREEN COVE SPRING
OF GREEN COVE SPRINGS

CO PRESERVE AT CITY OF

1

#### **GENERAL SITE NOTES:**

INCLUDED IN THE CONTRACTORS BID.

- MATTHEWS DESIGN GROUP (MDG) IS THE PROJECTS ENGINEER OF RECORD (EOR). MDG IS NOT A GENERAL CONTRACTOR, UTILITY CONTRACTOR, SITE CONTRACTOR, OR ANY OTHER TYPE OF CONTRACTOR.
- ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH ALL RELATIVE SECTIONS OF CITY OF GREEN COVE SPRINGS LAND DEVELOPMENT CODE, (LATEST REVISION) AND ALL CITY STANDARD DETAILS.
- 3. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF OSHA SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF THEIR EMPLOYEES, AND FOR ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS

ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE

- PRIOR TO CONSTRUCTION. THE SITE CONTRACTOR SHALL VERIFY ALL SURVEY CONTROL POINTS AS PROVIDED IN THE BOUNDARY SURVEY. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING THEMSELVES WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS. EITHER SURFACE OR SUB-SURFACE. WHICH MAY AFFECT THE WORK TO BE PERFORMED. AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE CONSTRUCTION CONTRACT. THE CONTRACTOR IS ALSO URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF OR WITHIN THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE ISSUES THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED. FAILURE OF THE CONTRACTOR TO IDENTIFY/QUANTIFY THE AMOUNT OF UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED DURING THE BID PROCESS WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THE
- . ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER AND CITY OF GREEN COVE SPRINGS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND CITY OF GREEN COVE SPRINGS.
- B. FOR BOUNDARY, ROADWAY, AND BUILDING GEOMETRY INFORMATION SEE ENGINEERING SITE PLAN. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT THE BUILDING DIMENSIONS SHOWN ON THE ENGINEERING PLAN AGREES WITH THE DIMENSIONS SHOWN ON THE ARCHITECTURAL PLAN. IF ANY DIMENSIONS DO NOT AGREE, THE ARCHITECT, ENGINEER, AND OWNER SHALL BE NOTIFIED AND THE DIMENSIONS ADJUSTED PRIOR TO COMMENCING WITH CONSTRUCTION.
- 9. UNLESS DIRECTED OTHERWISE BY THE OWNER OR THE ENGINEER, THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH CITY REQUIREMENTS. THIS SHALL INCLUDE DENSITY TESTS IN ALL PAVEMENT AREAS AND IN ALL UTILITY TRENCHES. LOCATED IN PAVEMENT AREAS, CONCRETE TESTING AND ALL OTHER MATERIAL TESTING. PRIOR TO LIMEROCK PLACEMENT, THE PROJECT GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION FOR UNDERDRAIN
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT INCLUDING CITY OF GREEN COVE SPRINGS RIGHT-OF-WAY PERMITS FOR WORK IN THE CITY
- 11. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO
- 12. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO THE ACTUAL LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH THEY SHALL CONNECT, AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
- 13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CIVIL ENGINEER TO DETERMINE IF THIS PROJECT IS WITHIN THE CITY'S JURISDICTION FOR INSPECTION. IF SO, THEN IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CITY FOR A PRE-CON MEETING FOR INSPECTIONS.
- 14. DUE TO THE PROXIMITY TO EXISTING RESIDENTIAL HOMES THE APPLICANT SHOULD LIMIT HOURS OF OPERATION TO DAYTIME HOURS AND PROVIDE MITIGATION TO NOISE FROM PUMPS IF 24 HOUR DEWATERING ACTIVITIES ARE
- 15. THE BUILDING FOOTPRINTS SHOWN HEREON ARE APPROXIMATE. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS
- 16. ALL STOP SIGNS SHALL BE FINISHED WITH DIAMOND GRADE HIGH REFLECTIVITY SURFACE.
- 17. ALL STOP BARS SHALL BE THERMO-PLASTIC MATERIAL

# **PAVING & DRAINAGE NOTES**

- "AS-BUILT" DRAWINGS DRAINAGE AS-BUILTS PROVIDED TO CITY OF GREEN COVE SPRINGS AND THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION. FIELD LOCATIONS. CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF GREEN COVE SPRINGS STANDARDS AND SPECIFICATIONS AND SJRMWD REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE AS-BUILT DRAWINGS FOR APPROVAL BY CITY OF GREEN COVE SPRINGS. IN ADDITION TO THE DRAINAGE SYSTEM THE "AS-BUILTS" SHALL SHOW THE FLEVATIONS AND LOCATION OF THE TOP OF BANK WATER LEVEL ANY POINTS. OF CHANGE IN SLOPE, TOE OF SLOPE AND POND BOTTOM AT 100' MAXIMUM INTERVALS ALONG POND BANK FOR ALL POND CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS ON THE CONTROL STRUCTURE DETAILS SHALL BE SHOWN ON AS-BUILT DRAWINGS
- ALL AREAS SHOWN TO BE FILLED SHALL BE CLEARED AND GRUBBED IN ACCORDANCE WITH CITY OF GREEN COVE SPRINGS STANDARDS AND SHALL BE FILLED WITH CLEAN STRUCTURAL FILL COMPACTED AND TESTED IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE
- ALL EXCESS SUITABLE AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT HIS EXPENSE UNLESS DIRECTED OTHERWISE BY ENGINEER OR OWNER.

4. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR.

- 6. ALL EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED.
- BURNING OF TREES, BRUSH, AND OTHER MATERIAL SHALL BE APPROVED, PERMITTED, AND COORDINATED WITH CITY OF GREEN COVE SPRINGS FIRE MARSHAL
- :. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER CITY OF GREEN COVE SPRINGS STANDARDS AND MEETING THE NPDES FINAL STABILIZATION REQUIREMENTS.
- . UNSUITABLE MATERIALS UNDER WATER PIPE, SEWER PIPE, STORM PIPE, OR STRUCTURES SHALL BE REMOVED AND
- REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED AT CONTRACTOR'S EXPENSE.
- 10. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION AND REPAIR.
- 11. ALL CLEARING AND GRUBBING REQUIRED FOR ALL ROADWAY, UTILITIES, DITCHES, BERMS, AND BUILDINGS INCLUDED IN THIS PROJECT AND THE CLEARING AND GRUBBING OF ALL RIGHT-OF-WAY OR EASEMENTS SHALL BE CONSIDERED AS PART OF THIS PROJECT.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A DEWATERING PERMIT FROM THE SJRWMD. 13. PRIOR TO ANY DISCHARGE OF GROUND WATER (DEWATERING) FROM CONSTRUCTION ACTIVITIES ASSOCIATED
- WITH THIS PROJECT TO WATERS OF THE STATE (INCLUDING, BUT NOT LIMITED TO, WETLANDS, CREEKS, SWALES AND MUNICIPAL STORM SEWERS), THE CONTRACTOR SHALL TEST THE EFFLUENT (WATER TO BE DISCHARGED) IN ACCORDANCE WITH RULE 62-621.300(2), F.A.C. IF THE TEST RESULTS ON THE EFFLUENT ARE BELOW THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL SUBMIT A SUMMARY OF THE PROPOSED CONSTRUCTION ACTIVITY AND THE TEST RESULTS TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DISTRICT OFFICE, WITHIN ONE (1) WEEK AFTER DISCHARGE BEGINS. THE CONTRACTOR SHALL CONTINUE TO SAMPLE THE EFFLUENT AS REQUIRED THROUGHOUT THE PROJECT AND COMPLY WITH ALL CONDITIONS OF RULE 62-621.300(2), F.A.C. IF THE GROUND WATER EXCEEDS THE SCREENING VALUES OF RULE 62-621.300(2), F.A.C., THE CONTRACTOR SHALL COMPLY WITH OTHER APPLICABLE RULES AND REGULATIONS PRIOR TO DISCHARGE OF THE EFFLUENT (GROUND WATER) TO SURFACE WATERS OF THE STATE.
- 14. ALL PIPE LENGTHS ARE SCALED DIMENSIONS, MEASURED FROM CENTER OF STRUCTURE TO END OF MITERED END SECTIONS. STRUCTURES WITHIN FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH FDOT STANDARDS. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH CITY REQUIREMENTS AND SHALL BE CONSTRUCTED TO CONFORM WITH CURBING, PROPERTY LINES, AND LOW POINTS AS SHOWN ON THE PLANS.
- 15. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEAN AND FUNCTIONING PROPERLY AT TIME OF ACCEPTANCE.

- 16. ALL DRAINAGE STRUCTURES SHALL HAVE TRAFFIC BEARING GRATES.
- 17. ALL DRAINAGE PIPE JOINTS ARE TO BE FILTER-WRAPPED.

LAYER OF BRICK, OR REDDI-MIX CONCRETE WITH #57 STONE.

- 18. ALL INVERTS IN DRAINAGE STRUCTURES TO BE PRECAST OR BRICK WITH LAYER OF MORTAR BETWEEN EACH
- 19. THE CONTRACTOR SHALL PROVIDE HANDICAP RAMPS AT ALL SIDEWALK AND CURB CONNECTIONS. HANDICAP
- RAMPS SHALL MEET ALL APPLICABLE ADA REQUIREMENTS. 20. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT
- 21. IF DEWATERING CAPACITY REQUIRES A CONSUMPTIVE USE PERMIT (C.U.P.), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
- 22. ALL DRAINAGE PIPES INSTALLED WITHIN ROADWAY RIGHT-OF-WAYS/EASEMENTS (PUBLIC OR PRIVATE) SHALL BE TELEVISED BY A COMPANY OR INDIVIDUAL CERTIFIED TO PERFORM SUCH WORK PER LDC 6.04.07.L.5.G. THIS REQUIREMENT MAY ONLY BE WAIVED ON COMMERCIAL SITES IF THE ENGINEER OF RECORD CERTIFIES BY LETTER THAT THE SITE DOES NOT RECEIVE ANY RUNOFF FROM CITY OF GREEN COVE SPRINGS RIGHT-OF-WAYS. IF THERE IS ANY CONNECTION OR RELATIONSHIP BETWEEN THE PROJECT SITE AND A CITY OWNED OR MAINTAINED DITCH, POND, OR STRUCTURE, IT SHALL BE REQUIRED. THIS TELEVISING OF THE DRAINAGE LINE SHALL BE DONE IN COLOR AND SHALL BE OF SUCH QUALITY AS TO VISUALLY IDENTIFY THE PROPER CONSTRUCTION OF ALL JOINTS AND PIPE ALIGNMENT. A VIDEO TAPE SHALL BE PROVIDED TO THE CITY UPON COMPLETION. THE TELEVISING OF THE DRAINAGE LINES SHALL BE PERFORMED AFTER THE PLACEMENT OF THE BASE MATERIAL AND PRIOR TO THE FINAL WEARING SURFACE OF THE ROADWAY. THE APPROVAL, BY THE CITY, OF THE TELEVISING SHALL BE REQUIRED PRIOR TO THE PLACEMENT OF THE FINAL WEARING SURFACE OF THE ROADWAY. TELEVISED RECORD SHALL BE REVIEWED AND CERTIFIED BY THE ENGINEER OF RECORD (EOR).
- 23. PLEASE BE AWARE THAT ALL DETECTABLE WARNING SURFACES FOR SIDEWALK AT CURB CUT HANDICAP RAMPS UNDER THE JURISDICTION OF CITY OF GREEN COVE SPRINGS SHALL BE A CITY APPROVED YELLOW COLORED COMPOSITE MATERIAL ANCHORED IN THE CONCRETE SIDEWALK RAMP. ANCHORED COMPOSITE WARNING AREA INSERTS ARE TO BE COLORED "SAFETY YELLOW", ARE TO BE SET INTO THE CONCRETE AND ARE TO BE FLUSH WITH CONCRETE SURFACE ALONG ALL FOUR SIDES. DESIGN DIMENSIONS OF DETECTABLE WARNING AREA SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS INDEX 522-002, SHEETS 1 THROUGH 8, AND 28 CODE OF FEDERAL REGULATIONS (CFR) PART 36, APPENDIX A LATEST REVISION, AS WELL AS APPLICABLE CITY REQUIREMENTS.
- 24. ALL SIDEWALKS AND CURB CUT RAMPS UNDER THE JURISDICTION OF CITY OF GREEN COVE SPRINGS SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO FDOT STANDARD PLANS INDEX 522-002 AND 522-001; AND TITLE 28, PART 36, APPENDIX A, CODE OF FEDERAL REGULATIONS (CFR) LATEST REVISION, AS WELL AS MEETING ALL ADA
- 25. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE HE/SHE IS NOT NOTIFIED OF DESIGN CONFLICTS.
- 26. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND MEASUREMENTS TAKEN IN THE FIELD WHEN POSSIBLE. THE INFORMATION SHOWN HEREON, IS NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.
- 27. UNLESS OTHERWISE INDICATED ALL STORM SEWER SHALL BE BEDDED IN ACCORDANCE WITH DETAIL GD15 TYPE "B", AS SHOWN ON SHEET 18. UNLESS CONDITIONS IN THE FIELD DICTATE THE USE OF TYPE "A" BEDDING, AS
- 28. POND SLOPES AS SHOWN ARE THE MAXIMUM ALLOWABLE SLOPE, IF SITE CONDITIONS OR OTHER ISSUES, SUCH AS GROUNDWATER SEEPAGE CAUSE SLOPE FAILURE, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO CORRECT THE SLOPES TO MEET THE INTENT OF THE DESIGN. CONTRACTOR IS TO NOTIFY ENGINEER IMMEDIATELY OF THESE ISSUES SO THAT ENGINEER MAY ASSIST WITH THE CORRECTIVE ACTION.
- 29. ALL STORM PIPE ON THIS PLAN SET, MUST MEET THE FOLLOWING STANDARDS: PP PIPE (12 INCHES TO 60 INCHES) FOR SIDE DRAIN, STORM DRAIN, AND OTHER SPECIFIED APPLICATIONS SHALL MEET THE REQUIREMENTS OF

#### GENERAL SIGNING & MARKING NOTES:

- 1. ALL STRIPING SHALL CONFORM TO CITY OF GREEN COVE SPRINGS AND/OR FDOT SPECIFICATIONS. 2. MATCH EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND ENDING OF PROJECT AND ALL SIDE STREETS.
- 3. SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 700-010, AND 700-101.
- SIGN ASSEMBLY LOCATIONS SHOWN ON PLANS WHICH ARE IN CONFLICT WITH LIGHTING, UTILITIES, DRIVEWAYS, CURB CUTS, ETC. SHALL BE ADJUSTED AS DIRECTED BY ENGINEER.
- 5. EXISTING SIGNS TO BE REMOVED SHALL BE DELIVERED AND STOCKPILED ON SITE IN THE MATERIALS STORAGE AREA AND RETURNED TO THE OWNER.
- 6. COST FOR SIGNING AND MARKING, IF ANY, SHALL BE INCLUDED IN THE COSTS FOR PAVEMENT.

#### **GENERAL DEMOLITION NOTES:** SEE SHEET 5 FOR THE TALLY OF TREES TO BE REMOVED.

- 2. ALL UTILITIES SHALL REMAIN IN PLACE AND UNHARMED UNLESS SPECIFICALLY INDICATED OTHERWISE BY THE EROSION CONTROL & DEMOLITION PLAN (SHEET 5).
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY ABANDONING WELLS OR SEPTIC SYSTEMS FOUND DURING CONSTRUCTION. ABANDONMENT SHALL BE IN ACCORDANCE WITH ALL CITY, STATE REGULATIONS, PER THE REQUIREMENTS SET FORTH IN THE F.A.C.

#### WATER AND SEWER NOTES: 1. REFER TO WATER & SEWER NOTES ON 3.

# **EROSION CONTROL NOTES:**

- NO CONSTRUCTION ACTIVITY INVOLVING EXCAVATION, DENUDING OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR AUDIBLE MATERIALS SHALL BEGIN WITHOUT AN APPROVED PLAN AND/OR WRITTEN CONSENT BY THE CITY OF GREEN COVE SPRINGS PUBLIC WORKS
- THE CONTRACTOR SHALL ESTABLISH ALL EROSION CONTROL MEASURES PRIOR TO EXCAVATION, DENUDING OR DEMOLITION OF ANY SITE SURFACE OR STOCKPILING OF ANY EARTHEN OR ERODIBLE MATERIALS.
- 3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DEVELOPMENT OF THE PROJECT AND SHALL NOT REMOVE ANY EROSION CONTROL MEASURE UNTIL ALL CONTRIBUTING SITE SURFACES AND VEGETATION HAVE BEEN ESTABLISHED AND STABILIZED.
- 4. THE CONTRACTOR SHALL PERFORM DAILY CLEAN UP OF ALL SEDIMENT AND DEBRIS WHICH LEAVES THE PROJECT
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL CITY STORM DRAIN SYSTEMS WHICH RECEIVE SEDIMENT OR DEBRIS AS A RESULT OF CONSTRUCTION, STOCKPILING OR DISPOSAL ACTIVITIES. CLEANING OF THE STORM DRAIN WILL OCCUR FROM THE POINT OF INTERCEPT TO THE OUTFALL OF THE SYSTEM OR TO A POINT WITHIN THE SYSTEM WHERE SEDIMENT OR DEBRIS IS NO LONGER PRESENT.
- 6. RAIN DAYS CLAIMED BY THE CONTRACTOR, DO NOT EXCUSE THE CONTRACTOR OF DAILY INSPECTION AND MAINTENANCE OF ALL SITE EROSION CONTROL MEASURES AND CLEANUP.
- 7. ALL SEDIMENT COLLECTION SYSTEMS MUST BE MUCKED OUT WHEN 1/3 FULL, MUCKED SEDIMENT MUST BE PROPERLY CONTAINED AND DISPOSED.

#### GENERAL LANDSCAPE NOTES: 1. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE LANDSCAPE CONSTRUCTION BEGINS.

- 2. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO
- 3. FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME RELEASE FERTILIZER.
- 4. PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR GRADE #1 OR BETTER AS GIVEN IN THE LATEST "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II", FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES OR TO THE STANDARDS AS GIVEN IN THE LATEST "AMERICAN STANDARD FOR NURSERY STOCK", AMERICAN NATIONAL STANDARDS INSTITUTE.
- 5. REMOVE ALL DEAD WOOD AND PRUNE TREES ACCORDING TO THE PRUNING GUIDELINES BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE, 1995 EDITION. IF ARBORIST BELIEVES A LIMB SHOULD NOT BE REMOVED THE ARBORIST SHALL CONTACT THE LANDSCAPE DESIGNER. REMOVE ALL DEBRIS FROM THE SITE TO AN APPROVED OFF-SITE LOCATION. FOLLOW THE "AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS" AND ANSI Z133.1 GUIDELINES.
- 6. TREES SHALL HAVE A MINIMUM HEIGHTS OF (8) EIGHT TO (10) TEN FEET AND (2) TWO INCHES OF CALIPER.
- 7. ALL DISTURBED AREAS MUST BE STABILIZED BY MEANS OF MULCH, SEEDING, OR SOD AS CALLED OUT ON THIS PLAN. IF DISTURBED AREA IS OUTSIDE OF THE LIMITS OF THIS PLAN, AREAS MUST BE STABILIZED WITH EXISTING MATERIAL OR BETTER. I.E. SEEDING OR SODDING.
- VEGETATION THAT EXCEEDS TWENTY-FIVE (25) FEET IN HEIGHT AT MATURITY SHOULD NOT BE PLANTED CLOSER THAN TEN (10) FEFT OF THE VERTICAL PLANE OF AN EXISTING POWER LINE EXCLUDING SERVICE WIRES.

- 9. BALLED AND BURLAPPED STRAPPING WIRE, AND ANY SYNTHETIC MATERIAL SHALL BE REMOVED PRIOR TO FINAL INSPECTION. WIRE BASKETS SHOULD BE PULLED AWAY FROM THE TRUNKS. WIRE BASKETS SHOULD BE CUT AWAY FROM THE TOP 1/3 OF THE ROOT BALL.
- 10. TREES SHALL NOT BE PLANTED CLOSER THAN TEN (10) FEET FROM OTHER TREES UNLESS APPROVED BY THE CITY ADMINISTRATOR. CANOPY TREES SHOULD BE SPACED A MINIMUM OF 20' TO 30'.
- 11. A MULCH RING OF PINE STRAW OR PINE BARK SHALL BE PROVIDED AT LEAST FIVE (5) FEET IN DIAMETER AND NOT CLOSER THAN SIX (6) INCHES FROM THE TREE TRUNK, FOR ALL NEWLY PLANTED TREES.
- 12. PINE STRAW OR PINE BARK MULCH SHALL BE PROVIDED A MINIMUM OF FOUR (4) INCHES OF DEPTH AROUND ALL
- 13. SHRUB LINES ARE TO BE PLANTED AT THE REQUIRED MINIMUM HEIGHT, NOT BY A CONTAINER SIZE. 14. SOIL IN TREE ISLANDS SHALL HAVE AT LEAST 12" OF SUITABLE SOIL FOR TREE PLANTINGS, AND BE VOID OF ANY
- CONSTRUCTION DEBRIS OR UNSUITABLE MATERIAL. 15. IRRIGATION SHALL BE PROVIDED WITH AN AUTOMATIC IRRIGATION SYSTEM FOR ALL NEWLY PLANTED MATERIAL.
- UNLESS AN ALTERNATE MEANS IS APPROVED, ALL TREES SHALL BE IRRIGATED BY BUBBLER TYPE EMITTERS.
- 16. TREES SHALL NOT BE PLANTED CLOSER THAN 7.5' FROM THE CENTERLINE OF UNDERGROUND UTILITIES. 17. UNLESS OTHERWISE SPECIFIED, NO HIGH VOLUME IRRIGATION IS PROPOSED ON THESE PLANS.
- 18. UNLESS OTHERWISE SPECIFIED, ALL SOD SHALL BE BAHIA.

#### **ROW IMPROVEMENT NOTES:**

 ALL EXISTING UTILITIES ARE TO BE ADJUSTED TO FINAL GRADE. 2. CONTRACTOR SHALL REMOVE ANY CONFLICTING STRIPING.

- SUBMITTAL OF AS-BUILT SITE SURVEY, INCLUDING BENCHMARKS, IS REQUIRED IN COMPLIANCE WITH SECTION 6.04.00 OF THE LATEST ST. JOHNS COUNTY LAND DEVELOPMENT CODE AND SECTION 15 (AS-BUILTS) OF THE DEVELOPMENT REVIEW MANUAL PRIOR TO SCHEDULING A FINAL INSPECTION OF THE WORK.
- 2. ST. JOHNS COUNTY DEVELOPMENT REVIEW INSPECTOR SHALL BE CONTACTED 24 HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND 5 DAYS PRIOR TO FINAL INSPECTION.
- 3. THERE ARE TWO PAVEMENT REQUIREMENTS: LDC 6.04.07.G.3 (ROAD CONSTRUCTION) & LDC 6.04.08 (BORING)
- 4. ALL SUBDIVISION PLANS APPROVED AFTER 5/28/08 ARE SUBJECT TO THE TWO LIFT PAVING REQUIREMENTS AS DETAILED IN THE ABOVE LAND DEVELOPMENT CODE SECTIONS. IN SUMMARY; THE FINAL WEARING SURFACE LAYER IS NOT TO BE APPLIED UNTIL 90% OF THE C/O'S HAVE BEEN ISSUED AND THE IMPROVEMENTS HAVE BEEN INSPECTED AND ACCEPTED BY THE COUNTY. UNTIL THE FINAL SURFACE HAS BEEN APPLIED AND ACCEPTED, BONDING FOR THIS WORK IS TO REMAIN IN PLACE.
- ALL DRAINAGE PIPES INSTALLED WITHIN ROADWAY RIGHT-OF-WAYS/EASEMENTS (PUBLIC OR PRIVATE) SHALL BE TELEVISED BY A COMPANY OR INDIVIDUAL CERTIFIED TO PERFORM SUCH WORK PER LDC 6.04.07.L.5G. THIS REQUIREMENT MAY ONLY BE WAIVED ON COMMERCIAL SITES IF THE ENGINEER OF RECORD CERTIFIES BY LETTER THAT THE SITE DOES NOT RECEIVE ANY RUNOFF FROM ST. JOHNS COUNTY RIGHT OF WAYS. IF THERE IS ANY CONNECTION OR RELATIONSHIP BETWEEN THE PROJECT SITE AND A COUNTY OWNED OR MAINTAINED DITCH, POND OR STRUCTURE, IT SHALL BE REQUIRED. THIS TELEVISING OF THE DRAINAGE LINE SHALL BE DONE IN COLOR AND SHALL BE OF SUCH QUALITY AS TO VISUALLY IDENTIFY THE PROPER CONSTRUCTION OF ALL JOINTS AND PIPE ALIGNMENT. A VIDEO TAPE SHALL BE PROVIDED TO THE COUNTY UPON COMPLETION. THE TELEVISING OF THE DRAINAGE LINES SHALL BE PREFORMED AFTER THE PLACEMENT OF THE BASE MATERIAL AND PRIOR TO THE FINAL WEARING SURFACE OF THE ROADWAY. THE APPROVAL, BY THE COUNTY, OF THE TELEVISING SHALL BE REQUIRED PRIOR TO THE PLACEMENT OF THE FINAL WEARING SURFACE OF THE ROADWAY. TELEVISED RECORD SHALL BE REVIEWED AND CERTIFIED BY THE ENGINEER OF RECORD (EOR).
- 6. IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE A PRE-CONSTRUCTION / PRE-PERMIT ISSUANCE MEETING WITH SJC STAFF AFTER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE COUNTY, AND PRIOR TO STARTING ANY SITE ACTIVITIES. THE PRE-CONSTRUCTION MEETING WILL BE HELD IN CONJUNCTION WITH THE MANDATORY SJCUD PRE-CONSTRUCTION MEETING. HOWEVER, IF THE PROJECT FALLS OUTSIDE OF SJCUD JURISDICTION, PLEASE CALL CARL COLEE TO SCHEDULE MEETING.

#### GENERAL FDOT DRIVEWAY CONNECTION NOTES: ALL WORK PERFORMED WITHIN THE DEPARTMENT RIGHT-OF-WAY SHALL CONFORM TO THE MOST CURRENT

- EDITION OF THE FOLLOWING PUBLICATIONS:
- A. STANDARD PLANS B. STANDARD SPECIFICATIONS
- C. FDOT DESIGN MANUAL
- D. FDOT FLEXIBLE PAVEMENT DESIGN MANUAL E. FDOT UTILITY ACCOMMODATION MANUAL
- TRANSPORTATION STANDARDS THE ENGINEER/APPLICANT SHALL IMMEDIATELY CONFER WITH THE DEPARTMENT'S ENGINEER IN ORDER TO RESOLVE THE DISCREPANCY)
- 2. ALL TRAFFIC STRIPING AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMO PLASTIC.
- 3. REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES / SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.
- 4. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.
- 5. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
- 6. ALL CURB AND GUTTER AND SIDEWALK, WILL BE REMOVED AND REPLACED JOINT TO JOINT. 7. ALL BROKEN / CRACKED DRIVEWAYS MUST BE FULLY REMOVED AND REPLACED.
- 8. ALL DISTURBED AREAS WITHIN THE DEPARTMENT'S RIGHT-OF-WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED (BERMUDA IN URBAN, BAHIA IN RURAL).
- 9. BURNING OF ANY MATERIAL OR DEBRIS IS PROHIBITED IN FDOT RIGHT OF WAY
- 10. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT.

# GENERAL FIRE PROTECTION NOTES:

- FIRE PROTECTION FOR THE PURPOSE OF THESE PLANS IS ANY UNDERGROUND WATER LINE NOT OWNED AND MAINTAINED BY A PUBLIC UTILITY AS WELL AS ANY PRIVATE FIRE SERVICE MAIN AND PIPE AND ITS APPURTENANCES ON PRIVATE PROPERTY (1) BETWEEN A SOURCE OF WATER AND THE BASE OF THE SYSTEM RISER FOR WATER-BASED FIRE PROTECTION SYSTEMS, (2) BETWEEN A SOURCE OF WATER AND INLETS TO FOAM-MAKING SYSTEMS. (3) BETWEEN A SOURCE OF WATER AND THE BASE ELBOW OF PRIVATE HYDRANTS OR MONITOR NOZZLES AND (4) USED AS FIRE PUMP SUCTION AND DISCHARGE PIPING, (5) BEGINNING AT THE INLET SIDE OF THE CHECK VALVE ON A GRAVITY OR PRESSURE TANK.
- 2. THIS SHALL ALSO APPLY TO COMBINED SERVICE MAINS USED TO CARRY WATER FOR FIRE SERVICE AND OTHER USES. I.E. DOMESTIC.
- 3. STANDARDS TO BE REFERENCED ARE TO BE THE MOST CURRENT AS ADOPTED BY THE FLORIDA FIRE PREVENTION

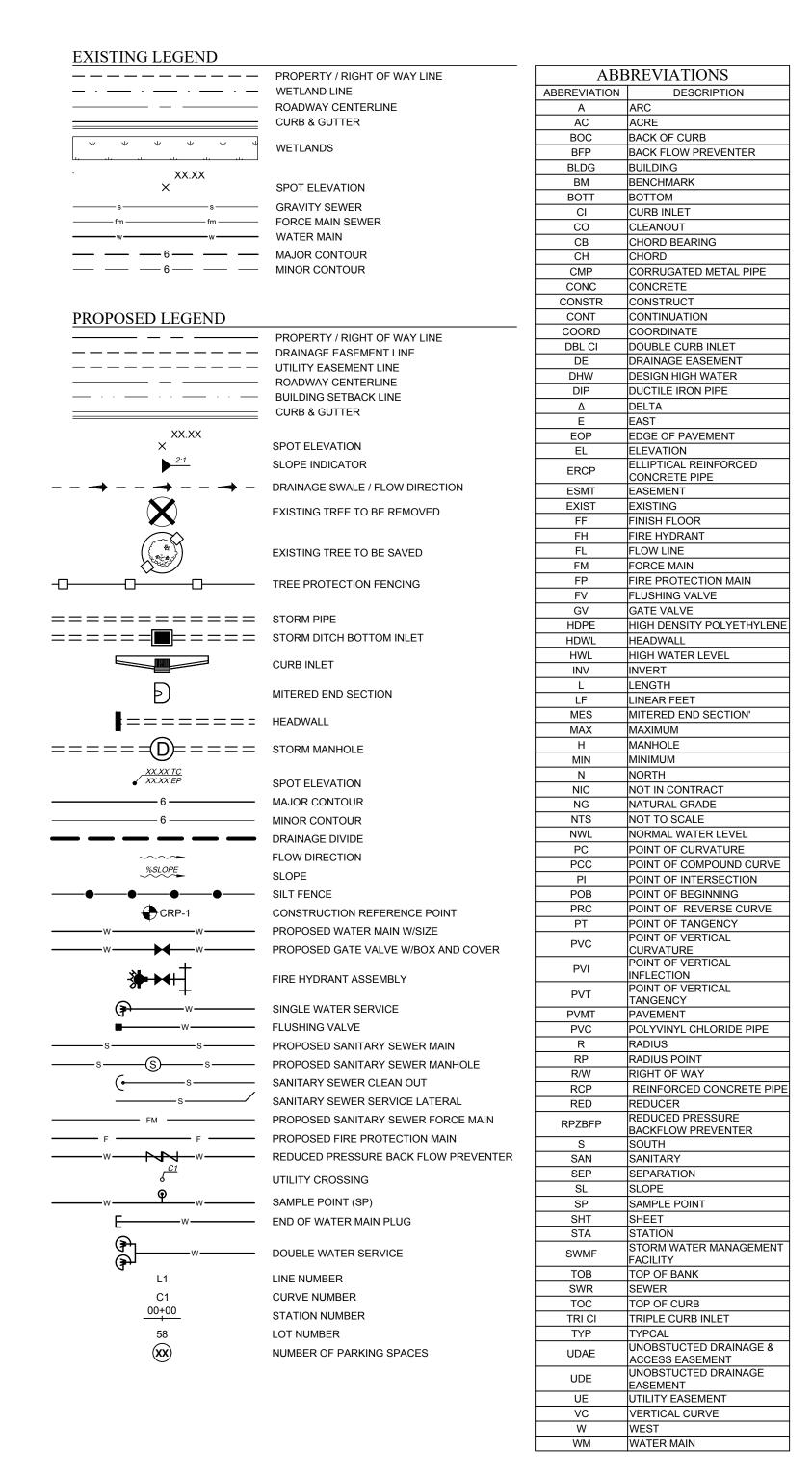
4. ITEMS ON THE CONSTRUCTION PLANS SHALL INCLUDE BUT NOT LIMITED TO SCALE DRAWINGS AND DETAILS AND TO

- NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS & THEIR APPURTENANCES NFPA 20, STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
- NFPA 22, STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION NFPA 16, STANDARD ON DELUGE FOAM-WATER SPRINKLER & FOAM-WATER SPRAY SYSTEMS
- NFPA 1963 STANDARD FOR FIRE HOSE CONNECTIONS
- INCLUDE THE FOLLOWING ITEMS WHEN THEY ARE APPLICABLE TO THE SYSTEM BEING INSTALLED: A. NAME OF OWNER AND OCCUPANT.
- B. LOCATION, INCLUDING STREET ADDRESS. POINT OF COMPASS.
- A GRAPHIC REPRESENTATION OF THE SCALE USED ON ALL PLANS.
- NAME AND ADDRESS OF CONTRACTOR SIZE AND LOCATION OF ALL WATER SUPPLIES
- G. SIZE AND LOCATION OF ALL PIPING, INDICATING, WHERE POSSIBLE, THE CLASS AND TYPE AND DEPTH OF EXISTING PIPE, THE CLASS AND TYPE OF NEW PIPE TO BE INSTALLED, AND THE DEPTH TO WHICH IT IS TO BE
- H. SIZE, TYPE, AND LOCATION OF VALVES. INDICATE IF LOCATED IN PIT OR IF OPERATION IS BY POST INDICATOR OR KEY WRENCH THROUGH A CURB BOX.
- LOCATION OF FIRE DEPARTMENT CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM, INCLUDING DETAIL OF CONNECTIONS.
- SPRINKLER AND STANDPIPE RISERS AND MONITOR NOZZLES TO BE SUPPLIED BY THE SYSTEM. K. LOCATION OF FIRE DEPARTMENT CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM,

- INCLUDING DETAIL OF CONNECTIONS.
- ALL COMPONENTS MUST HAVE LISTING WITH FIRE PROTECTION PER NFPA 24. M. ALL FIRE HYDRANTS INSTALLED IN ST. JOHNS COUNTY MUST HAVE A SINGLE 4.5 INCH HOSE OUTLET, AND
- A COPY THESE APPROVED ENGINEERED PLANS SHALL ACCOMPANY A REQUIRED FIRE MARSHAL UNDERGROUND PERMIT SUBMITTED BY A CERTIFIED CONTRACTOR. THIS UNDERGROUND PERMIT WILL REQUIRE ADDITIONAL DETAILS AND SPECS AT THE TIME OF SUBMITTAL TO THE FIRE MARSHAL'S OFFICE.

TWO (2.5) INCH HOUSE OUTLETS, ALL WITH MALE NH STANDARD THREADS, IN ACCORDANCE WITH NFPA 1963.

- 6. CONTRACTORS INSTALLING THE UNDERGROUND PIPING IN ACCORDANCE WITH THE ABOVE REFERENCE STANDARDS FOR A FIRE PROTECTION SYSTEM USING WATER AS THE EXTINGUISHING AGENT BEGINNING AT THE POINT AT WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND ENDING NO MORE THAN 1 FOOT ABOVE THE FLOOR SHALL BE REQUIRED TO HAVE A CLASS I, II, OR V FIRE PROTECTION CONTRACTORS LICENSE PURSUANT TO CHAPTER 633, FLORIDA STATUTES. GENERAL CONTRACTORS ARE REMINDED THAT THEY ARE RESPONSIBLE FOR VERIFYING THAT THEIR SUBCONTRACTORS HOLD THE REQUIRED LICENSES. CONTRACTORS FOUND TO BE VIOLATING THIS REQUIREMENT MAY BE REPORTED TO THE DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION AND/OR THE STATE FIRE MARSHAL'S REGULATORY LICENSING SECTION.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE FIRE MARSHAL'S OFFICE PRIOR TO THE START OF SITE CONSTRUCTION IN ACCORDANCE WITH THE ABOVE REFERENCED STANDARDS.
- 8. NOTE: MINIMUM WORKING PRESSURE OF THE UNDERGROUND PIPING SHALL BE 150 PSI. NFPA 24 REQUIRES SPECIFIC PVC PIPING TO MEET TABLE C-900 WITH MANUFACTURING LISTING FOR FIRE PROTECTION.
- 9. ALL FIRE LINES MUST BE INSPECTED BY THE FIRE MARSHAL'S OFFICE PRIOR TO BACKFILL. THE CODE REQUIRES ALL JOINTS EXPOSED FOR INSPECTION WITH FILL IN-BETWEEN JOINTS. ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2 HOURS.



02. GENERAL. All materials shall be of those listed in the C.G.C.S. Approved Materials Manual, The installation shall be warranted by the Contractor as to materials, workmanship and accuracy of the As-built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good auality: i.e., sewers shall be laid true to line and grade, fittings shall be properly installed and restrained, trenches shall be properly excavated and backfilled, manholes shall be installed at locations and to elevations shown on the plans.

02.1 CONTRACTOR LICENSE AND APPROVAL. Utility reserves the right to approve or deny approval of contractor prior to construction of any on-site or off-site utility facilities. Contractor must hold a State Of Florida Under Ground Utility contractors license, that named contracting company being the one doing the work on project, and demonstrate acceptable experience in the field of utility construction.

03. SURVEYS. The Utility Contractor shall provide all surveys necessary for the layout and construction of the work of his contract.

04. EARTHWORK. Earthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenches are to be used for backfill. All fill or backfill shall be either sand or sandy clay, free of roots, trash or other debris. All backfill alongside of and to a height twenty—four inches above all pipe shall be free of clay or organic material, compacted in lifts, the first of which shall be to the spring line of the pipe by either hand or machine operation carefully to 98%. All other backfill shall be compacted by either hand or machine operation carefully to 95% (outside of paving), 98% (under paving) of its optimum moisture content as determined by ASTM D698. latest. Copies of compaction density test reports from a licensed testing agency shall be made available to C.G.C.S. if requested.

05. MANHOLES. Manhole bases, sections and cones shall conform to the requirements of ASTM C478, Specifications for Precast Reinforced Concrete Manhole Sections. Cement shall meet the requirements of ASTM C150, Specifications for Portland Cement, Type II. Concrete shall meet the minimum requirements for Class "A" Concrete Work. Minimum wall thickness shall be 1/12 the inside diameter in inches plus one (1) inch. Bases for manholes shall be cast integrally with the bottom manhole section. Joint contact surfaces shall be formed with machined castings; they shall be exactly parallel with a 2 degree slope and nominal 1/16 inch clearance with the tongue equipped with a proper recess for the installation of an O-ring rubber gasket, conforming to ASTM C443. Joints for circular Concrete sewer and Culvert pipe using Rubber gasket, or RAM—NEK premolded Plastic Joint Sealer with joints Manhole adjustment materials shall be Precast concrete adjustment rings only as manufactured by Taylor Precast Co. (or equal). Precast manhole walls shall not be coated, unless otherwise noted. Cement grout for manhole bottoms shall be a stiff rich mix of Type II Portland Cement and sharp plaster sand. Calcium chloride may be added (maximum of 2%) to aid in obtaining a faster set. At permanent pump station locations, the first upstream manhole from the station shall be lined with a polyethylene liner as manufactured and installed by Taylor Precast Co. or approved equal.

05.1 CAST IRON MANHOLE FRAMES AND COVERS. Cast iron manhole frames and covers shall be as detailed on drawings. Castings shall meet the requirements of ASTM A48. Specifications for Gray Iron Castings, Class No. 30, or Grade 65-45-12. Ductile Iron meeting the requirements of ASTM A536, Standard Specification for Ductile Iron Castings. In either case, manhole frame and cover shall be

designed to withstand an HS20-44 loading defined in the AASHTO Specifications. Frames and covers shall be machined or ground at touching surfaces so as to seat firmly and prevent rocking.

05.2 FLEXIBLE MANHOLE CONNECTOR. All connections between sewer pipe and pre-cast concrete manholes shall be accomplished by a Flexible Connector, "Kor-N-Seal", as manufactured by National Pollution Control Systems, Inc. or approved equal.

FLOW CHANNELS. Flow channels in manhole base shall be formed of D.O.T. Class I, Type II cement grout with brick or rubble and trowel to a smooth surface finish. Grout surface shall be 1" min. thickness over brick or rubble. While the manholes are under construction, cut off pipes at inside face of the manhole and construct the invert to the shape and sizes of pipe indicated. All inverts shall provide a constant aradient from influent pipe to effluent pipe through manhole. Changes in direction of the sewer and entering branch or branches shall be laid out in smooth curves of the longest possible radius which is tangent to the center lines of adjoining pipelines.

05.4 DROP INLETS. Where shown on the drawings, drop inlets to the manholes shall be constructed as shown on the drawings and specified herein.

06. POLYVINYL CHLORIDE PIPE. Polyvinyl Chloride Sewer Pipe shall conform to the requirements of ASTM D-3034. SDR 26. The PVC compound conforming to ASTM D-1784. Pipe shall be clearly marked in 5 Ft. intervals or less, indicating manufacturers name, nominal size, cell classification and legend. Joints shall be push-on rubber gasketed, conforming to ASTM D-3034. Pipe and fittings shall be installed in accordance with recommended practice ASTM D-2321. Maximum depth of gravity sewer without prior approval shall be 15 feet. Sewers over 15' in depth shall be DR-18 P.V.C. pipe and shall have C.G.C.S. approval prior to design or installation of said sewer.

07. PIPE BETWEEN MANHOLES. All piping installed between manholes shall be the same material and class. No dissimilar pipe material will be allowed anywhere within a single run of pipe.

08. SANITARY SERVICE LATERALS. Sanitary service laterals shall be Polyvinyl Chloride Pipe conforming to the requirements of ASTM D-3034. SDR 26 where cover over top of pipe is 36 inches or greater. Where cover over top of pipe is less than 36 inches, specific construction conditions shall be directed by the City of Green Cove Springs. All sanitary service laterals shall be a minimum of 4'-0" deep at the right-of-way line to top of pipe. Any sanitary service lateral which must be more than 5'-0" deep shall not be installed prior to obtaining permission from the C.G.C.S. field inspector or C.G.C.S. Public Works Department, All sanitary service laterals shall be 6-inch diameter from the main to the right-of-way line with a minimum slope of 0.60% (0.6 feet per hundred feet). In single family residential developments, services shall reduce to 4" in size and terminated at the property line with a cleanout constructed of a PVC wye and bend with a maximum angle of 45 degrees (see Standard Sewer System Cleanout Detail) utilizing the proper fittings for the type of pipe specified.

09. FORCE MAINS. Force mains shall be C900 DR-18 PVC and conform to the requirements of ASTM D-1784, D-2241, D-3139 and F-477. Pipe shall be color coded and marked "FORCE MAIN" on at least two sides and at every 12" along the barrel of the pipe. Ductile iron pipe for force main service shall be polylined. Ductile iron pipe is not to be used without prior approval of the Clay County Utility Authority. Fittings shall be C110 gray iron and shall be polylined. Force mains less than 3" shall be SCH.80 PVC. All force mains shall be installed with tracer wire per C.G.C.S. standard location wire details.

09.1 LIFT STATION VALVES. Plug valves shall be Dezurik, Clow or M&H. with full port opening. Check valves shall be M&H, Mueller or American Darling. 09.2 FORCE MAIN VALVE. Gate valve, resilient seated, same as specified in Water Distribution System Specifications Section 12 below. Except valve bodies shall be gray iron. Valve box shall have the word "SEWER" cast into the cover,

09.3 FORCE MAIN JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all force main tees, crosses, valves and bends. Restrainers shall be Uni-Flange Series 1300, 1350, 1390 or approved equal installed per manufacturer's recommendations and C.G.C.S.

OUTLINE SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEM

09.4 FORCE MAIN PIPE FLUSHING. All force main piping shall be flushed clean with water utilizing full pipe diameter flushing for all piping up to and including 8" diameter.

10. INSTALLATION. All sewer lines, manholes, and appurtenances shall be constructed to the dimensions and elevations indicated on the drawings. Trenches shall be excavated to a width approximately twelve inches greater than the outside diameter of the pipe. Machine excavation shall be to a depth one-fourth pipe diameter above proposed pipe grade; the remaining depth shall be hand excavated and shaped to give full support to the lower one-fourth of each pipe. Each section of pipe shall be inspected for defects prior to being lowered into the trench. The inside of each bell and the outside of each spigot shall be thoroughly cleaned of all foreign matter, prior to making the joint. All sewer lines shall be constructed with the spigot ends pointing in the direction of the flow. Both the bell and the spigot of each joint shall be lubricated with the lubricant recommended by the pipe manufacturer. All sewer lines shall be cleaned of foreign matter as construction progresses, and shall be in a clean condition upon completion of construction operations. Pipe materials shall remain the same on runs between manholes and / or other structures.

11. INSPECTIONS. Each section of the completed sewer system shall be inspected for proper alignment. Inspection shall consist of "lampina" from manhole to manhole. Any section of the sewer system which does not display true, concentric alignment shall be reinstalled at no additional expense to the Owner. A written log of inspection shall be kept indicating location of test, potential problems in sewer, dips and depth of water. service locations, and other irregularities in the pipe lines. A video tape in VCR format shall be made of the television inspection and submitted to the Engineer and the City of GCS. Copies of compaction density test reports from a licensed testing agency shall be made available to City of GCS if requested.

11.1 Television inspection will be required on all new gravity sewers constructed. This service shall be provided by the Contractor as a part of this Contract. The newly constructed sewers shall be televised in the presence of the Inspector of the City of GCS. A full report as to the condition of pipe, type, depth, location of services, length, type, joint and distance between manholes, etc. shall be furnished to the City of GCS inspector prior to the final acceptance of the system. Any pipe found to be cracked, leaking or otherwise defective shall be removed and replaced with new pipe at no additional costs to the Owner. Deflection testing with 7.5% mandrel also required. Any section not passing the mandrel test shall be corrected. Sewer mains shall be televised after curb and lime rock are in place but prior to paving. Curb and limerock shall be installed, finish graded prior to televising the gravity sewer. Limerock priming and paving operations shall not take place until the City of GCS inspector has reviewed the television tape and approves the gravity sewer system. This will be strictly enforced. All gravity sewers must be flushed no sooner than 4 hours prior to any television inspection. Force main lines shall be pressure tested and approved prior to paving, but not prior to subgrade mixing operation and limerock installation, finish graded and compacted. Sewer services shall be viewed by a camera capable of viewing into service lateral connections. Adequate water must be placed within the upstream manhole to flow through the downstream manhole before inspectina with the camera. All work must be accomplished in the presence of the City of GCS inspector and a 48 hour notice must be provided. Contractor shall provide City of GCS with a 48 hr. notice of intent to televise and inspect sewer main. City of GCS inspector shall report to job site at the time specified by contractor at the time of the call-in. City of GCS inspectors will wait at the job site no more than one hour for the televising to begin before leaving the job site. Contractor shall reschedule televising giving City of GCS 48 hrs. notice if the above occurs.

11.2 TEST, INFILTRATION: After completion, the sewers or sections thereof, shall be tested and gauged for infiltration. To check the amount of infiltration, the Contractor, at no added compensation over the contract price for the sewers, shall furnish, and install and maintain a V-notch sharp crested weir in a wood frame on the main sewers as directed by the Engineer, Maximum allowable infiltration shall be 50 gallons per mile, per inch of dia. of sewer per 24 hour day at any time.

11.3 TEST, EXFILTRATION: In greas where around water is not encountered in sewer construction, or it is desired to run exfiltration tests, the Contractor shall furnish and install all necessary materials. equipments, shall supply water, etc., and shall run exfiltration tests to determine acceptance of the sewer. The maximum allowable exfiltration shall be 50 gallons per mile per inch of diameter of sewer per 24 hour day at any time based on two foot minimum internal head.

# standard details and specifications.

01. INTENTION. It is the declared and acknowledged intention to secure a new water distribution system, complete, in accordance with the plans and specifications, and contract documents. All new work shall be in accordance with C.G.C.S. Specifications and Details and Approved Materials Manual and C.G.C.S. Public Works Department Details and Specifications and any other Government Regulatory Agency, All work shall conform to the above whether or not specifically called out or noted on the plans.

02.1 CONTRACTOR LICENSE AND APPROVAL. Utility reserves the right to approve or deny approval of contractor prior to construction of any on-site or off-site utility facilities. Contractor must hold a State Of Florida Under Ground Utility contractors license, that named contracting company being the one doing the work on project, and demonstrate acceptable experience in the field of utility construction.

02. GENERAL. All materials shall be of those listed in the C.G.C.S. Approved Materials Manual, Materials shall be warranted by the Contractor as to materials, workmanship and accuracy of As-built drawings for a period of two years from the date of completion of the work or beneficial use of the facilities. Workmanship shall be of good quality; i.e., mains shall be laid in a uniform alignment, fittings shall be properly restrained, trenches shall be properly excavated and backfilled, fire hydrants and valve boxes shall be adjusted to finished grade. All water mains shall be installed with tracer wire per C.G.C.S. standard location wire details.

03. SURVEYS. The Utility Contractor shall provide all surveys necessary for the layout and construction of the work of his contract.

04. EARTHWORK. Earthwork shall include all excavation, fill and backfill (hand/machine), compaction and rough grading of materials encountered. No unsuitable materials clay, muck, or peat removed from pipe trenches are to be used for backfill. All fill or backfill shall be either sand or sandy clay, free of roots, trash or other debris. All backfill alonaside of and to a height twenty-four inches above all pipe shall be free of clay or organic material, compacted by either hand or machine operation carefully to 98%. All other backfill shall be compacted by either hand or machine operation carefully to 95% (outside of paving), 98% (under paving) of its optimum moisture content as determined by ASTM D698, latest. Copies of compaction density test reports from a licensed testing agency shall be made available to C.G.C.S. if requested.

05, JOINT RESTRAINT. All fittings shall be properly and adequately restrained against lateral movement at all water main tees, crosses, valves bends and fire hydrants. Restrainers shall be Uni-Flange Series 1300, 1350, 390 or approved equal installed per manufacturer's recommendations and C.G.C.S. Details and Specifications.

06. DUCTILE IRON PIPE. Ductile iron pipe shall conform to ANSI Specification A21.50 (AWWA C150) latest, "Thickness Design of Ductile Iron Pipe", Table 50.5, laying condition Type 2, internal operating pressure of 250 p.s.i. for an 8-foot depth of cover, Class 51 minimum and shall be ANSI A21.51 (AWWA C151), latest centrifugally cast pipe. Laying lengths shall each length clearly marked with pressure rating, thickness be 20 feet or less, class, height of pipe without lining, length, and manufacturer. Ductile iron pipe for water service shall be furnished with cement lining per AWWA C110, C115 and C151. The pipe shall have design values of 60,000 P.S.I. minimum tensile strength, and 42,000 P.S.I. minimum yield strength. Ductile iron pipe for water or service lines shall be used in any easement, right-of-way, between lots, and any instance where a building foundation or other permanent appurtenance is within 10' of the water main or a service line

07. DUCTILE IRON FITTINGS shall be C153 cement lined and suitable for the type and class of pipe to which connected. Gaskets shall be suitable for potable, domestic water service. Minimum working pressure shall be 150 P.S.I.

08. POLYVINYL CHLORIDE PIPE. Polyvinyl chloride pipe for water mains 4 inch in diameter and larger, shall be P.V.C. C900, DR-18, conforming to ASTM D-1784, D-2241, D-3139 and F-477, latest, and shall bear the seal of the National Sanitation Foundation. Pipe shall be color coded and marked on at least 2 sides with the word "WATER" and at every 12" along the barrel of the pipe. Couplings shall be rubber gasketed, push—on type conforming to ASTM D-2122. DR-18 shall be used for fire mains.

09. STEEL CASING PIPE, Steel casing pipe shall be of size indicated on the Drawings and shall conform to ASTM A139, with a minimum yield strength of 35,000 p.s.i.

10. POLYETHYLENE PIPE shall be SDR 9, AWWA C901, ASTM D2737, PE 3408, colored blue, NSF Seal, with Type 316 stainless steel inserts. Fittings shall be suitable for type of installation required. All piping smaller than 4" shall be Polyethylene.

11. GATE VALVES AND BOXES. Gate valves shall be non-rising stem type and shall be suitable for a 200 p.s.i. non-shock working pressure Gate valves shall be mechanical joint, flanged or screwed. Gate valves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type of main on which installed. Valves 2" & 3" shall be iron body, bronze fitted (distribution mains only). Valves 4" and larger shall be iron body, bronze fitted with resilient seat. Valves shall be of domestic (American) manufacture and shall be A.F.C., M&H. Mueller or approved equal, Valves 16" and larger shall be AWWA C-509. M&H Valve Co. Valve boxes with screw extensions shall be provided for all gate valves. Boxes shall be of cast iron construction, 7/32" minimum wall thickness and shall be nontacky tar enamel coated. The word "WATER" shall be cast in the cover. Other ball valves 2" and smaller shall be Ford Ball Valve or Mueller with F.I.P.T.

12. WATER METER BOXES. Meter boxes for flushing hydrants and 3/4" meters shall be DFW Plastics, Inc., model DFW36C-12-3T. Meter boxes for 1" meters shall be DFW Plastics, Inc., model DFW37C-12-3T. Meter boxes for 1-1/2" and 2" meters shall be DFW Plastics, Inc., model DFW1730C-12-3T, Developer shall be responsible for installation of meter boxes on all water services as part of the water main installation. All curb stops shall be adjusted to the proper elevation and shall be accessible for the installation of the water meter. The contractor shall be required to open all boxes for the C.G.C.S. inspector at the final inspection. A treated 6'-6" fence post marker shall be painted blue for identification,

13. CURB STOPS. Curb stops shall be cast bronze, inverted key stop, roundway, with check, lock wing type, for locking in the closed position. Curb stops shall be Ford Ball Valve or Mueller.

14. CORP STOPS. Corp stops shall be cast bronze. inverted key stop. roundway, with check, lock wing type, for locking in the closed position. Corp stops shall be Ford Ball Valve or Mueller.

15. FIRE HYDRANTS. Fire hydrants shall be traffic type, 150 pound working pressure, AWWA Standard C502, latest revisions, with two 2 1/2" nozzles, one 4 1/2" nozzle and 5 1/4" main valve. Fire hydrant shall be be compression type with breakable coupling and bolts. Pipe connection shall be mechanical joint. American Flow Control, AFC B-84-B, painted red w/white bonnets and with 1 1/2" penta nuts, opening left.

16. INSTALLATION. The minimum cover over top of potable water main shall be 36" minimum. All water lines and appurtenances shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. All pipe shall be checked for defects before being lowered into the trench. Defective pipe shall not be used. Pipe found to be defective, after installation, shall be removed and replaced with sound pipe at no additional expense to the Owner. The full length of each section of pipe shall rest solidly upon the pipe bed, with recesses excavated to accommodate the bells and joints. All pipe that has the grade or joint disturbed after laying shall be taken up and reinstalled. The pipe shall not be laid in water, or, when trench or weather conditions are unsuitable for the work. All joints shall be cleaned of all foreign matter before making the joint. Fittings at bends in the pipe shall be properly restrained with joint restrainers adequately sized to prevent movement and dislocating or blowing off when the line is under pressure. Service laterals shall terminate at the point noted in the details.

17. TESTS. After the pipe is laid, the joints completed, and the trench backfilled, the newly laid pipe and appurtenances shall be subjected to a Hydrostatic and Leakage test of 150 pounds per square inch for a

period of at least two hours. During this period, all joints shall be inspected to determine water tightness of the system. Any leaks detected shall be corrected. Tests shall be in accordance with the C.G.C.S.'s requirements and specifications. Water main lines shall be pressure tested and approved prior to paying, but not prior to subgrade mixing operation and limerock installation, finish graded and compacted. If C.G.C.S. inspector detects the water main has been damaged during priming or paving he shall require the contractor to repair the water main

18. STERILIZATION. After completion of construction and testing, the water system shall be sterilized with chlorine in accordance with AWWA Standard C651 latest, and State of Florida Department of Environmental Protection requirements before acceptance for domestic operation. The amount of chlorine applied shall be sufficient to provide a dosage of 50 parts per million or more. The chlorine solution shall remain in the system for a period of at least 8 hours, during which time every valve in the system shall remain opened and closed several times to assure contact with every surface of the system. After completion of sterilization procedures, the system shall be flushed using chlorinated water from a domestic water source having a chlorine residual of at least 1 part per million. The contractor shall obtain all bacteriological clearances as required by the Florida Department of Environmental Protection. After bacteriological clearances, the pressure in the main shall not drop below 20 P.S.I. Clearance report to be submitted to the Engineer. The contractor should be aware that there is a timing maximum related to bacteriological clearance of the main, completion of as-built drawings and Engineer / C.G.C.S. completion of Certificate of Completion. In any project where the bacteriological clearances are greater than 30 days old at the time of submittal of Certificate of Completion to F.D.E.P., the contractor may be required to pull more samples and obtain more bacteriological clearances. Prior to introducing the chlorine solution, the lines shall be thoroughly flushed with clean water utilizing full pipe diameter flushing for pipe up to and including 8" diameter. Contractor shall be responsible for dechlorination of the disinfectant water prior to any discharge to any ditch or surface waters.

19. BACTERIOLOGICAL SAMPLING. Contractor shall assure the project construction is completely finished prior to any bacteriological sampling and testing.

# **GENERAL NOTES**

1. AS-BUILT DRAWINGS AND ASSOCIATED COSTS. All cost records pertaining to the cost of water, reclaim and sewer facilities donated to the utility shall be provided to the Utility by applicant. Prior to acceptance of any extension to the Utility's system that is completed by a licensed underground utility contractor, the Utility will require that the applicant's contractor provide the Utility, to retain for its permanent records, all field as-built data. During the daily progress of the work, the contractor's job superintendent shall record on his field set of drawings all work installed. All manholes, gravity sewers, force mains, laterals, valves, fittings, fire hydrants, etc. shall be located in two directions. One location shall be referenced perpendicular to the right-of-way lines and or property lines (preferably both) or existing permanent utility structures are acceptable (i.e. manholes, catch basins, fire hydrants, head/end walls, etc.). No power/utility poles may be used for reference. Elevations of manhole inverts and center of cover shall be shown to the nearest hundredth of a foot. Size, type, class and slope of sewer main shall be shown (i.e. 8" PVC, SDR-35). The top elevation of each manhole may be determined by measuring from a surveyed pipe invert to the final adjusted manhole top. Size, type and class of water mains, valves, fittings, fire hydrants, etc. shall be shown (i.e., 8" D.I.P., 6" gate valve). All locations where the top of the water main is less than 36" deep or more than 50" deep shall be noted on the as-builts. Water as-builts, sewer as-builts and reclaim water as-builts shall be on separate sheets. <u>ASBUILTS SHALL BE IN NAD 1983 FL EAST-FOOT-STATE PLANE COORDINATES AND REFERENCE THE BM USED FOR THE PROJECT.</u>

Each page of the as-built drawings shall bear the name, date and original signature of the general contractor responsible for the Work and the name, date, original signature and seal of the reaistered land surveyor or reaistered professional engineer who provided the horizontal and vertical dimensions and elevations on the as-built drawing. The signatures shall certify that the as-built drawings do, in fact, reflect the true as-built conditions as located under the direct supervision of the registered surveyor and/or professional engineer. The as-builts shall be at the contractor's expense. A copy of the AutoCAD® ASBUILT DATA SHALL BE FURNISHED ON COMPACT DISK (CD) PLUS (2) SIGNED FULL SIZE PRINTED SET PLUS (1) MYLAR SET by either the design engineer or the applicant's contractor.

2. CONSTRUCTION WARRANTY AND WARRANTY SECURITY PERIOD. Developer shall warranty Utility against defects in material and workmanship for the portion of the onsite system to be owned by the Utility. Developer shall secure from its Contractor a written and fully assignable warranty that the system installed will be and remain free from all defects, latent or otherwise with respect to workmanship. materials, installation, and accuracy of his as-built drawings in accordance with the Utility approved plans and specifications for a period of two years from the date of the system acceptance by the Utility and immediately assign the same and the right to enforce the same to Utility on or before the date of the Utility's acceptance of the system for ownership and maintenance.

CLEAN-UP. All surplus materials of construction shall be removed from the site and disposed of by the Contractor as part of his contract with the owner.

4. RESTORATION. New Sanitary Sewer and Water Main Construction in earthen areas shall be seeded and mulched in accordance with Section 570 of Standard Specifications of the Florida Dept. of Transportation (latest edition). In locations where existing grassed (sodded) areas are disturbed, sod shall be replaced to preconstruction condition and to limits of construction or where directed by the engineer.

5. PERMITS. The Contractor shall be responsible for obtaining all permits required for performing work under this contract, except that the F.D.E.P. permits, and wetland permits, if required, will be secured by the owner or developer.

6. PIPE BEDDING. In the event unsuitable or unstable bedding material is encountered at or below the limits of the excavation required for installation, such material shall be removed and replaced with suitable compacted backfill material specified by the design engineer and approved by the C.G.C.S so as to provide a stable trench bedding surface suitable for proper pipe installation.

6-A. Pipe Bedding (Rock Bedding Material) Rock material used for pipe bedding shall be #57 stone or crushed concrete (crush-crete) in a #57 size. Rock bedding material shall be completely wrapped in a heavy filter fabric material, overlapped a minimum of one foot, rock bedding shall be installed to the correct grade and compacted to a density which will prevent any settlement, either by mechanical tamping equipment or by compressing the rock using the bottom of the backhoe bucket. The compaction shall be approved by C.G.C.S. inspector. The contractor shall be required to have submittal approved by design engineer and C.G.C.S. prior to use of such rock bedding

7. DEWATERING. The contractor shall at all time during construction provide ample means and equipment with which to promptly remove and dispose of all water entering the trench and structure excavations and shall keep said excavations acceptably dry until the piping and / or structures to be built therein are completed. All water pumped or drained from the work area shall be disposed of in a manner as to not damage sewer, water, electrical or any other piping, structures or property. No pipe shall be laid in water and no water shall be allowed to rise above the bottom of any pipe while it is being jointed, except as may be approved in writing by the C.G.C.S.

8. HYDROSTATIC TESTING. After all pressure pipes (water mains, services, and force mains) are laid, the joints completed, and the trench backfilled, the newly laid pipe and appurtenances shall be subjected to a hydrostatic test of 150 P.S.I. for a period of at least two hours. The engineer and the C.G.C.S. Public Works must be notified 48 hours before a test is to be performed. Test shall be as set forth in AWWA standard C600. Any leaks detected shall be corrected and the section of pipeline retested. The two hour test period shall begin when all joints have been determined to be water tight. Leakage shall be limited to that allowance set forth in Section 4 of AWWA Standard C600-87. Hydrostatic and leakage test and blow-down (zeroing of gage) must occur before sampling for bacteriological test. The maximum allowable pressure loss is 5 P.S.I. regardless of the length of pipe.

REPORTS. Reports of hydrostatic and leakage tests and sterilization of the newly completed systems shall be submitted to the C.G.C.S. prior to requesting acceptance of the system.

10. DENSITY TESTING. In-place density tests are required at intervals not to exceed 150' along pipelines for every other lift. A minimum of one test between manholes is required for every other lift regardless of the distance between sanitary sewer manholes.

11. CONCRETE. All Portland Cement concrete shall be of Type II Portland Cement, 2,500 P.S.I. minimum, ready mixed. All concrete shall be placed before the initial set has taken place. Stale or retempered concrete shall not be used.

12. GATE VALVES AND BOXES. Gate valves shall have a 2" operating nut and open left. Gate valves shall have joints suitable for the type main on which installed. Valves 2" and 3" shall be iron body, bronze fitted. Valves 4" and larger shall be iron body, bronze fitted with resilient seat. The word "WATER" on water boxes and "SEWER" on force main boxes shall be cast in the covers.

13. SEPARATION OF WATER AND SEWER MAINS. Horizontal and vertical separation between potable water system mains and or appurtenances and sanitary or storm sewers, wastewater or storm water force mains, and reclaimed water mains shall be in accordance with Rule 62-555,314 FAC.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed storm sewer, storm water force main, reclaimed water main regulated under Part III of Chapter 62-610, F.A.C, or proposed vacuum-type sanitary sewer. (b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity— or pressure—type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(c) New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(d) New or relocated, underground water mains crossing any existing or proposed pressure—type sanitary sewer, wastewater or storm water force main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least 12 inches above or below the outside of the other pipeline. However, it is preferable to lay the water main

(e) At the utility crossings described in paragraphs (c) and (d) above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum—type sanitary sewers, storm sewers, storm water force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity— or pressure—type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter

14. NEW CONNECTION TO EXISTING MAIN. New connection to existing main in service shall be accomplished by the "wet tap" method utilizing full circle stainless steel tapping sleeve and mechanical joint tapping valve. Tapping sleeve shall be rated at 200 P.S.I., non-shock working pressure conforming to AWWA Standard C110, latest revision. Stainless steel tapping sleeves shall be from those listed in C.G.C.S. approved material manual. Tapping valve shall be mechanical joint one end and standard flanged joint on other end. Valve shall conform to Section 12. of these specifications.

15. JOBSITE SAFETY. While on the job site, the contractor shall at all times observe all Federal, State and local safety rules, regulations and laws. This includes, but not limited to, confined spaces and excavation protection systems as per O.S.H.A. standards.

# **GENERAL NOTES**

16. CLOSE OUT / COMPLETION. Minimum items required for Close Out / Completion for

submittal to the City of Green Cove Springs will include: (a.) Construction Warranty from Developer in the form of a Bond, Letter of Credit or

Cashier's Check for a two-year period. (b.) Warranty Certificate for a two-year warranty from the contractor to the Developer

and assignment of same to the City of Green Cove Springs (C.G.C.S.). (c.) Developer's Affidavit certifying there is no outstanding debt against utility assets to

(d.) Value of Acceptance Report showing value of assets to be deeded to the C.G.C.S. e.) Bill of Sale to C.G.C.S

.) Bacteriological Test(s) .) Pressure Test(s)

n.) Television Reports and Tapes Density Reports

prior to any installation of said materials.

.) PROPER Final As-Built Drawings and disks

17. C.G.C.S. Shop Drawing and Submittal Process. A signed acknowledgment by the Contractor and the Material Supplier, on the "Shop Drawings and C.G.C.S.'s Approved Materials List Form", that all materials will be in accordance with C.G.S.S.'s Specifications, C.G.C.S.'s Details and C.G.C.S.'s Approved Materials Manual, is the only submittal C.G.C.S. will require for each item of materials with the following exception: any alternate materials requested by the Engineer; any materials not listed in the C.G.C.S. Materials Manual; and materials associated with pumping stations and plant installations. Those exceptions shall have an individual shop drawing submitted for C.G.C.S.'s review and approval

This is C.G.C.S.'s procedure and it does not preclude the design engineer from requiring additional submittals and shop drawings as he deems necessary for the project.

18. PUMP STATIONS (TEMPORARY OR PERMANENT). All pump stations shall be constructed in accordance with C.G.C.S. standards, rules and regulations and be approved by C.G.C.S. All work and materials shall meet the requirements of C.G.C.S. Standard Pump Station Details and Specifications or the plans, details and specifications for that specific pump station. A driveway shall be provided from the street (roadway) to within 2 feet of the pump station wetwell, minimum 10 feet wide x 5 inches thick 3,000 P.S.I. concrete. Submersible pump stations shall be fenced completely about the perimeter of the pump station site (location of the pump station site as noted on the plans), including gates and all other items required to make a completely fenced installation. The entire pump station site within the fenced area shall be covered with #57 stone, 6 inch thick minimum, placed over 8 mil visqueen.

19. Information shown on the Drawings as to the location of existing utilities has been prepared from the most reliable data available to the Engineer. The Contractor shall be responsible for requesting underground utility locates and shall assist the utility companies, by every means possible to determine said locations and the locations of recent additions to the systems not shown. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from Contractor's activities. The locations of all overhead utilities shall also be verified by the Contractor. The Engineer shall be notified of any conflict that may occur. The Contractor shall be responsible for determining which poles will need shoring during excavation and shall provide such shoring and support as required.

20. C.G.C.S. details and specifications (latest available copy) shall be included in all plans submitted for work within the C.G.C.S. utility system. No person shall modify, change, omit, replace any portion of those details and specifications without the express written consent of C.G.C.S.. In any instance where the design engineer has included his written specifications or details in the plans then the more stringent of the two shall govern.

21. All materials to be used for any project within C.G.C.S.'s utility system shall conform to those materials listed in the C.G.C.S. approved material manual in effect at the time final plans for that project are approved by C.G.C.S.

22. Under no circumstance shall any trees be planted within a C.G.C.S. utility easement without; a.) C.G.C.S. approving landscape and irrigation plans.

b.) C.G.C.S. being notified prior to the planting of trees and giving approval. c.) C.G.C.S. inspecting the installation of root barrier material (required at all trees which are closer than 10' to any C.G.C.S. utility line) as shown in C.G.C.S.

approved material manual and C.G.C.S. roadway cross section details, whether or not shown on the plans. 23. At all Jack & Bore locations a C.G.C.S. inspector shall inspect the casing spacers to verify

they are the correct size and have been installed correctly on the pipe prior to the pipe being installed into the pipe casing. The pipe casing shall be clean and free of all dirt, and shall be cleaned with a Vac-Con if necessary. A C.G.C.S. inspector shall be present at all time during this

# FINAL INSPECTION PROCEDURES

PRIOR TO FINAL INSPECTION, THE CONTRACTOR shall PROVIDE THE FOLLOWING:

. The sewer line T.V. report and tape The pressure test and bacteriological clearance analysis report.

The engineer of record certification to D.E.P. This can be done with completed as-builts. . Completed as—builts showing at least the following:

a.) Location of valves, mains, services, manholes and locate wire boxes.

b.) Elevation of sewer lines in the manhole, and stub-outs. 5. All services and valves to be plainly marked with a treated fence

post, and electronic locate marker when needed. 6. Pump station start-up report with draw down data for each pump and with both

working condition. PRIOR TO FINAL ACCEPTANCE FOR OWNERSHIP, THE FOLLOWING MUST BE COMPLETED:

1. All manhole rings and covers have to be adjusted to finish grade. Water services must be lowered and meter boxes installed, valve boxes must be

set on all gate valves. . As-built drawings shall have been updated to accommodate the C.G.C.S. comments and the

pumps in operation. All electrical components to be completely installed and in proper

final elevation of the manhole tops must be included. 4. All valves, locate wire boxes, sewer, water and reclaimed services shall be scribed in

curb and painted the correct color.

5. As-builts, must be accepted and approved by the City of Green Cove Springs Public Works. PRIOR TO FINAL ACCEPTANCE FOR OWNERSHIP, THE FOLLOWING MUST BE COMPLETED:

preliminary inspection will compare the approved design drawings to the actual site

1. A preliminary inspection must be coordinated by the underground utility contractor

and held a minimum of fifteen (15) working days prior to the final inspection/start-up. The installation, noting any deficiencies. 2. The following must be represented at the preliminary and final inspection:

a.) The C.G.C.S.'s inspection and distribution and collection departments b.) The project's developer and/or general contractor

c.) The underground utility contractor

d.) All subcontractors associated with the lift station (electrical, pump manufacturer,

control panel manufacturer, etc.)

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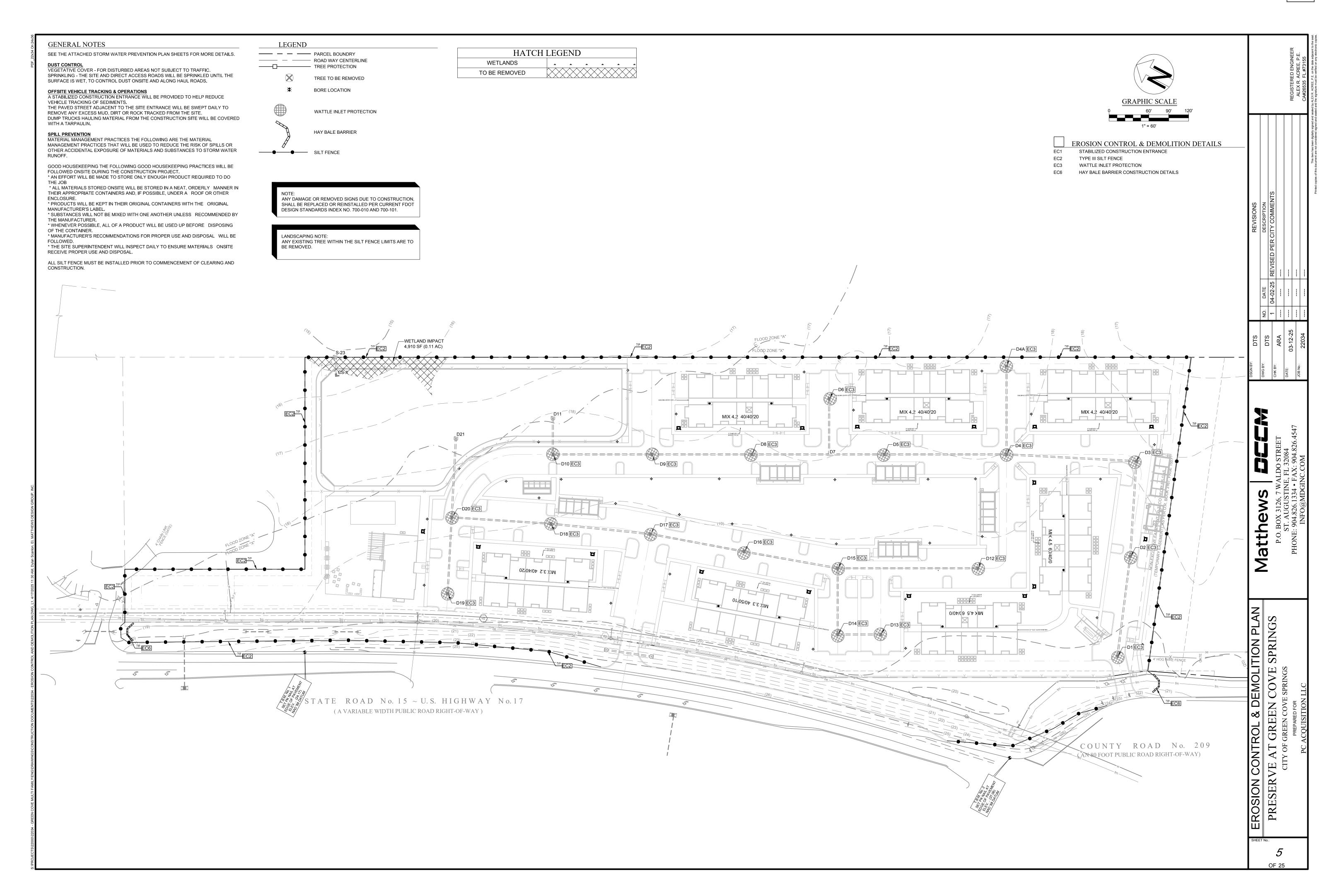
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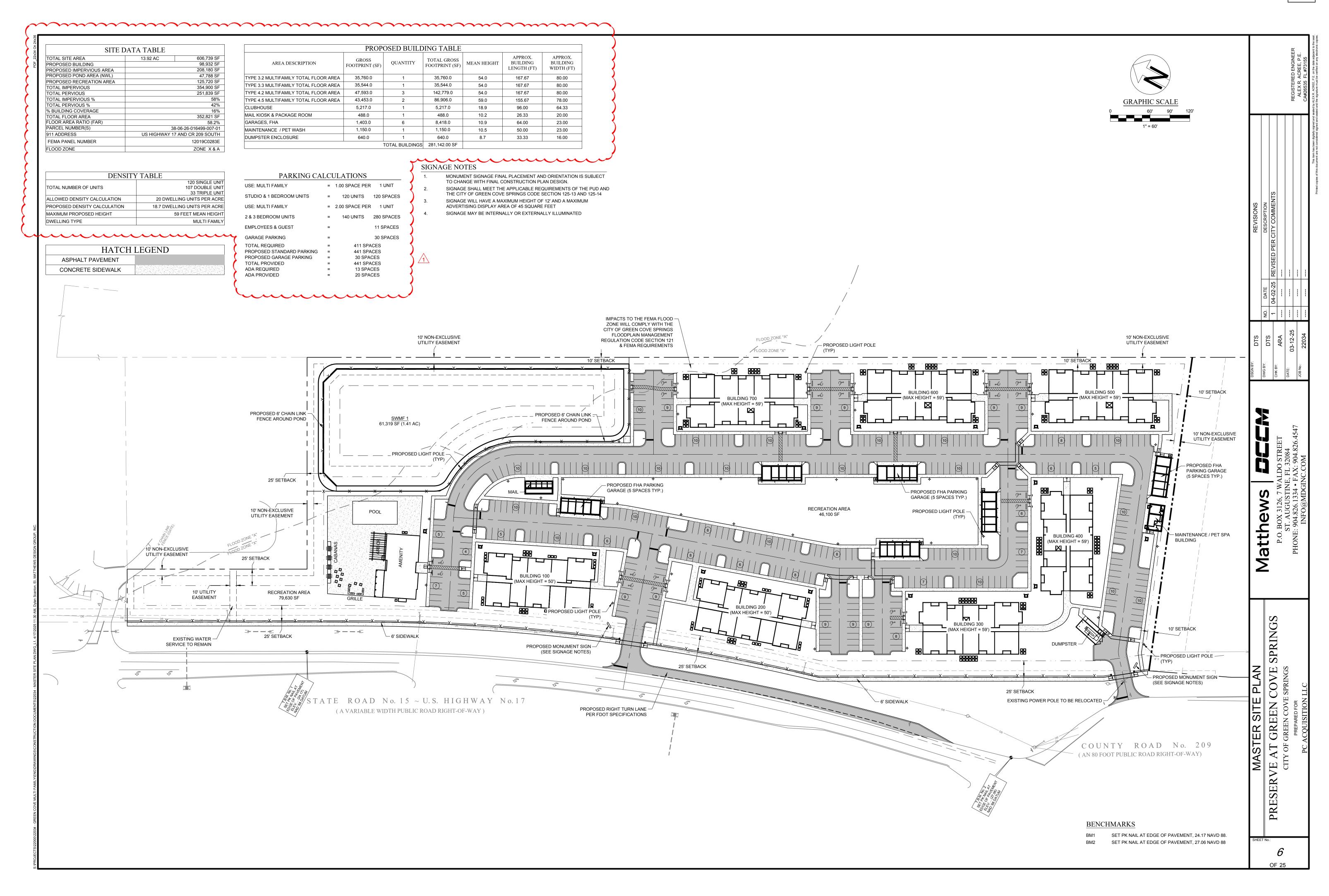
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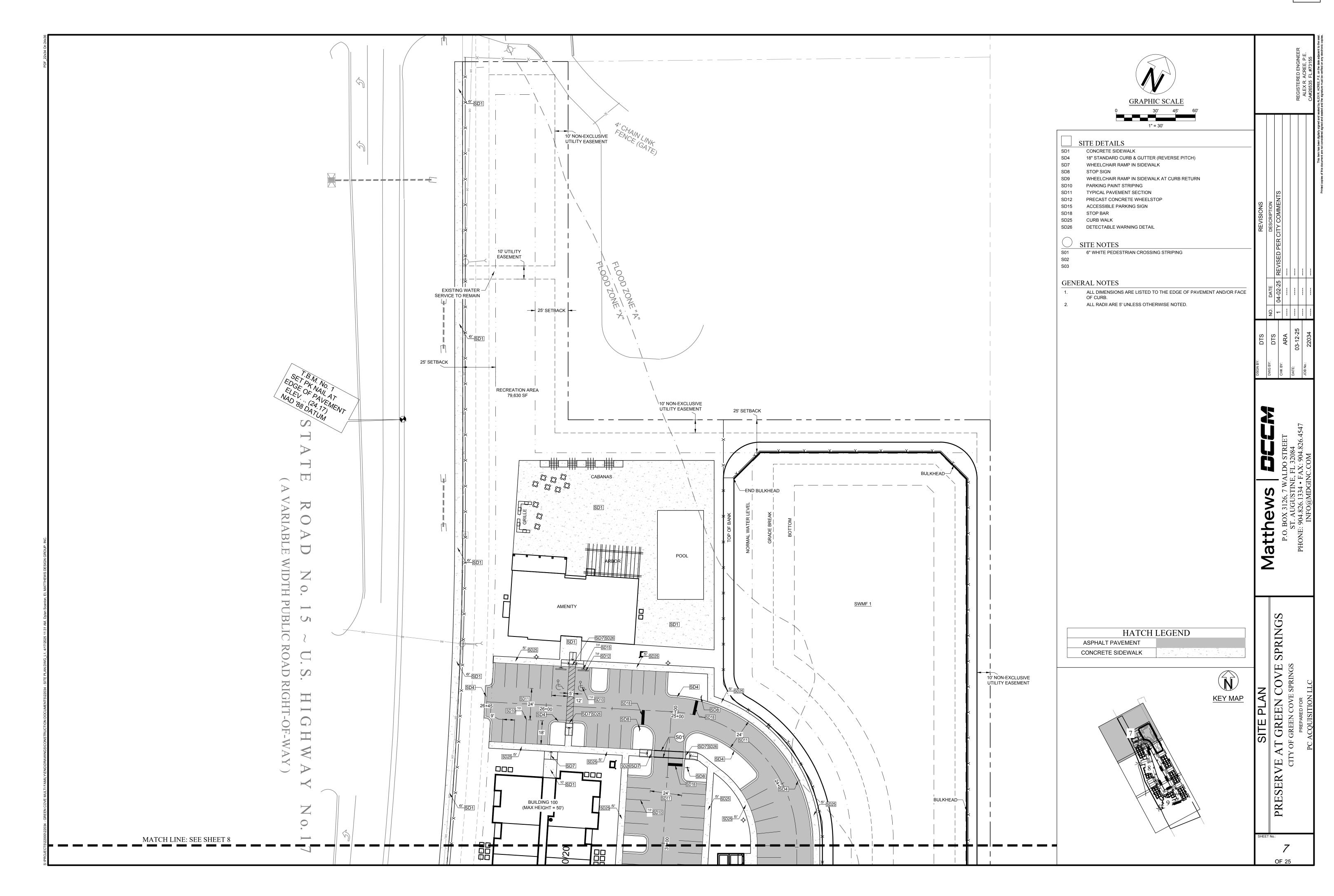
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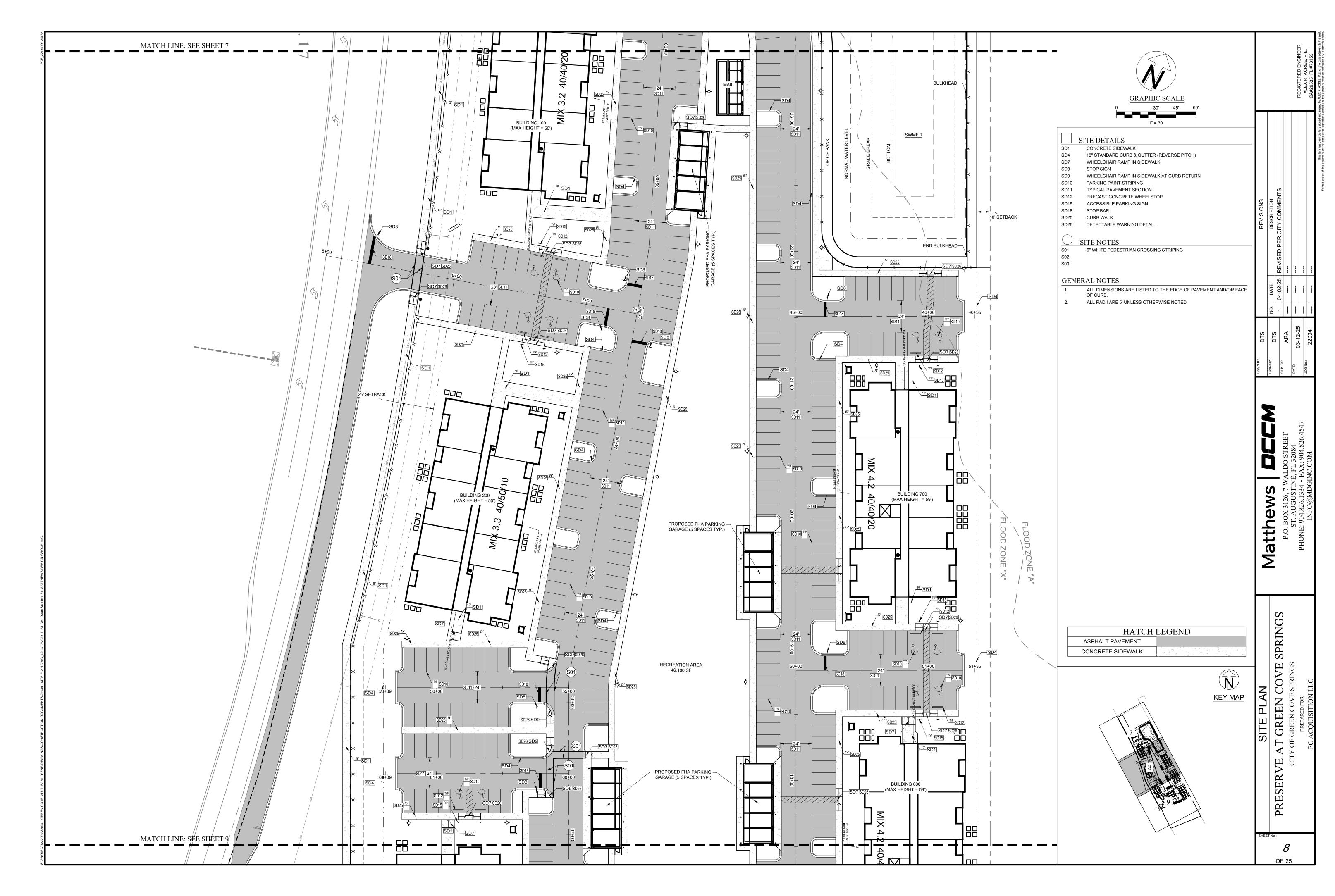
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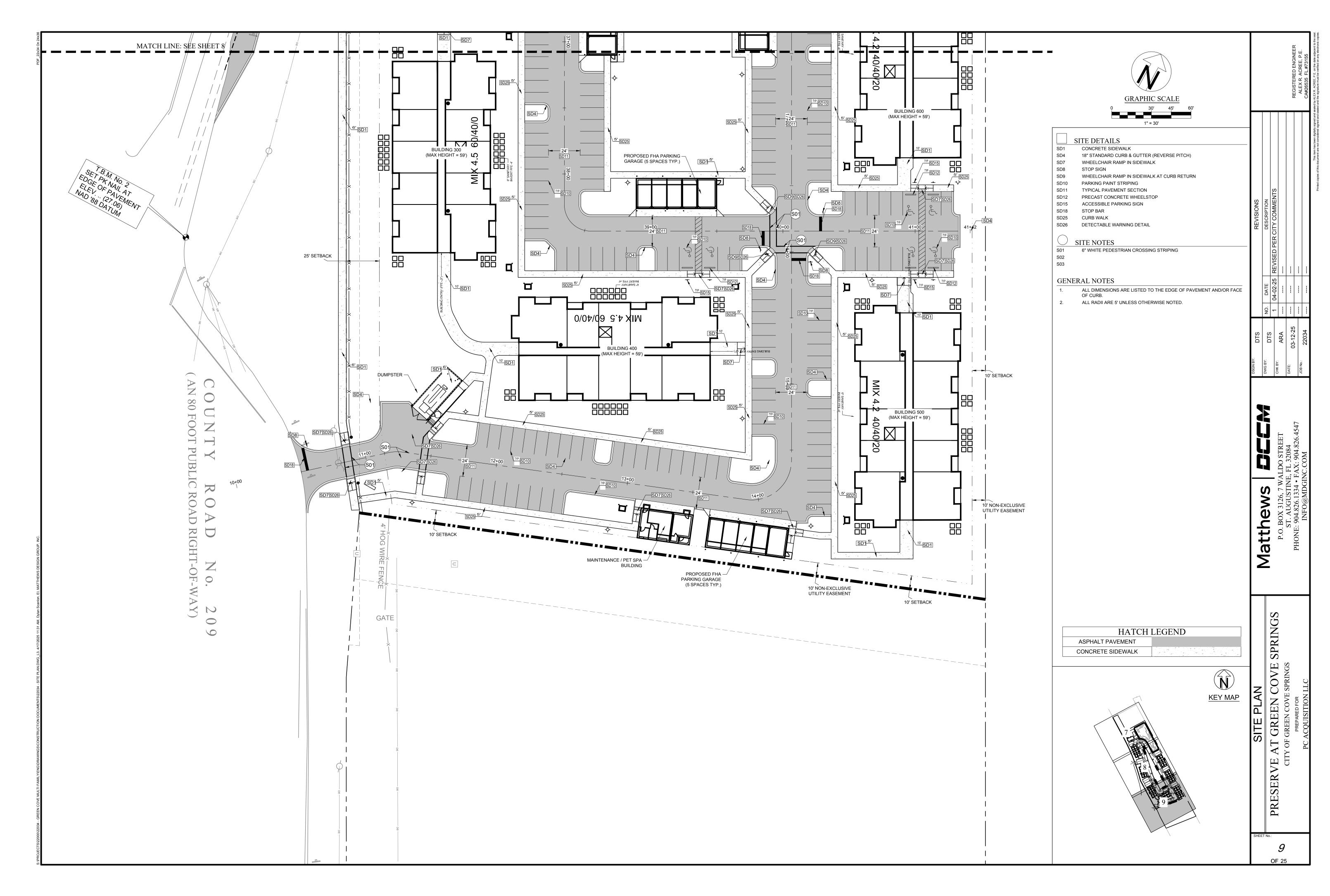
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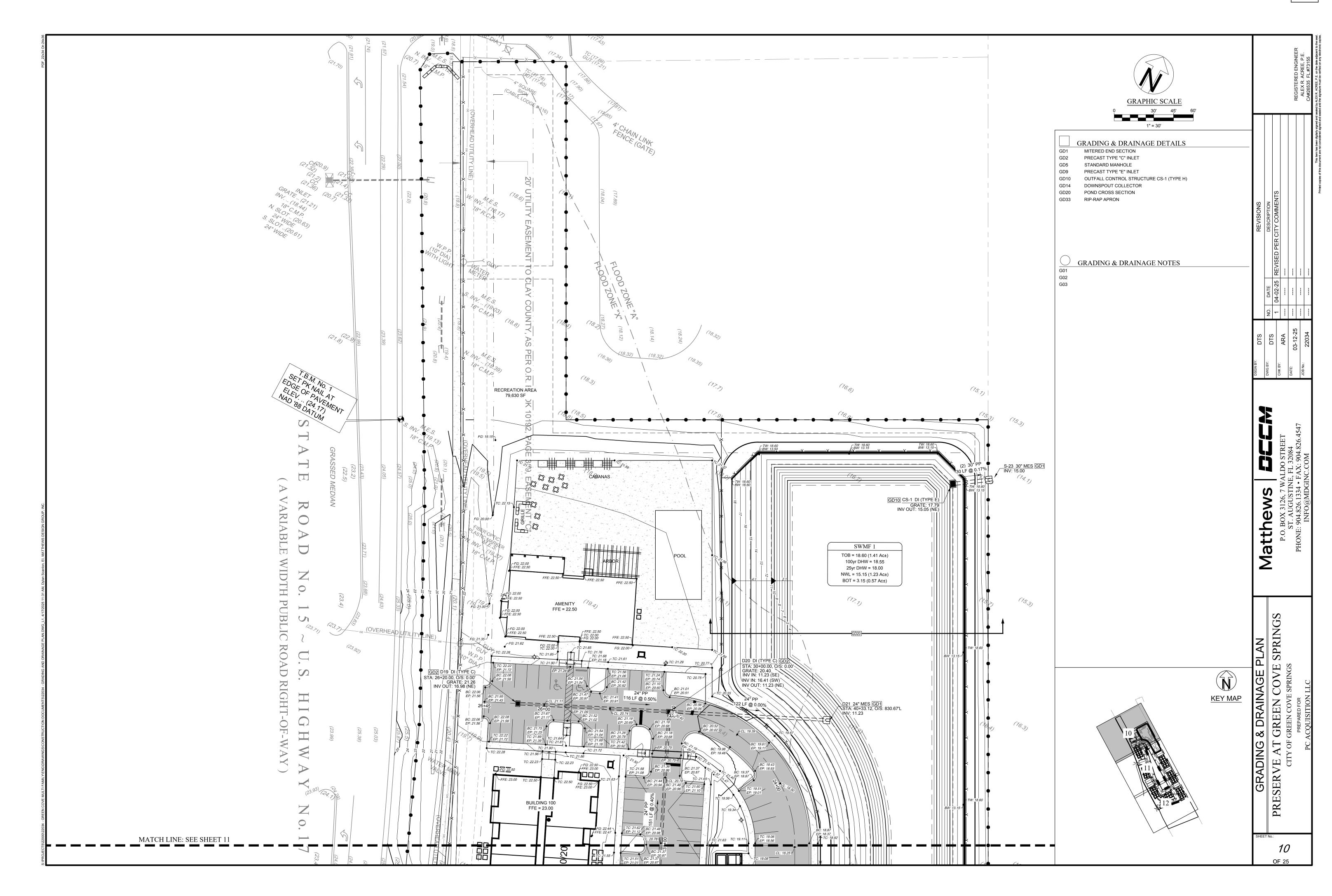


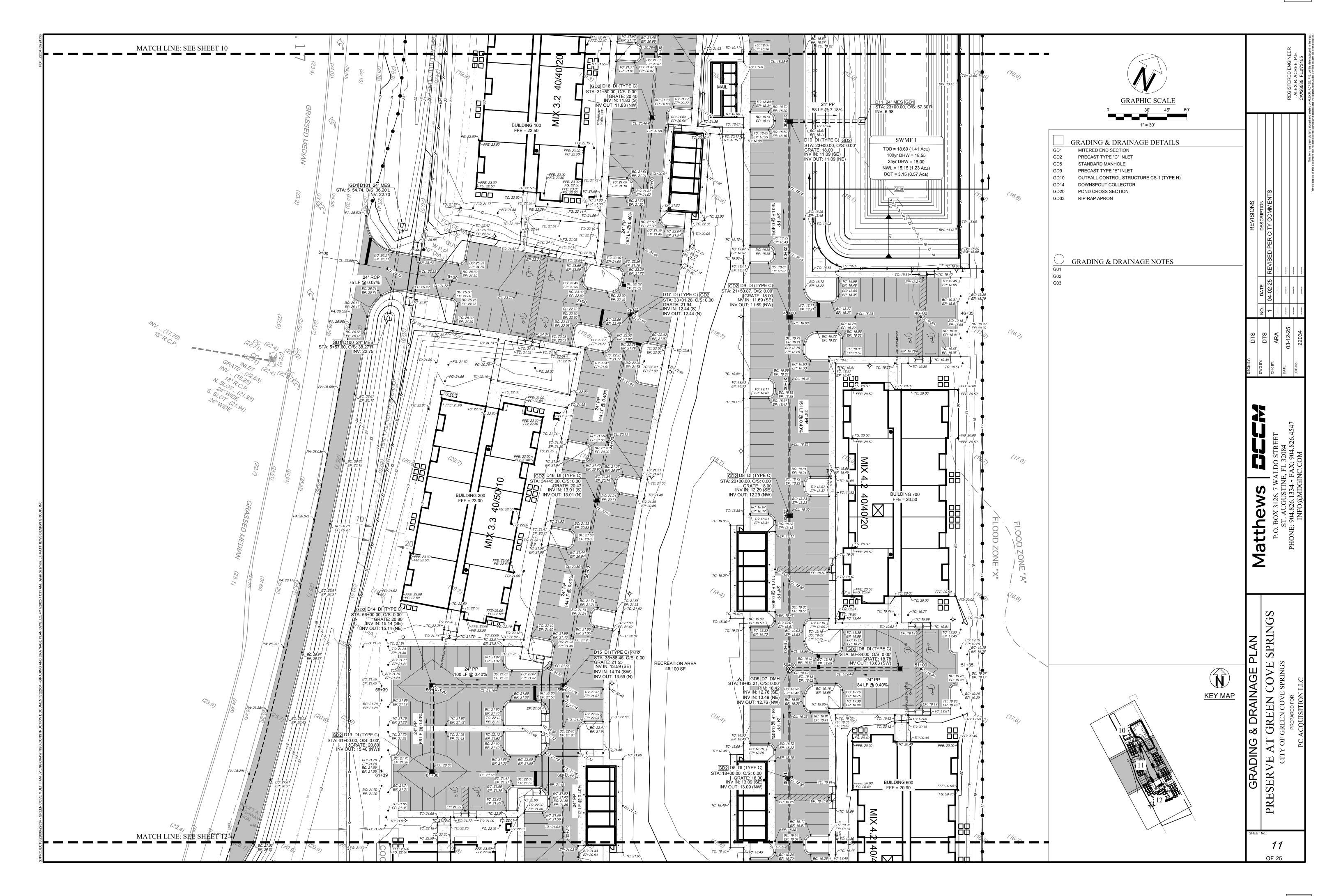


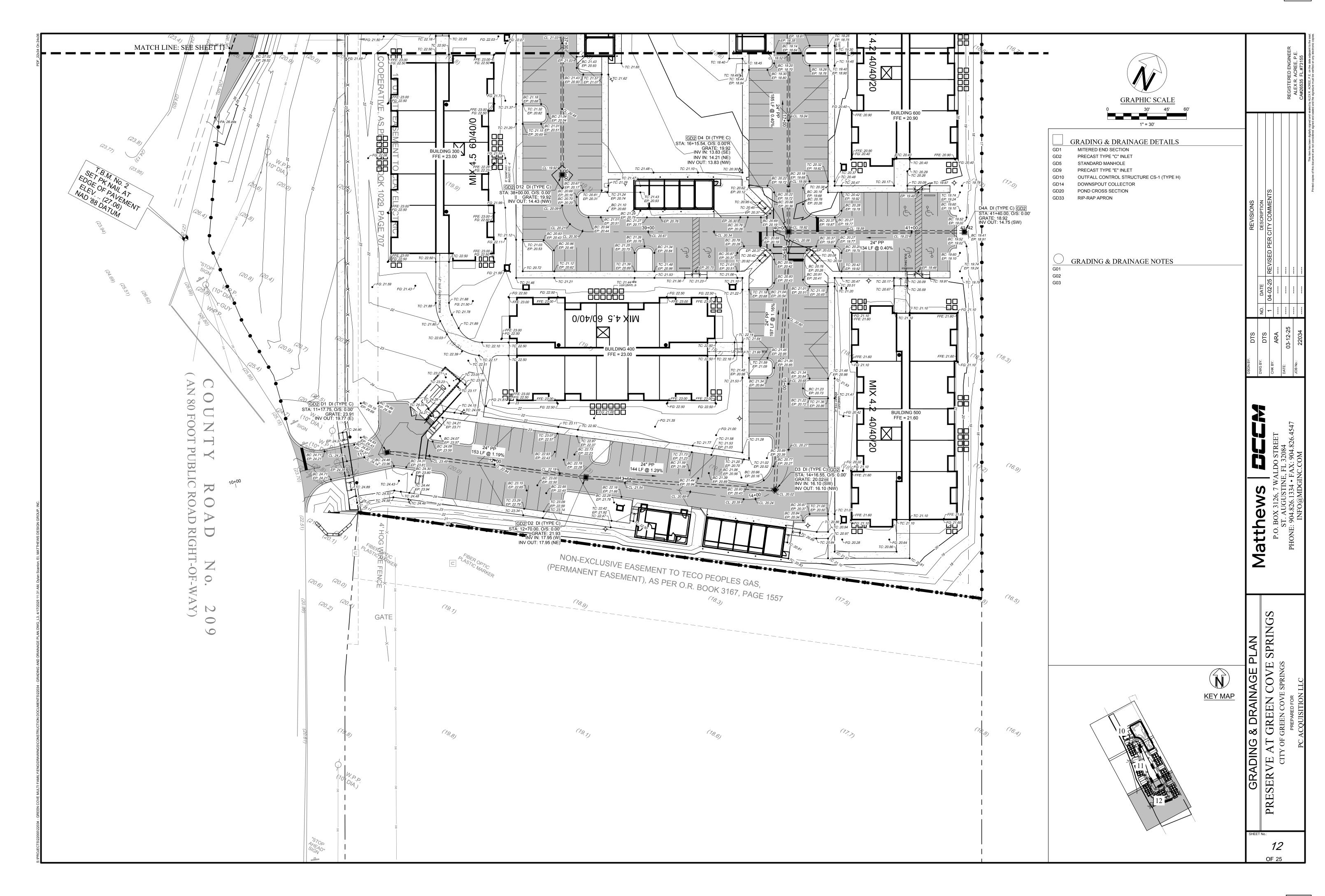


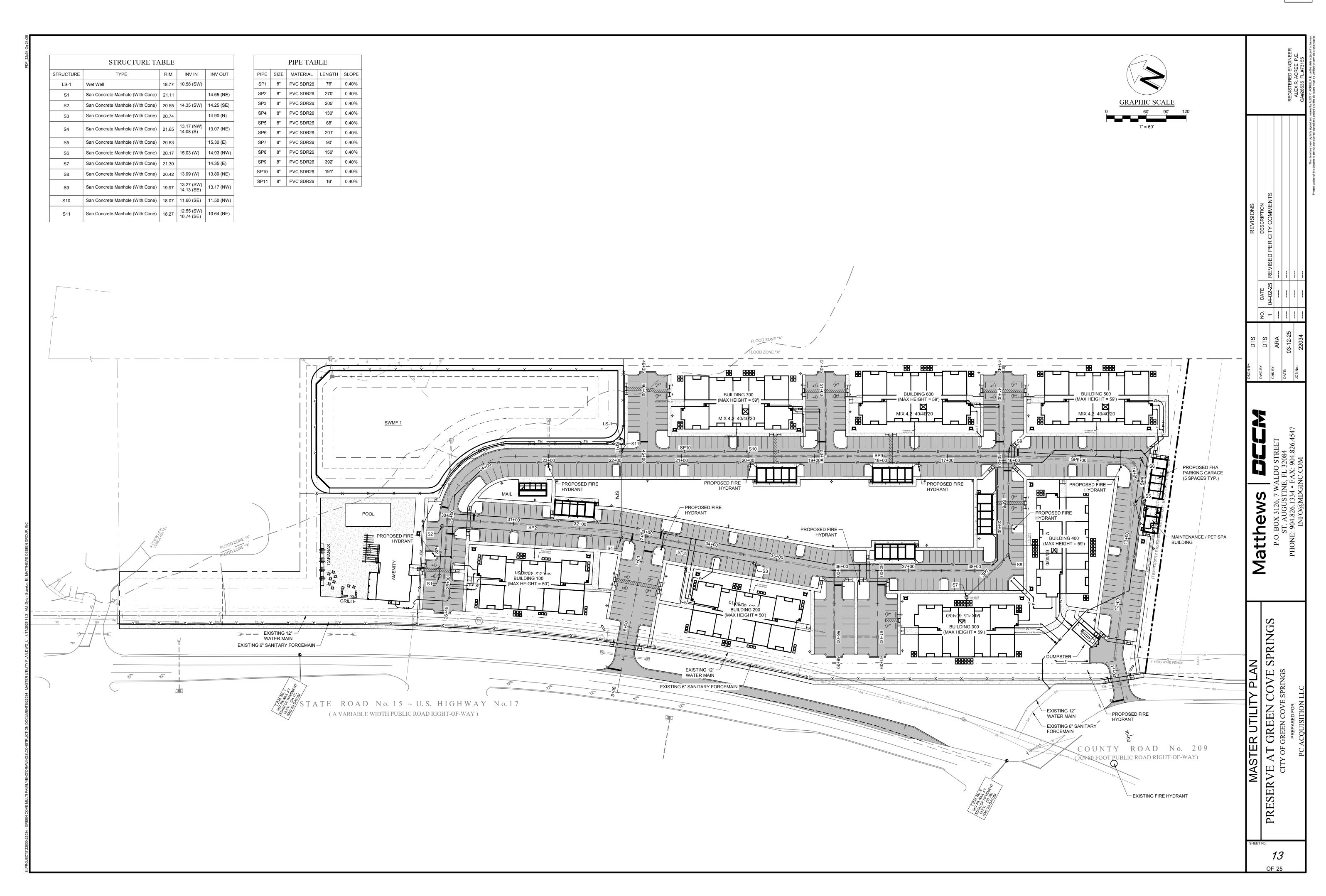


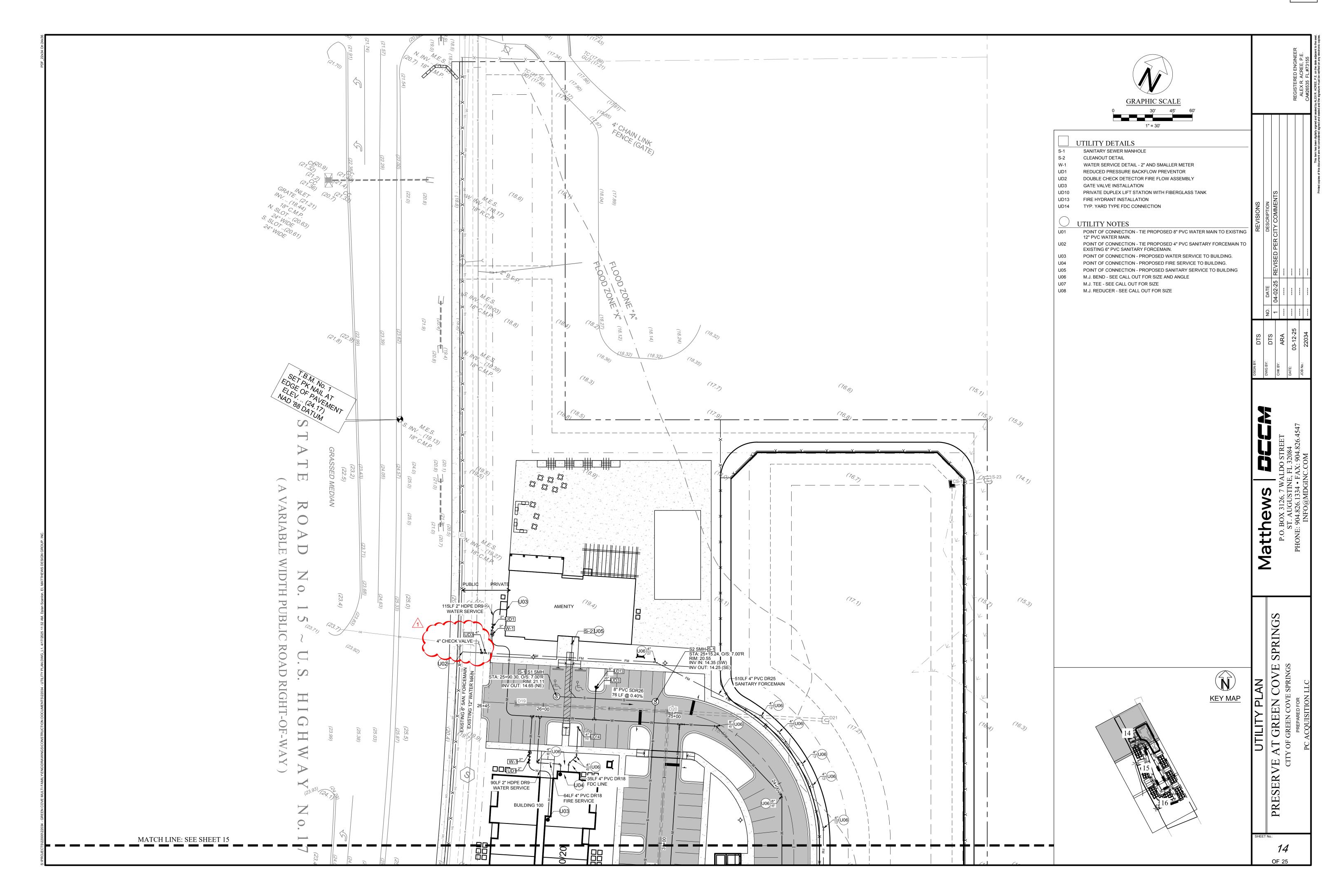




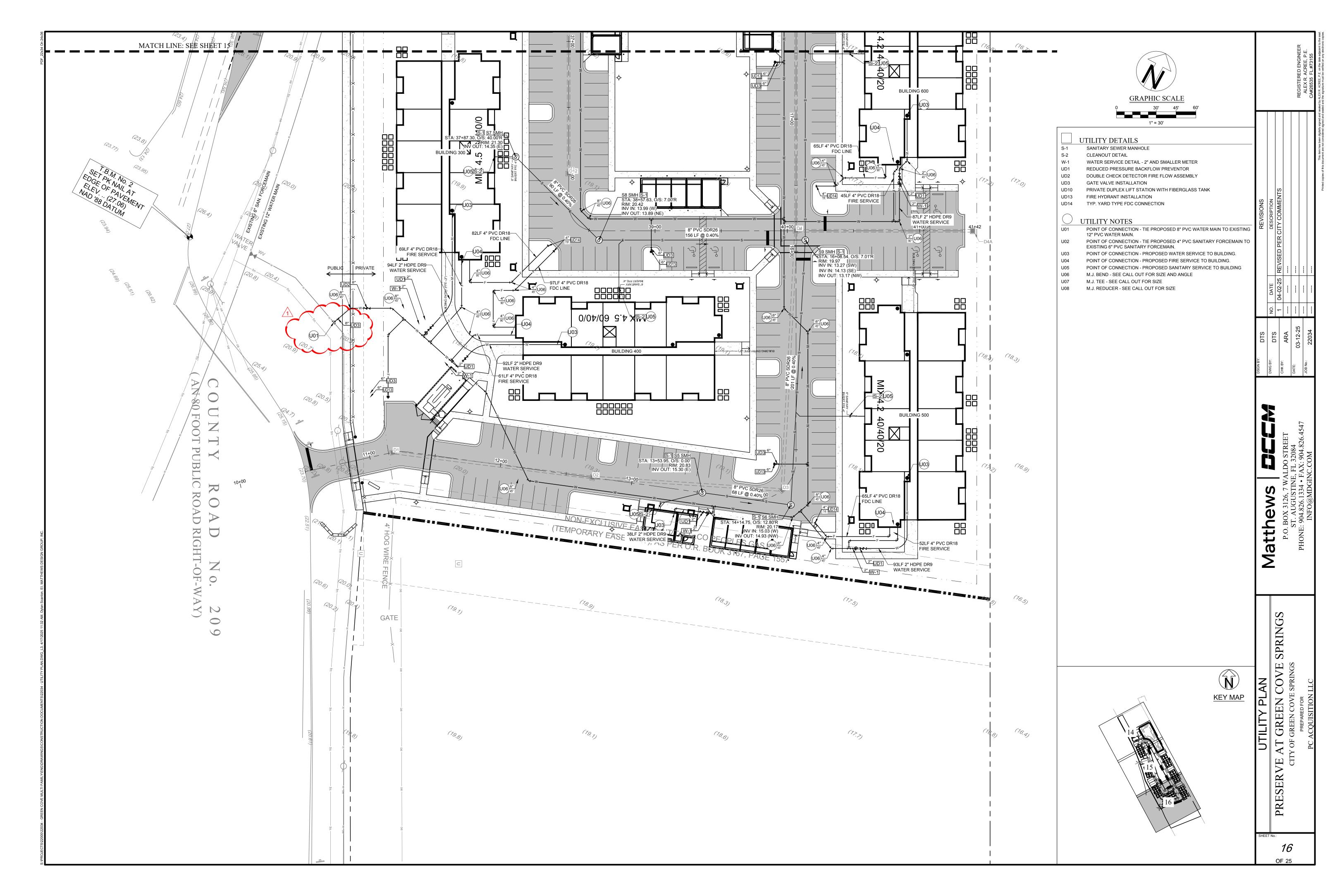


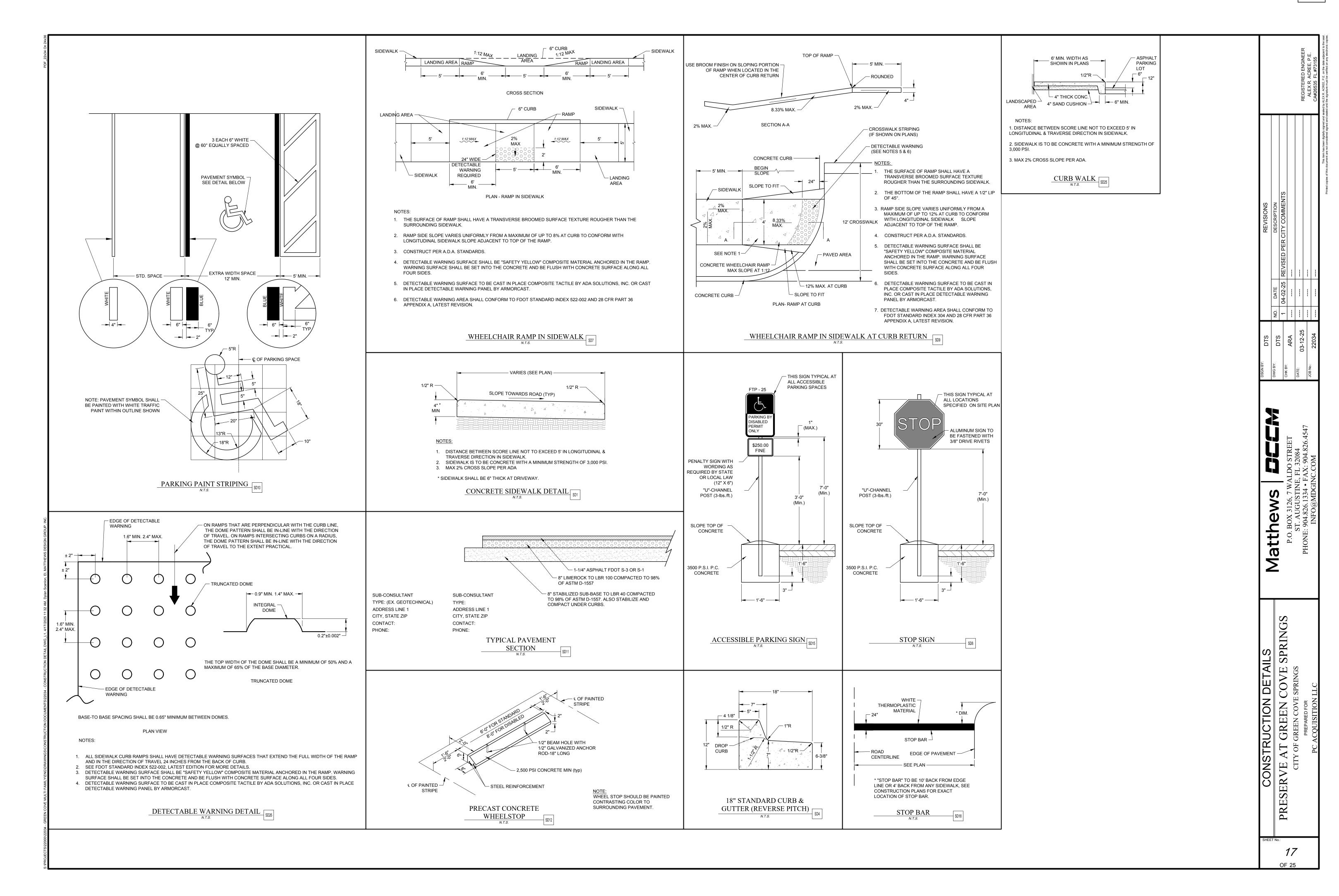


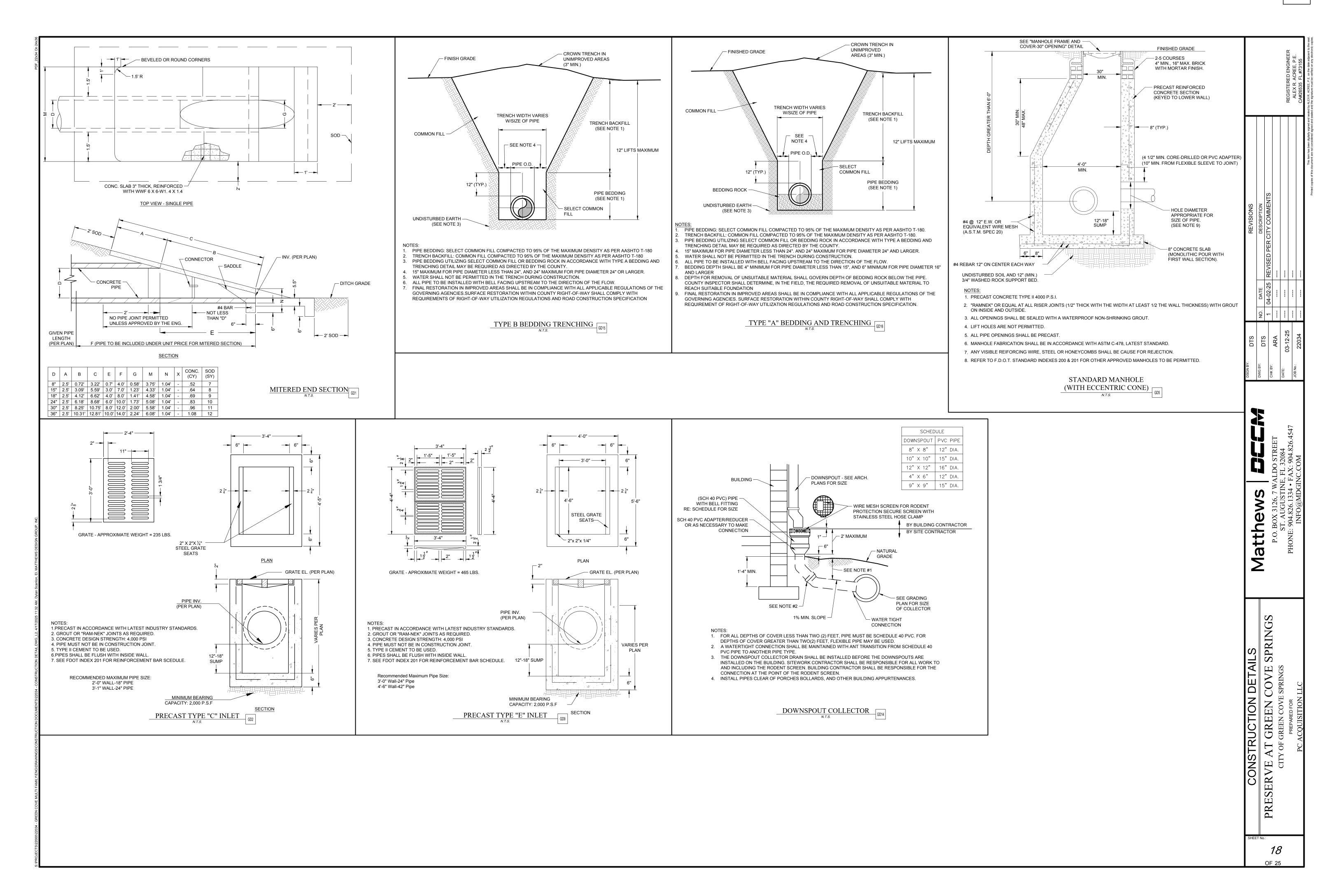


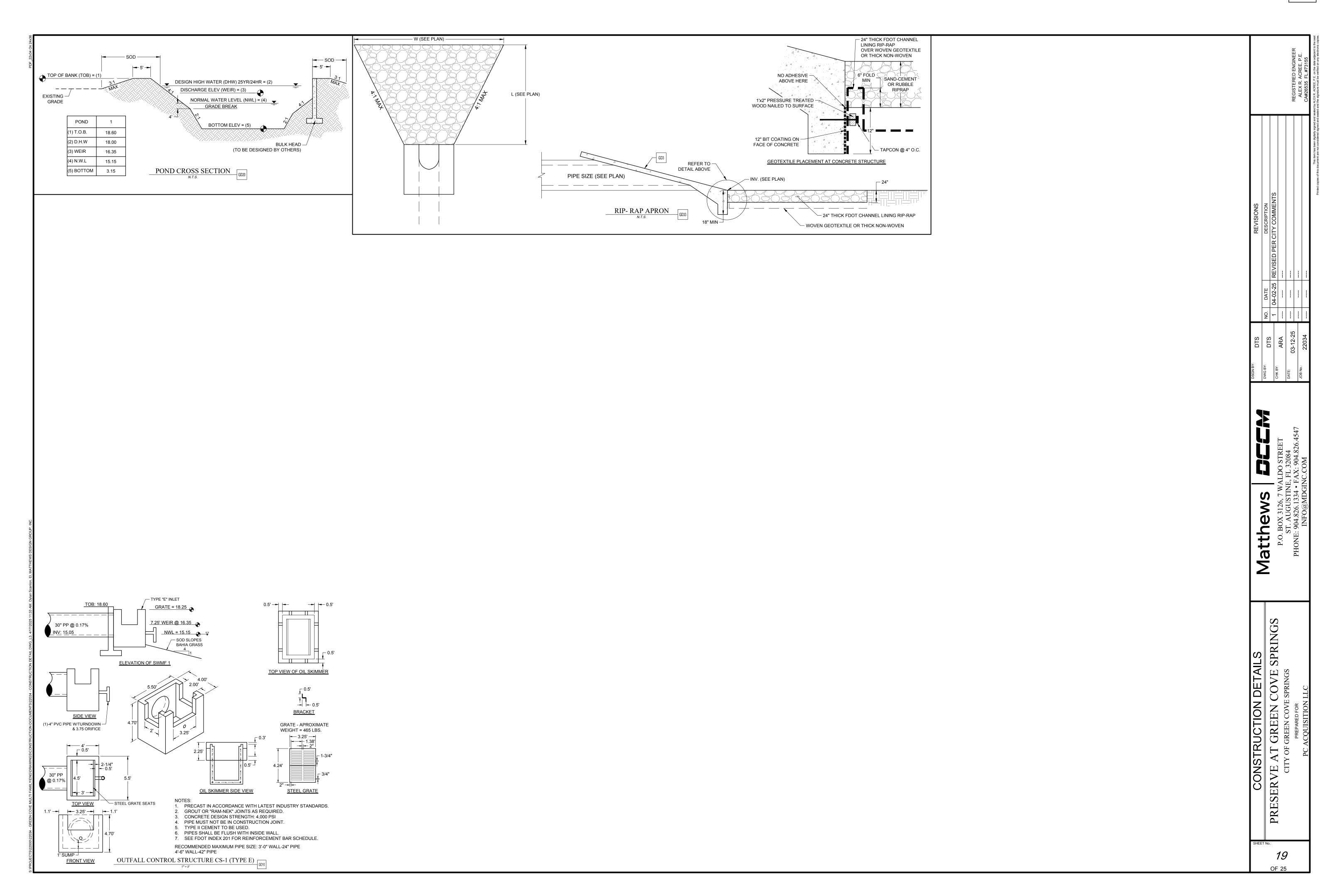


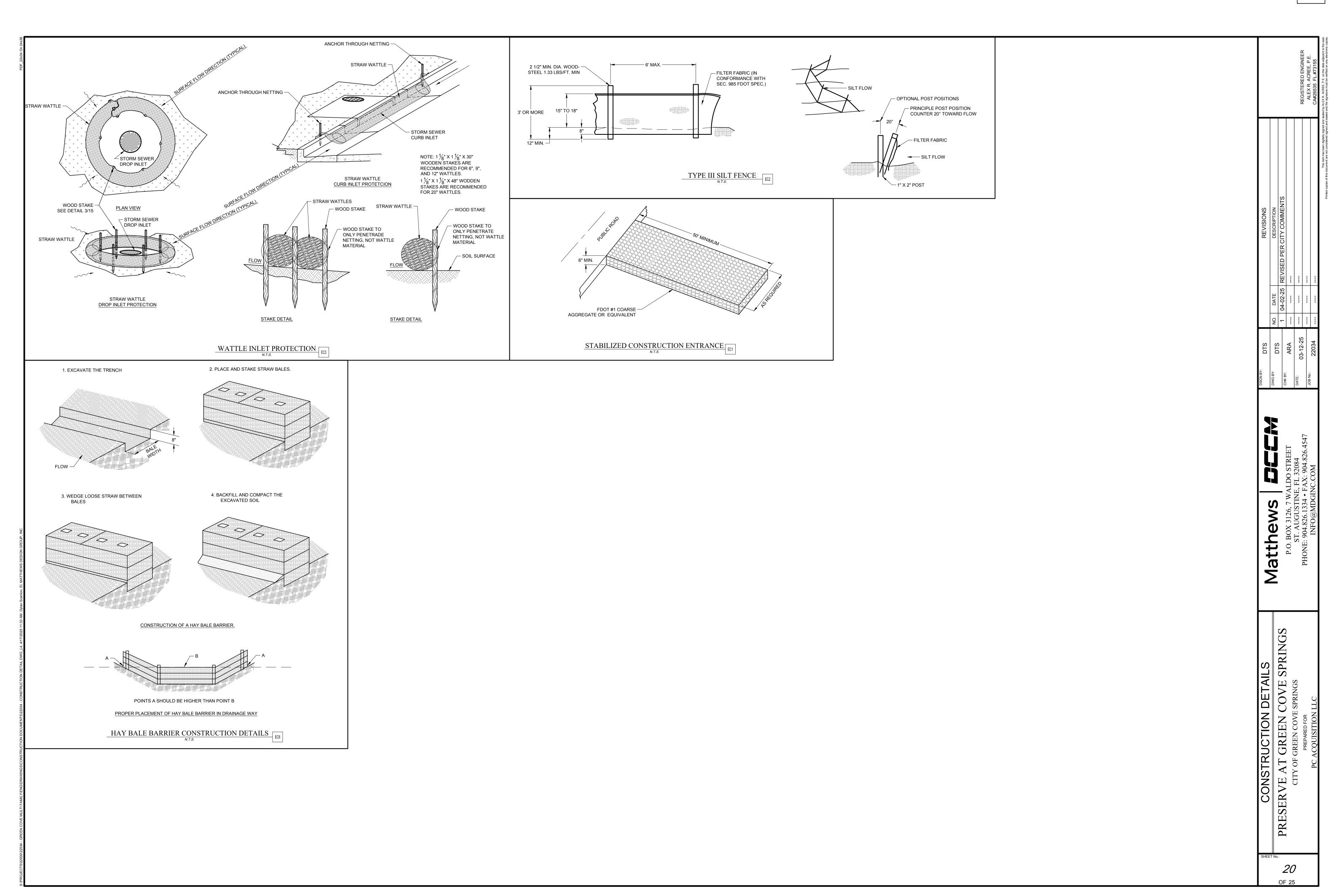


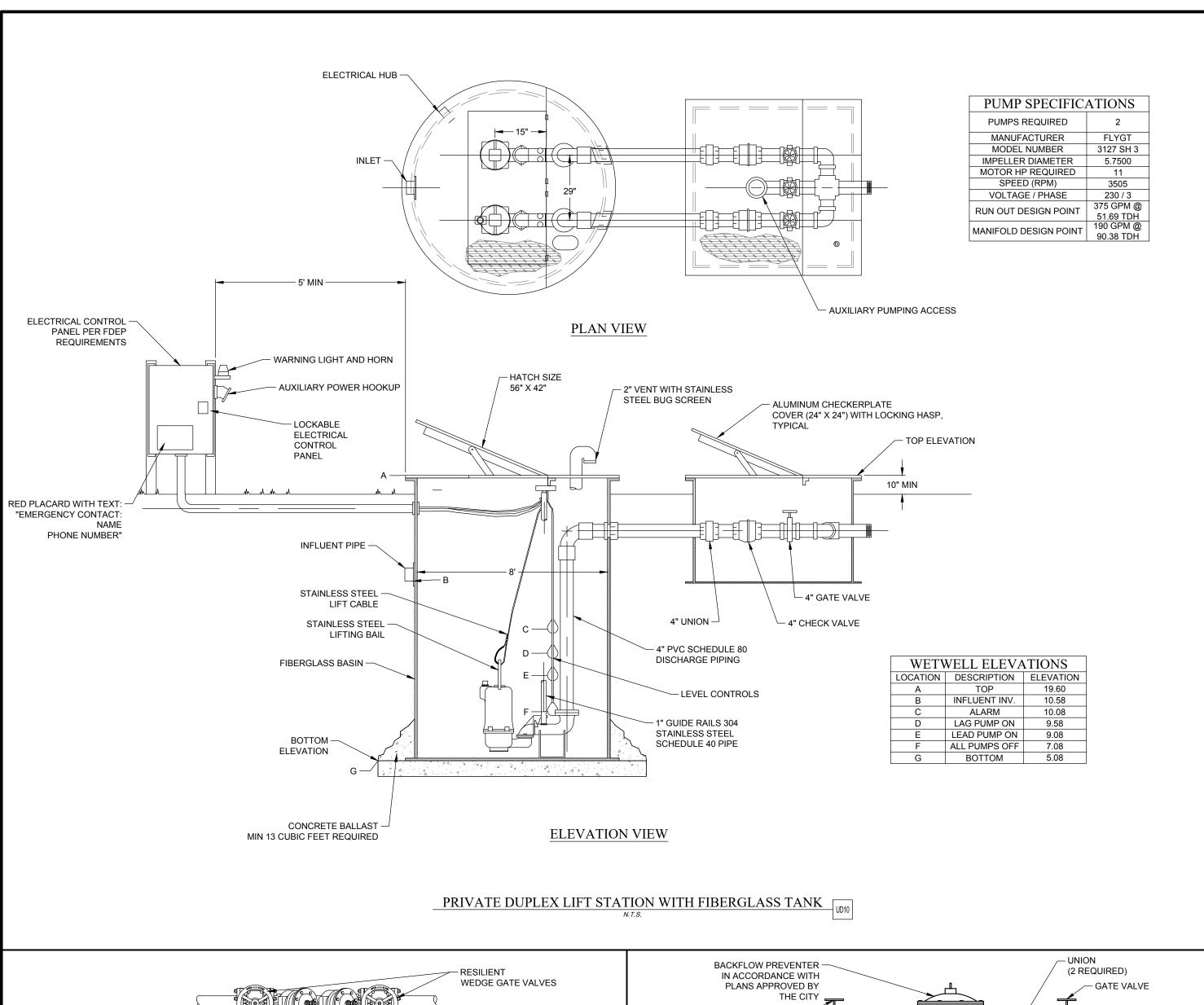


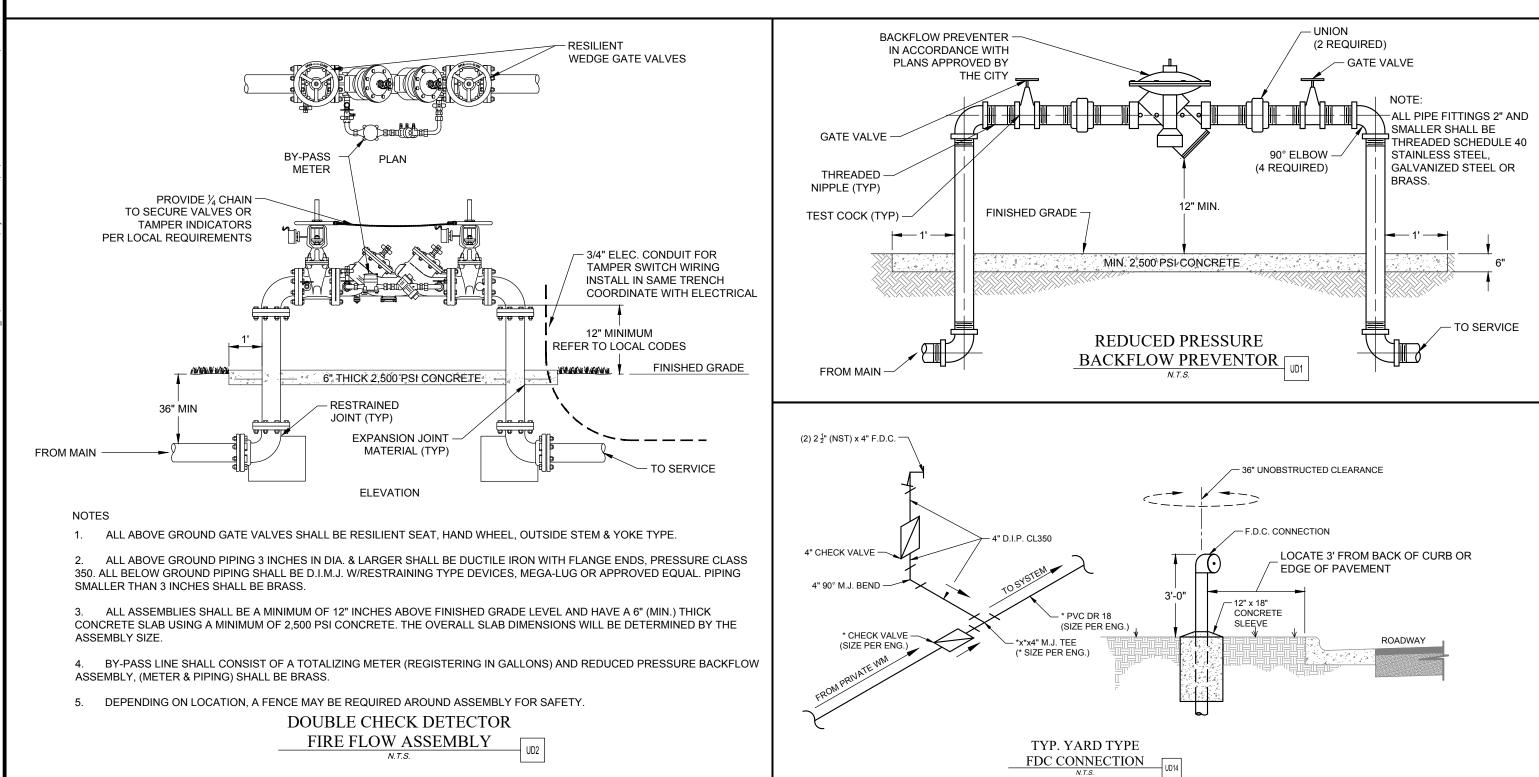


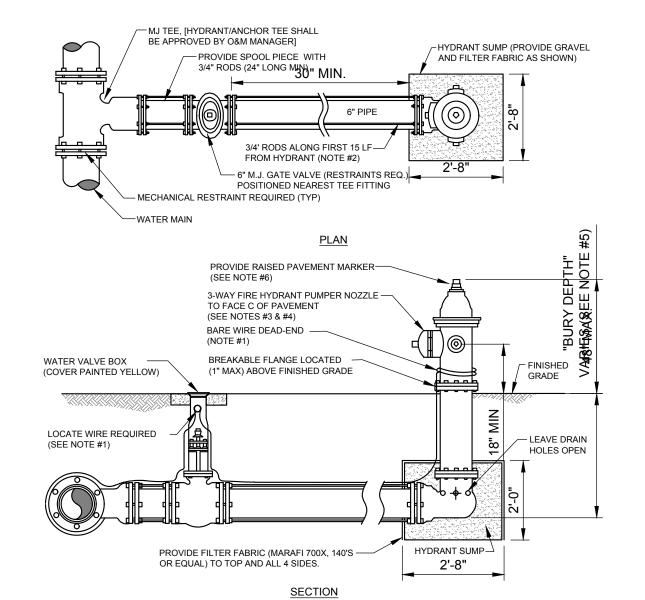










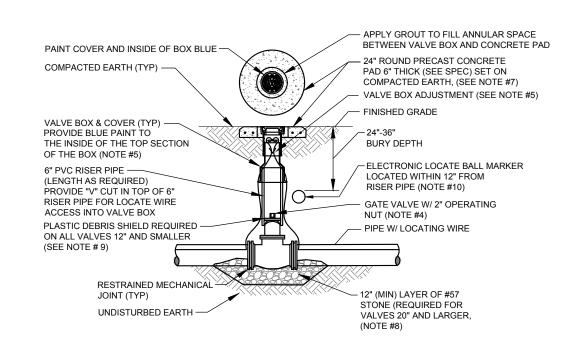


LOCATE WIRE SHALL BE ROUTED FROM THE VALVE TO THE HYDRANT AS SHOWN ABOVE LEAVING ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE. THE END OF THE WIRE SHALL BE SECURED TO THE PIPE MAIN. SEE SECTION 350, LOCATE WIRE INSTALLATION PARAGRAPH.

FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK AND NOT WITHIN SWALE/DITCH AREAS. THE DISTANCE RANGE FROM EDGI OF ADJACENT PAVEMENT, BACK OF CURB AND FACE OF SIDEWALK SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED B JEA AND APPLICABLE PERMITTING AGENCIES. DISTANCE SHALL BE MEASURED TO THE CLOSEST PART OF THE FIRE HYDRANT (I.E. THE PUMPER NOZZLE). THE MAXIMUM DISTANCE (BACK OF CURB) SHALL BE IN COMPLIANCE WITH LOCAL COUNTY FIRE DEPARTMENT RULES AND AS APPROVED BY JEA. FOR OTHER LOCATIC LIMITATIONS SEE PLATES W-10 AND W-11. IF PIPING BETWEEN TEE AND HYDRANT IS LONGER THAN 80 LF, AN ADDITIONAL 6" GATE VALVE IS REQUIRED AT THE HYDRANT LOCATION (PROVIDE 30" SEPARATION). ALL PIPING, VALVES AND FITTINGS ALONG THE HYDRANT BRANCH MAIN WHICH IS WITHIN 15 LF OF THE HYDRANT SHALL BE RESTRAINED UTILIZING ONLY TWO 3/4" DIA (THREADED ENDS) STEEL RODS AND EYE BOLTS (NO JOINT RESTRAINT DEVICES REQUIRED). A SPLIT SERRAT RING WITH RESTRAINT EARS (EBAA 15 PF06 or EQUAL) MAYBE USED IN THIS ASSEMBLY. ALL OTHER JOINTS ALONG THE HYDRANT BRANCH MAIN OUTSIDE OF THE

- OPERATION OF THE FIRE HYDRANT SHALL BE EITHER FULL OPEN POSITION OR TOTALLY CLOSED POSITION. THE HYDRANT SHALL NOT BE UTILIZED TO THROTTLE
- PRIOR TO PROJECT FINAL INSPECTION, THE HYDRANT AND ALL ABOVE GROUND PIPING SHALL BE RE-OILED, GREASED AND REPAINTED (RUS- KIL ENAMEL-INTERNATIONAL YELLOW OR EQUAL). PRIVATELY OWNED AND MAINTAINED FIRE HYDRANTS SHALL BE PAINTED RED.
- FIRE HYDRANTS SHALL BE ORDERED WITH PROPER "BURY DEPTH" TO MEET ACTUAL FIELD CONDITIONS. THIS IS ESPECIALLY IMPORTANT FOR BRANCH LINES WHICH TEE-OFF A 12" OR LARGER WATER MAIN. UNLESS APPROVED OTHERWISE BY JEA, THE INSTALLATION OF (45°) BENDS IS NOT ACCEPTABLE WHEN UTILIZED TO CORRECT AN IMPROPERLY FURNISHED HYDRANT. THE USE OF HYDRANT EXTENSIONS SHOULD BE MINIMIZED.
- BLUE REFLECTIVE MARKERS SHALL BE INSTALLED IN SUCH A MANNER THAT THE REFLECTIVE FACE OF THE MARKER IS PERPENDICULAR TO A LINE PARALLEL TO T ROADWAY CENTERLINE. THE BLUE REFLECTIVE MARKERS SHALL BE PLACED IN THE CENTER OF THE TRAVEL LANE, DIRECTLY ACROSS FROM AND ADJACENT TO

# FIRE HYDRANT INSTALLATION NT.S. UD13



. FOR UNPAVED LOCATIONS, A PRECAST CONCRETE VALVE PAD SHALL BE PROVIDED AND INSTALLED FLUSH WITH GRADE. CONCRETE PAD IS NOT REQUIRED FOR VALVE LOCATED IN THE ROADWAY, UNLESS SHOWN OR NOTED OTHERWISE. LOCATING WIRE IS REQUIRED ON ALL PRESSURE PIPING (SEE DETAILW-44).

A "V" CUT SHALL BE CARVED IN THE CURB CLOSEST/ADJACENT/( ASPHALT IF NO CURB) TO ALL BELOW GRADE VALVES. THE "V" CUT IS TO BE PAINTED BLUE I. IN PAVED AREAS, INSTALL VALVE AT A DEPTH TO ALLOW A 12" MIN. DISTANCE BETWEEN THE VALVE COVER PLATE AND THE TOP OF THE VALVE OPERATING NUT. OUTSIDE OF PAVED AREAS (GRASS), INSTALL VALVE AT A DEPTH TO ALLOW A 6" MINIMUM DISTANCE BETWEEN THE VALVE COVER AND THE TOP OF THE VALVE OPERATING NUT. OPERATING NUT/STEM EXTENSION SHALL BE PROVIDED (WHERE APPLICABLE) SO THAT THE OPERATING NUT WILL BE NO MORE THAN 30 INCHES BELOW FINISHED GRADE.

- 5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS. ROUTE LOCATE WIRES THRU A "V" CUT IN THE TOP OF THE 6" PVC RISER PIPE FOR LOCATE WIRE ACCESS INTO VALVE BOX. THE LOCATE WIRES WITH A 24" LONG PIG-TAIL AT THE TOP SHALL BE CONNECTED TOGETHER WITH A WIRE NUT.
- BRASS IDENTIFICATION TAG INDICATING "WATER", VALVE SIZE, DIRECTION AND TURNS TO OPEN & VALVE TYPE. PROVIDE A 4" HOLE IN BRASS TAG AND ATTACH TAG (TWIST WIRE AROUND TAG) TO THE END OF THE LOCATE WIRE. TAGS ARE NOT REQUIRED ON VALVES INSTALLED ON FIRE HYDRANT BRANCH LINES. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD W/2 - #4 REBAR AROUND PERIMETER, MAY BE USED.
- . GRAVEL SHALL BE PROVIDED UNDER ALL VALVES 20" AND LARGER. THE MINIMUM VERTICAL LIMIT OF GRAVEL IS 12" UNDER THE VALVE UP TO  $\frac{1}{3}$  THE OVERALL HEIGHT OF THE VALVE.
- 9. FOR VALVES 12 INCH AND SMALLER, PROVIDE A WHITE OR BLACK PLASTIC DEBRIS SHIELD WHICH INSTALLS BELOW THE OPERATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE OPERATING NUT AND MINIMIZE INFILTRATION. SHIELD SHALL BE BY AFC, BOXLOK OR APPROVED EQUAL. ). ALL VALVES SHALL BE INSTALLED WITH AN ELECTRIC LOCATE MARKER. MARKER SHALL BE 4" DIA. COLOR CODED BALL MARKER (3M-1403XR FOR WATER AND 1408XR FOR RECLAIMED WATER).

GATE VALVE INSTALLATION

N.T.S. UD3

ONSTRUCTION DETAILS

VE AT GREEN COVE SPRINGS

CITY OF GREEN COVE SPRINGS

21

1. THE SKETCHES ABOVE INDICATE TYPICAL WATER SERVICE AND METER BOX LOCATIONS. ACTUAL LOCATIONS OF BOXES MAY VARY SLIGHTLY ACCORDING TO FIELD CONDITIONS ENCOUNTERED. TYPICALLY, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE.

2. UNLESS SPECIFIED OTHERWISE BY THE CITY OF GREEN COVE SPRINGS, THE METER BOX SHALL BE LOCATED 1.0' OFF OF THE R/W LINE, AND 1.0' FOOT INSIDE OF THE PROLONGATION OF ONE OF THE SIDE PROPERTY LINES. IF A CONFLICT EXISTS WITH OTHER UTILITIES, THE METER BOX MAY BE ADJUSTED TO FOUR FEET (MAX.) INSIDE PROPERTY LINES (IN LIEU OF 1.0' FEET). UNLESS APPROVED OTHERWISE BY THE CITY, THE WATER METER BOX SHALL BE LOCATED IN NON-TRAFFIC AREAS (NOT IN SIDEWALKS OR DRIVEWAYS). IF AN UNAPPROVED METER BOX IS IDENTIFIED BY THE CITY, THEN THE CONTRACTOR OR CUSTOMER SHALL BE RESPONSIBLE FOR THE COST OF RELOCATING ANY METER BOX WHICH IS LOCATED IN THE SIDEWALK OR DRIVEWAY OR THE COST TO PROVIDE THE CORRECT METER BOX. THE CITY SHALL APPROVE ALL DEVIATIONS TO THE ABOVE PRIOR TO CONSTRUCTION.

3. IF DRAINAGE OR OTHER EASEMENT IS LOCATED BETWEEN LOTS, METER BOXES SHALL BE LOCATED AT THE EASEMENT LINE BUT OUTSIDE THE EASEMENT AREA.

4. FOR SINGLE SERVICES, THE HORIZONTAL DISTANCE (PERPENDICULAR TO THE MAIN) BETWEEN THE SERVICE'S SADDLE AND THE METER BOX SHALL BE 2 FEET MAXIMUM, FOR DOUBLE 3/4" SERVICES, THE 2"POLY MAIN SHALL BE LOCATED CENTERED BETWEEN THE TWO METER BOXES, LOCATE WIRE IS REQUIRED ON ALL SERVICES, THE WIRE SHALL RUN FROM THE METER BOX TO THE MAIN (WITH NO CONNECTION TO MAIN WIRE WITH THE LAST 24 INCHES STRIPPED OF INSULATION/BARE WIRE AS GROUND). ALL EXCEPTIONS TO THIS REQUIREMENT MUST BE APPROVED BY THE CITY OF GREEN COVE SPRINGS, THIS WILL ASSIST IN LOCATING ÉXISTING SERVICE LINES IN THE FUTURE.

5. GANG WATER SERVICES: FOR 3 OR 4 SERVICES IN ONE AREA, A DUCTICLE IRON PIPE (D.I.P.) WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG-SIDE SERVICES WHERE SHOWN ON THE DRAWINGS. LOCATE WIRE SHALL EXTEND FROM ONE METER BOX TO CURB STOP AT WATER MAIN. FOR 5 OR MORE SERVICES IN ONE AREA, A WATER MAIN EXTENSION W/LOCATE WIRE MAY BE UTILIZED ON EITHER SHORT-SIDE OR LONG-SIDE SERVICES WHERE SHOWN ON THE DRAWINGS (TAPS STAGGERED AND AT 2 FEET ON CENTER (MIN). FOR WATER SUPPLY HEADERS WHERE 5 OR MORE TAPS ARE CONSTRUCTED, THE HEADER PIPE SHALL BE 4" AT A MINIMUM. EXAMPLE: CONSTRUCT A 4" MAIN D.I. CROSSING THE STREET FOR 5 RESIDENTIAL CUSTOMERS, UTILIZING 4" G.V., 4" PIPE, 4"X1" SADDLES AND 1" CURB STOPS (NO GLUED TEE FITTINGS). THE 4" OR LARGER D.I.P. WATER MAIN MUST BE SIZED AND DESIGNED BY THE ENGINEER.

6. ALL COMMERCIAL WATER SERVICES SHALL BE 2" POLYETHYLENE PIPING CONNECTED TO 2" CURB STOP IN METER BOX, UNLESS OTHERWISE APPROVED BY THE CITY.

# WATER SERVICE INSTALLATIONS 2" AND SMALLER METER

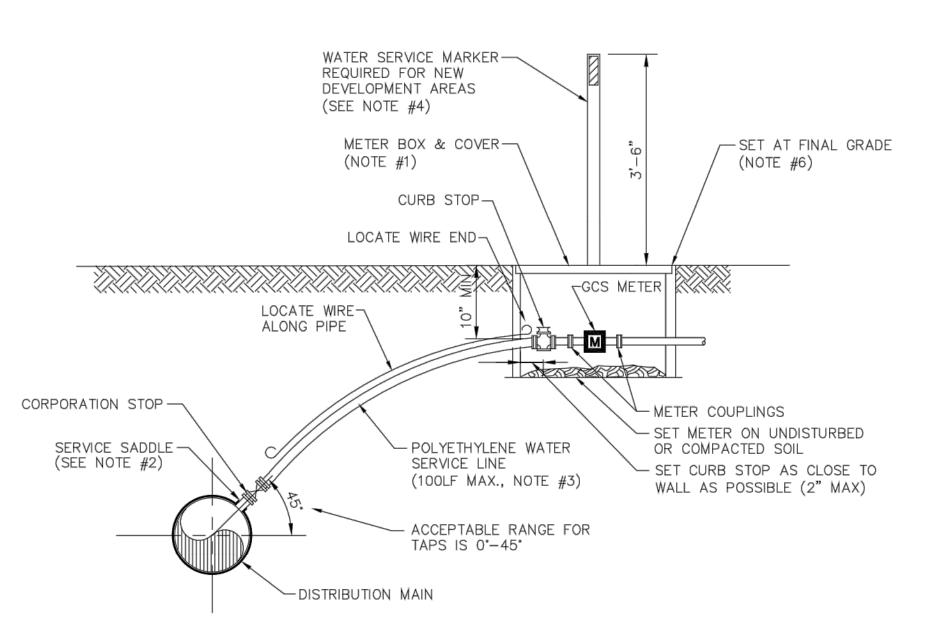
CONNECT WIRE TOGETHER WITH ELECTRICAL WIRE NUT. PROVIDE 12" PIG TAIL ─BOX ACCESS (SEE NOTE #1) VALVE BOX -DUCT TAPE OR ZIPPER TYPE PLASTIC TIE STRAPS — -WATER MAIN

LOCATE WIRE BOX UTILIZING VALVE BOX

INSTALL CO-POLYMER METER BOX WITH — HEAVY-DUTY IRON LID (PAINT TOP OF LID) (POSITION BOX PARALLEL WITH MAIN) CONNECT WIRES TOGETHER WITH PROVIDE 3" THICK — GRAVEL BOTTOM ELECTRICAL WIRE NUT PROVIDE 12" LONG PIGTAIL ENDS) 2" PVC RISER PIPE--LOCATING WIRE (ROUTED IN PIPE) DUCT TAPE OR ZIPPER TYPE — PLASTIC TIE STRAPS -WATER MAIN LOCATE WIRE BOX UTILIZING METER BOX

1. LOCATE WIRE SHALL ENTER THE VALVE BOX THROUGH A "V" CUT IN THE 6" PVC RISER PIPE.

LOCATE WIRE BOX



1. SEE CITY OF GREEN COVE SPRINGS APPROVED MATERIALS MANUAL AND SYSTEM DETAILS FOR REQUIREMENTS.

2. SINGLE BAND SADDLES MAYBE UTILIZED ON NEW 1" WATER SERVICES WHICH ARE INSTALLED ON A DRY 10" SIZE OR SMALLER WATER MAIN (NEW WATER MAIN CONSTRUCTION). FOR WET TAPS OR WATER MAINS 12" SIZE AND LARGER, A DOUBLE BAND SADDLE IS REQUIRED.

3. NO OPEN CUT UNDER ROADWAY PAVING ALLOWED UNLESS THE ROADWAY IS BEING RECONSTRUCTED OR IF DIRECTED OTHERWISE BY CITY OF GREEN COVE SPRINGS. CONSTRUCT POLY LINE WITH 36" (MIN.) COVER UNDER ROADWAYS. THE POLY WATER SERVICE LINE SHALL BE SAME SIZE AS THE METER (3/4" MINIMUM) AND BE INSTALLED PERPENDICULAR TO THE MAIN AND NOT EXCEED 100LF UNLESS OTHERWISE APPROVED BY CITY OF GREEN COVE SPRINGS.

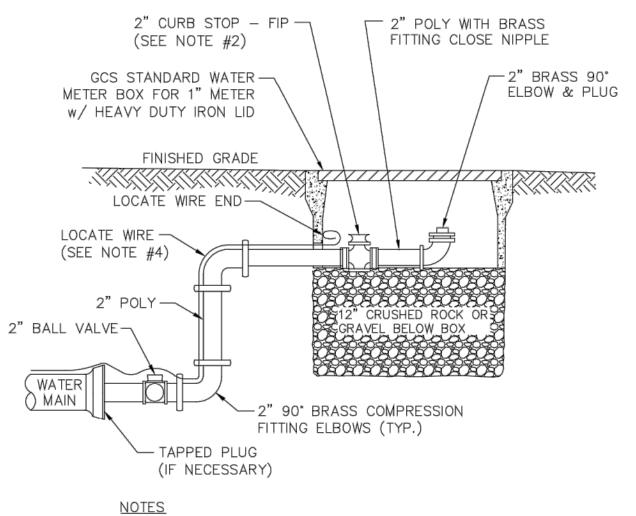
4. INSTALL PVC PLUG IN ALL CURB STOPS IF WATER SERVICE IS "NOT IN USE" (I.E.: IF NO METER IS INSTALLED). IN ADDITION, INSTALL A 6', 6" P.T. FENCE POST (TOP PAINTED BLUE) 12" OFF SIDE OF METER BOX, THE REMOVAL OR TRANSFER OF A WATER SERVICE SHALL INCLUDE BRASS METER COUPLINGS (HEX ON BARREL TYPE).

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE BOXES, METERS OR ELECTRONIC DEVICES IF DAMAGED BY THE CONTRACTOR DURING THE CONSTRUCTION PERIOD.

6. METER BOX AND TOP SHALL BE CLEAR OF ALL DEBRIS TO ALLOW FULL ACCESS TO BOX (I.E., NO DIRT, TRASH OR OTHER DEBRIS PLACED ON TOP OF BOX).

7. LOCATE WIRING REQUIRED ON ALL LONG AND SHORT SERVICES.

WATER SERVICE DETAIL- 2" AND SMALLER METER

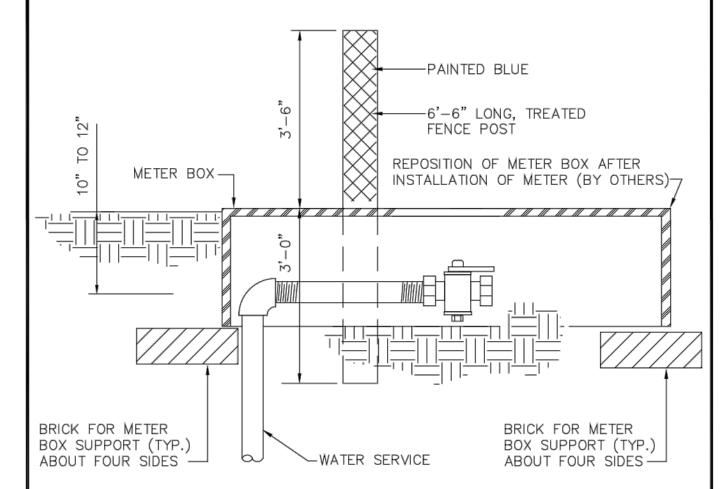


PIPE SHALL BE POLYETHYLENE. FITTINGS SHALL BE BRASS. THE 2" CURB STOP SHALL BE ALL BRONZE. FITTINGS SHALL BE BRASS.

CANNOT BE PLACED UNDER CONCRETE OR PAVEMENT.

PLACE 2 FEET PAST LAST WATER MAIN SERVICE CONNECTION.

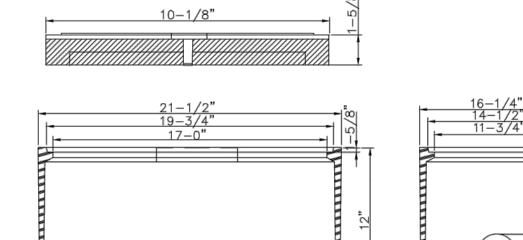
FLUSHING VALVE BELOW GRADE

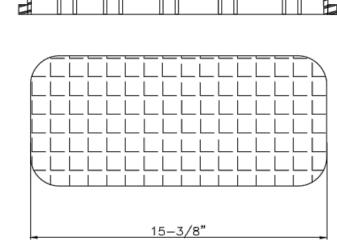


# WATER SERVICE MARKER POST

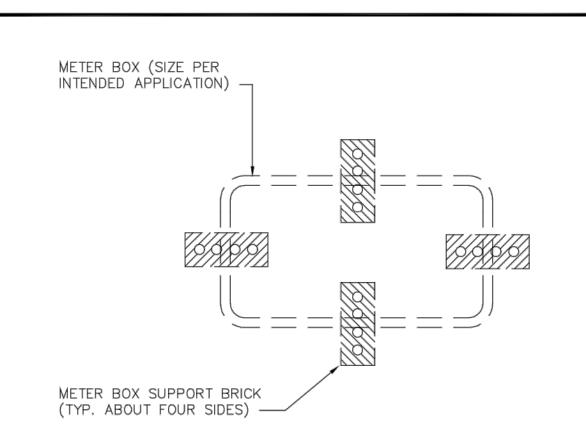
ALL SERVICES ARE TO BE CLEARLY MARKED BY A TREATED 6'-6" LONG MARKER POST PAINTED BLUE. ALL SERVICES ARE TO BE EXTENDED ABOVE GRADE UNTIL COMPLETION OF ALL GRADING ACTIVITIES. ONCE FINAL ROAD GRADING IS COMPLETE, LOWER SERVICES BY CUTTING OFF RISER 10" TO 12" BELOW FINAL GRADE AND INSTALL 90° BEND, NIPPLE AND LW BALL VALVE AT THAT ELEVATION. SET METER BOX OVER ENTIRE HORIZONTAL SECTION OF SERVICE LINE FROM LAST 90° BEND TO THE END OF THE CURB STOP. BOX TO BE REPOSITIONED WHEN THE METER IS INSTALLED, MARKER POST TO BE INSTALLED ADJACENT TO AND LOCATED AT THE MID SECTION OF THE METER BOX.

MIN. WALL THIKNESS: .25" DOUBLE WALL BODY W/STRUCTURAL SUPPORT RIBS w/MIN. THINCKNESS: 3/6" 1" BOTTOM FLANGE BOX IS INJECTED MOLDED STRUCTURAL FOAM RECYCLED POLYPROPYLENE MATERIAL





METER BOX & SOLID BLUE LID



METER BOX SUPPORT DETAIL

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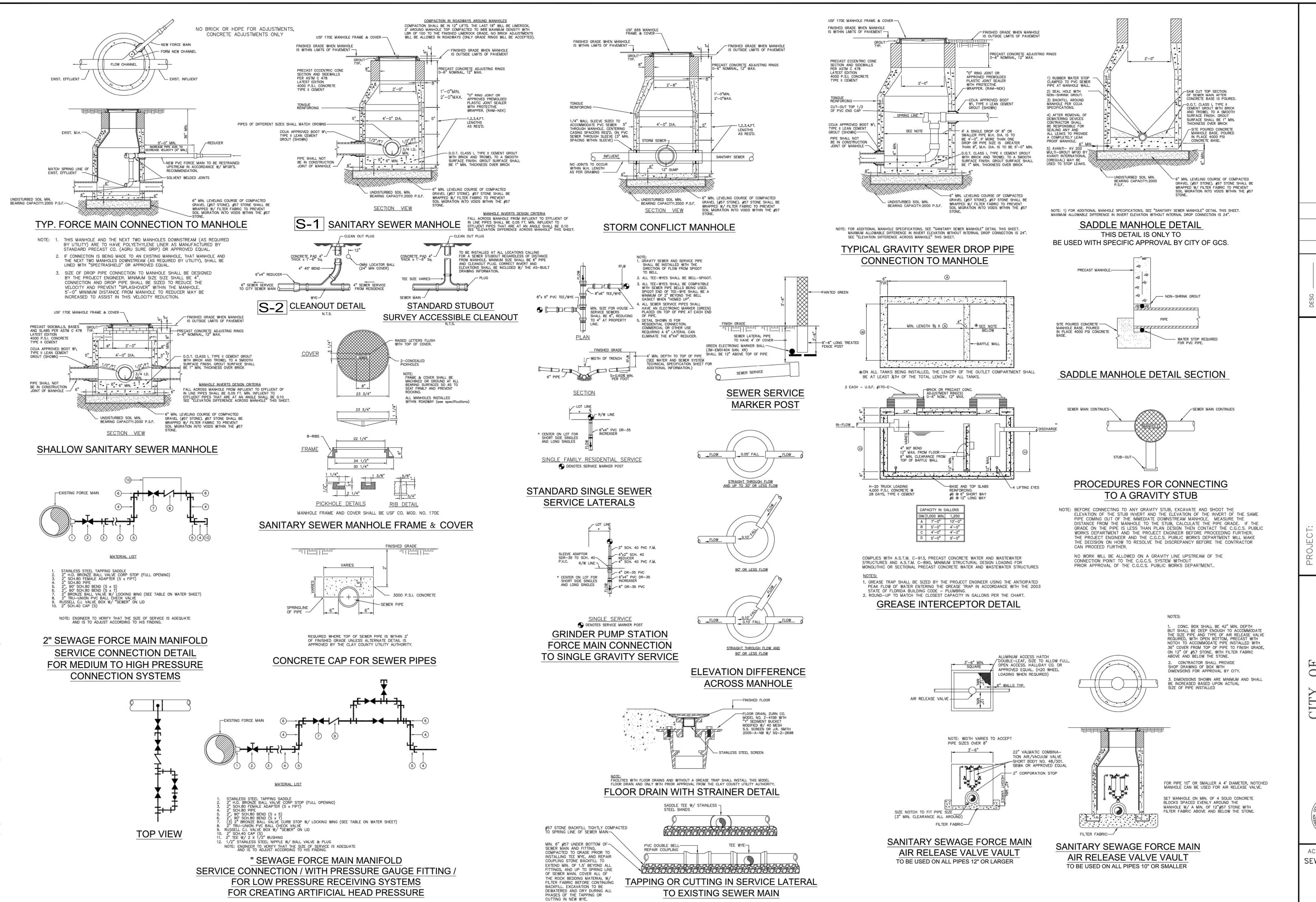
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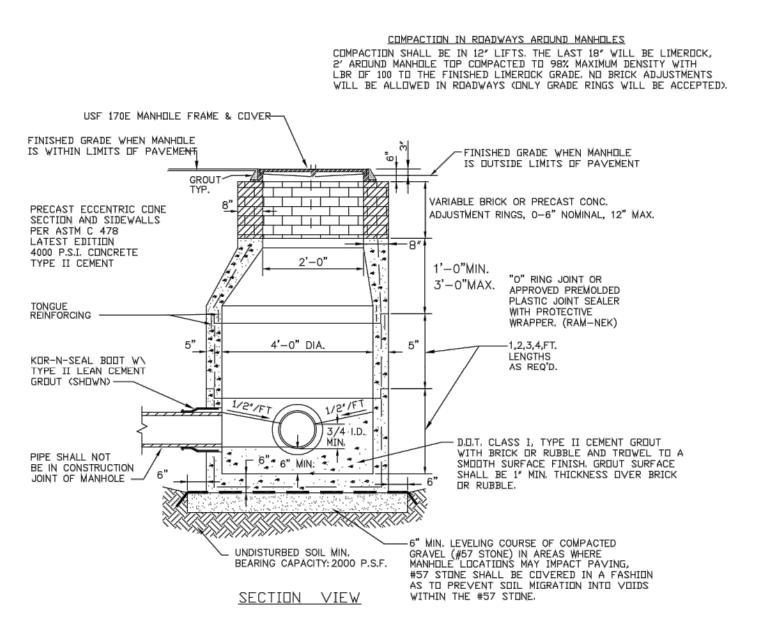
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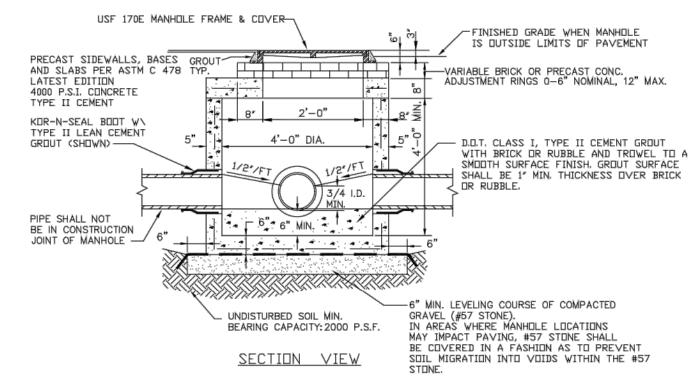
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32043 SPRING STREET , FLORIDA 0FCOVE WALNUT SPRINGS, GREE

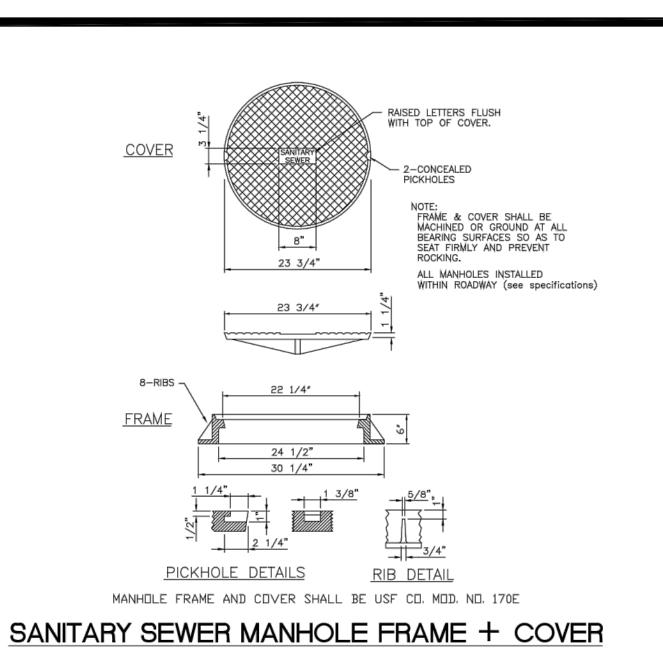
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# SANITARY SEWER MANHOLE



## SHALLOW SANITARY SEWER MANHOLE





~ 8"×6" TEE/WYE

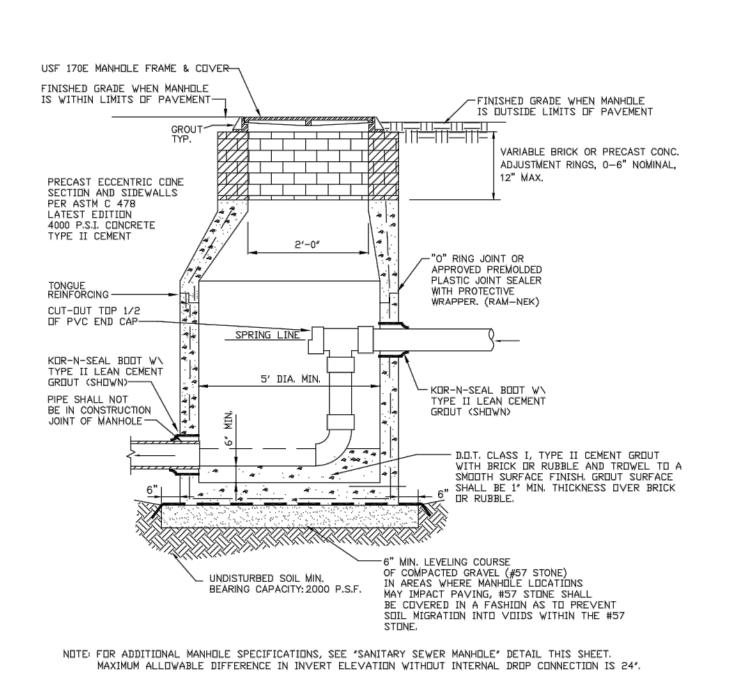
SHALL BE 6", REDUCING TO 4" AT PROPERTY

/ WIDTH OF TRENCH

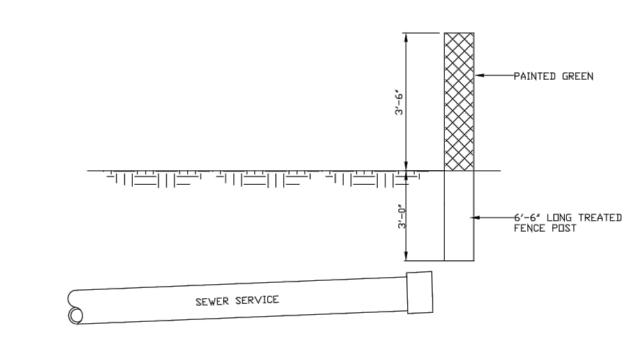
MIN. SIZE FOR HOUSE SERVICE SEWERS

8"x 6" PVC TEE/WYE-

\* CENTER ON LOT FOR SHORT SIDE SINGLES AND LONG SINGLES

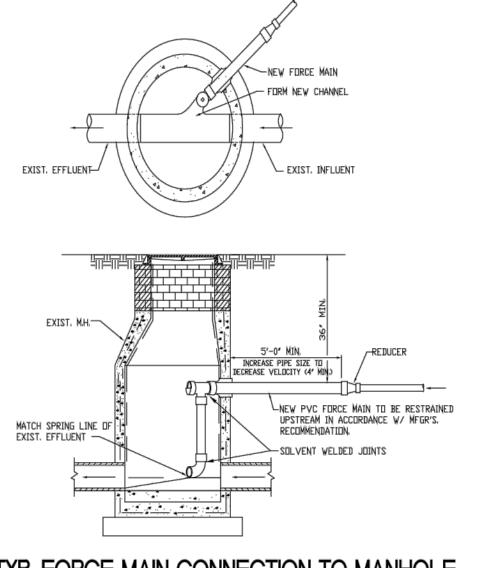


TYPICAL GRAVITY SEWER DROP PIPE



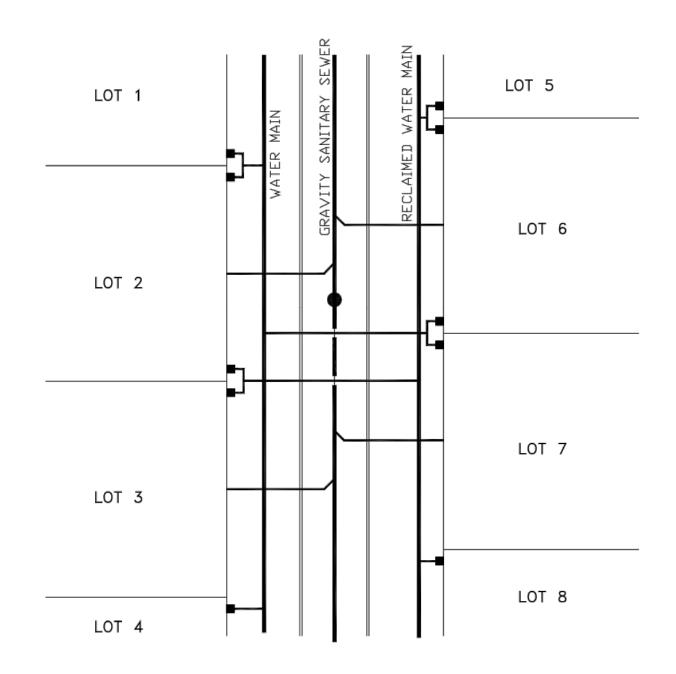
SEWER SERVICE MARKER POST

CONNECTION TO MANHOLE



# TYP. FORCE MAIN CONNECTION TO MANHOLE

- NOTE: 1. THIS MANHOLE AND THE NEXT TWO MANHOLES DOWNSTREAM (AS REQUIRED BY UTILITY) ARE TO HAVE POLYETHYLENE LINER AS MANUFACTURED BY TAYLOR PRECAST CO. OR APPROVED EQUAL.
  - 2. SIZE OF DROP PIPE CONNECTION TO MANHOLE SHALL BE DESIGNED BY THE PROJECT ENGINEER, MINIMUM SIZE SIZE SHALL BE 4". CONNECTION AND DROP PIPE SHALL BE SIZED TO REDUCE THE VELOCITY AND PREVENT "SPLASHOVER" WITHIN THE MANHOLE 5'-0" MINIMUM DISTANCE FROM MANHOLE TO REDUCER MAY BE INCREASED TO ASSIST IN THIS VELOCITY REDUCTION.



## TYPICAL WATER AND SEWER SERVICE LOCATION PLAN

- 1.) ALL WATER AND REUSE DOUBLE SERVICES ON PROPERTY LINE.
- 2.) ANY SINGLE WATER OR REUSE SERVICE LINES ON LOT LINE. 3.) ALL SEWER SERVICES ARE TO CENTER OF LOTS.

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MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR

KNOWING VIOLATIONS.

# STORM WATER POLLUTION PREVENTION PLAN

CONTRACTOR'S REQUIREMENTS

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURRIDITY CONTROL PLAN IN ADDITION THE CONTRACTOR SHALL LINDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULENTS TO THE RETENTION SYSTEM PRIOR TO PLACING

11. REMOVE ACCUMULATED

SEDIMENT FROM BASINS

12. WHEN ALL CONSTRUCTION

ACTIVITY IS COMPLETE AND THE

SITE IS STABILIZED, REMOVE ANY

SEQUENCE OF MAJOR ACTIVITIES:

### THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- INSTALL STABILIZED 9. INSTALL STORM SEWER, CONSTRUCTION ENTRANCE AND IRRIGATION. INSTALL SILT FENCES AND SYNTHETIC 10. COMPLETE GRADING AND INSTALL PERMANENT BALES AS REQUIRED CLEAR AND GRUB FOR DIVERSION SEEDING/SOD AND PLANTING
- SWALES/DIKES AND SEDIMENT . CONSTRUCT SEDIMENTATION CONTINUE CLEARING AND

THE SYSTEM INTO OPERATION.

PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS

PRACTICABLE

TEMPORARY DIVERSION S. STOCK PILE TOP SOIL IF REQUIRED SWALES/DIKES AND RESEED/SOD AS REQUIRED

## TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES. STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

#### CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

#### EROSION AND SEDIMENT CONTROLS STABILIZATION PRACTICES

1. SYNTHETIC BALE BARRIER: SYNTHETIC BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:

- A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS. D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF SYNTHETIC BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE
- REFER TO THE DETAILS FOR CONSTRUCTING THE HAY BALE BARRIER. ALSO REFER TO THE DETAILS FOR PROPER LOCATION, MATERIAL
- 2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM
- CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. REFER TO THE DETAIL SHEET FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER. 3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED
- ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE. 4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE

BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE

GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE

CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE, LEVEL SPREADER SHALL BE CONSTRUCTED IN ACCORDANCE TO THE DETAILS.

- 5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
- 6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
- . INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
- 8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
- 9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
- 10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDRO MULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.

11. TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

- 2. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- 13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
- 14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED
- 15 TEMPORARY FLOATING TURBIDITY BARRIER: FLOATING TURBIDITY BARRIER MAY BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH. FILTER CURTAIN SHALL REACH THE BOTTOM UP TO DEPTHS OF 10 FEET.

### STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED IN ACCORDANCE TO WITH THE DETAILS.

- 2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER
- INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION
- A BLOCK & GRAVEL SEDIMENT FILTER THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. REFER TO THE DETAIL SHEET FOR CONSTRUCTION OF A CURB INLET SEDIMENT FILTER, AND FOR CONSTRUCTION OF A DROP INLET SEDIMENT FILTER.
- AREAS. REFER TO THE DETAILS FOR CONSTRUCTION OF CURB INLET & DROP B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED SEDIMENT TRAP.
- C. DROP INLET SEDIMENT TRAP THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS. REFER TO THE DETAILS FOR CONSTRUCTION OF HAY BALE & FABRIC SEDIMENT FILTER.
- 3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
- 4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE.

THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

### OTHER CONTROLS

#### WASTE DISPOSAL

### WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL, NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

### HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

### OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE, DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

ncrete	Fertilizers	Wood
phalt	Petroleum Based Products	Masonry Blocks
r	Cleaning Solvents	Roofing Materials
tergents	Paints	

### SPILL PREVENTION

### MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF

### GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

WILL BE FOLLOWED.

THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS

ONSITE RECEIVE PROPER USE AND DISPOSAL.

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

RESEALABLE.

\* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT

\* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED: THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

\* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE

#### PRODUCT SPECIFIC PRACTICES THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE: PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS. CONCRETE TRUCKS

CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONLY AT DISCHARGE POINT PROVIDED. NO OFFSITE DISCHARGE WILL BE PERMITTED.

### SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS. GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL). SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

### ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

### MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

\* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

\* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.50 INCHES OR GREATER.

ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER: IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF

\* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

\* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS. AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

\* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.

## \* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES

\* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH. \* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH

THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM

\* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE

\* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT, THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

### NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

\* WATER FROM WATER LINE FLUSHING \* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR

HAZARDOUS MATERIALS HAVE OCCURRED). \* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

### CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERIC STORMWATER PERMIT ISSUED PURSUANT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STROM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION

RESPONSIBLE FOR/DUTIES	GENERAL CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR	SUB-CONTRACTOR
BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS					
SIGNATURE / DATE					

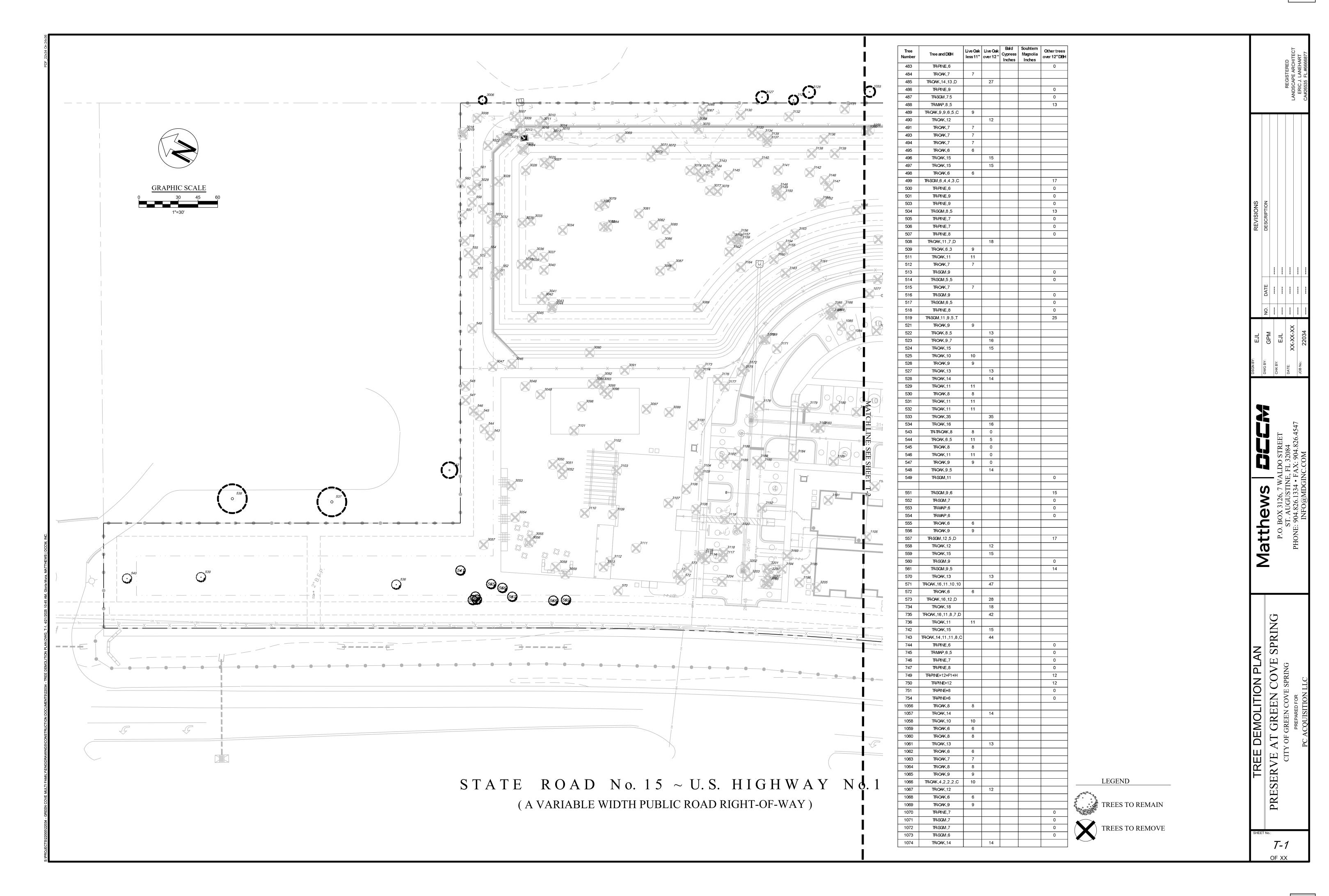
### NOTE TO CONTRACTOR:

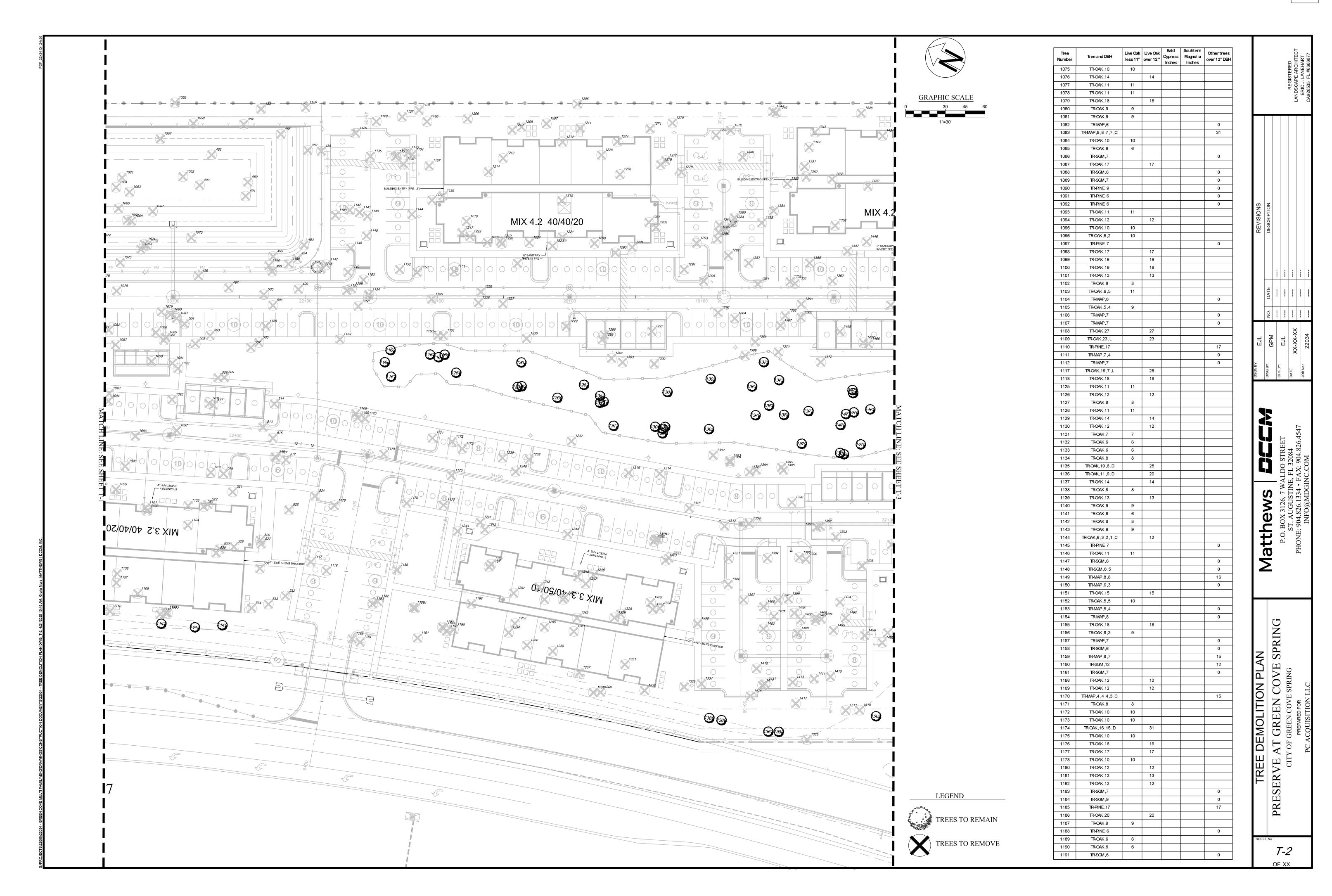
CERTIFICATION IS REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.50 INCHES.

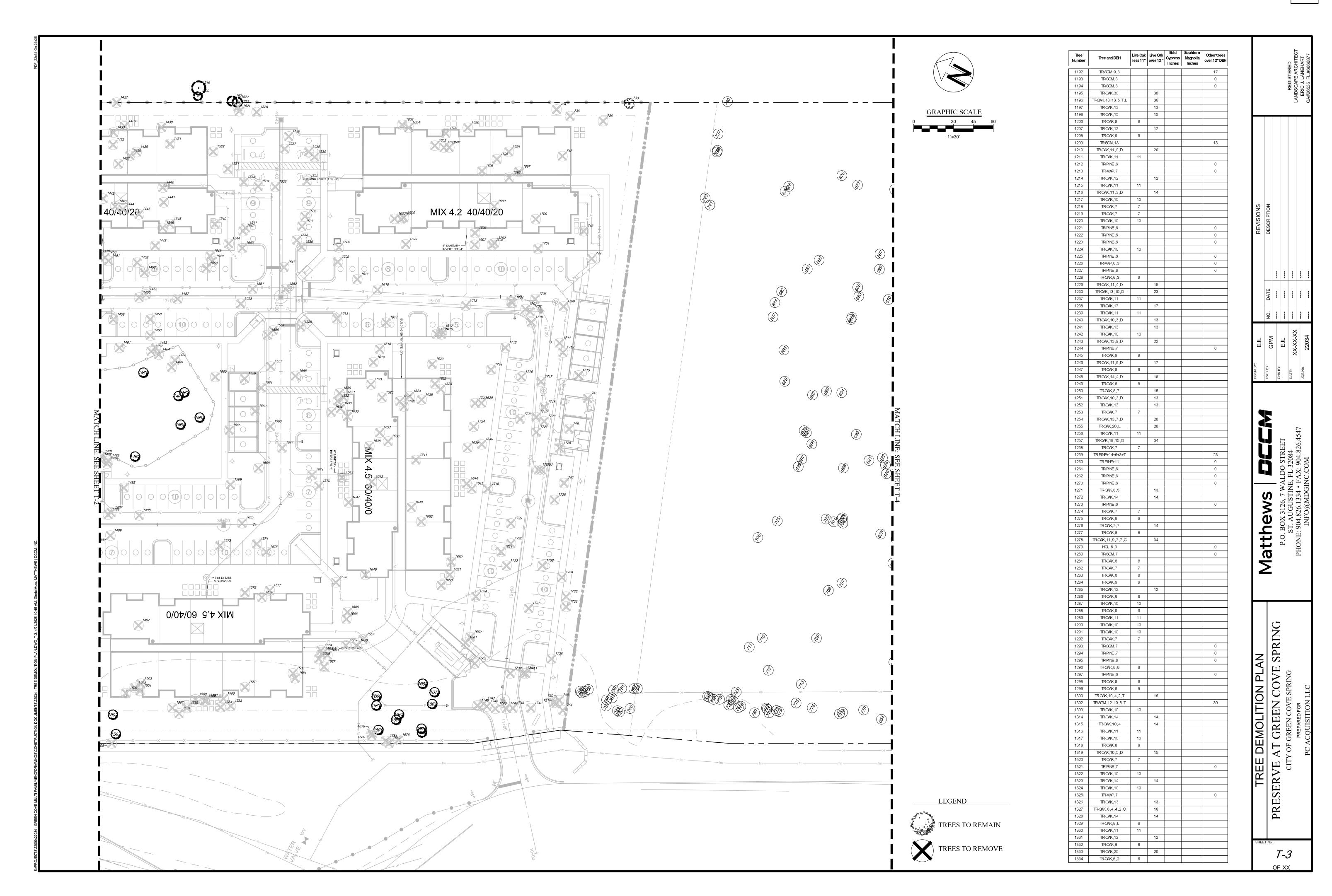
HTTPS://WWW.EPA.GOV/NPDES/CONSTRUCTION-GENERAL-PERMIT-RESOURCES-TOOLS-AND-TEMPLATES#INSPECTION

INSPECTION AND CORRECTIVE ACTION REPORT TEMPLATES AND FORMS CAN BE ACCESSED FROM THE WEB ADDRESS

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	Tree Number Tree and DBH Live Oak less 11" Bald Cypress Magnolia Inches Over 12" Other trees over 12"DBH	Tree Number Tree and DBH Live Cak less 11" Dive Cak Cypress Inches Diver 12" DBH	Tree Number Tree and DBH Live Oak less 11" Cypress Inches Inches Other trees over 12" Other trees over 12" Other trees	Tree Number Tree and DBH Live Oak less 11" Live Oak over 12 " Bald Cypress Magnolia Inches Inches Over 12" Other trees over 12" DBH
	1339 TR-PINE+10 0 1346 TR-PINE,20 20	1455 TR-OAK,7 7 1456 TR-OAK,10 10	1576 TR-OAK,10,2,2,T 14 1577 TR-OAK,10 10	1706 TR-OAK,15 15 1707 TR-OAK,16,14,D,L 30
	1347 TR-OAK,12 12	1457 TR-PINE ,8 0	1578 TR-OAK,10 10	1708 TR-OAK,7 7
GRAPHIC SCALE  O 30 45 60	1348 TR-OAK,7,3 10 1349 TR-OAK,6 6	1458 TR-OAK,10 10 0 1459 TR-PINE,7 0	1579 TR-OAK,14,4,L 18 1580 TR-OAK,9 9	1709 TR-OAK,11 11 1710 TR-OAK,7 7
1"=30'	1350 TR-OAK,10 10 1351 TR-OAK,7 7	1460 TR-PINE,7 0 1461 TR-PINE,7 0	1581 TR-OAK,10 10 1582 TR-OAK,9 9	1711 TR-OAK,13 13 1712 TR-OAK,7 7
	1352 TR-OAK,14,10,6,4,C 1	1462 TR-PINE 6 0	1583 TR-OAK,9,6 15	1713 TR-OAK,7,7 14
	1353 TR-OAK,6 6 1354 TR-PINE,6 6	1463 TR-PINE,7 0 1464 TR-OAK,6 6	1584 TR-OAK,9 9 0 0	1714 TR-OAK,21,L 21 0
RAVEL ROAD	1355 TR-OAK,12,6,D 12 1356 TR-SGM,9,8 9	1465 TR-PINE,9 0 1466 PAL,15 15	1586 TR-OAK,18 18 18 1587 TR-OAK,9 9	1716 TR-OAK,18,12,D 30 1717 TR-OAK,9 9
	1357 TR-OAK,6 6	1467 TR-OAK,32 32	1599 TR-OAK,33,L 33	1718 TR-PINE,6 6 0
R A S	1358 TR-OAK,8,6 8 1359 TR-OAK,8 8	1468 TR-OAK,10,5,4,4,C 23 1469 TR-OAK,6,5,4,2,C 17	1600 TR-OAK,7,3 10 1601 TR-OAK,7 7	1719     TR-PINE,7     7     0       1720     TR-PINE,6     6     0
	1360 TR-OAK,6 6 1361 TR-PINE,6 6	1481 TR-OAK,8 8 1482 TR-OAK,8 8	1602 TR-OAK,8 8 1603 TR-OAK,16 16	1721 TR-PINE,9 9 0 1722 TR-OAK,22,L 22
	1362 TROAK,8 8	1483 TROAK,9,4 13	1604 TR-OAK,6 6	1723 TR-PINE,6 0
	1363 TR-OAK,7 7 1364 TR-OAK,12 12	1484 TR-OAK,14 14 14 0	1605 TR-PINE,7 0 1606 TR-OAK,9 9	1724 TR-PINE,7 0 1725 TR-PINE,9 0
	1365 TR-PINE,6 6 1366 TR-PINE,6 6	1486 TR-OAK,17,4,D 21 1487 TR-OAK,8 8	1607 TR-OAK,9 9 1608 TR-OAK,10 10	1726 TR-PINE,7 0 1727 TR-PINE,7 0
	1367 TR-OAK,12,7,4,T 19	1488 TR-PINE ,8 0	1609 TR-OAK,10 10	1728 TR-OAK,6 6
	1369 TR-PINE,6 6	1489 TR-OAK,12 12 1490 TR-OAK,8 8	1610 TR-OAK,10 10 1611 TR-OAK,7 7	1729 TR-PINE,6 0 1730 TR-PINE,9 0
	1370 TR-PINE,6 6 1372 TR-OAK,23,6,4,T 23	1491 TR-PINE,6 0 1492 TR-OAK,13 13	1612 TR-OAK,19 19 1613 TR-OAK,12,7,3,T 22	1731 TR-PINE,6 0 1732 TR-PINE,6 0
	1382 TR-OAK,6 6	1493 TR-OAK,6 6	1614 TR-OAK,6 6	1733 TR-PINE,6 0
	1383 TR-OAK,6 6 1384 TR-OAK,9 9	1494 TR-OAK,11,10,5,4,C 30 1495 TR-OAK,7,6 13	1615 TR-PINE,7 0 1616 TR-OAK,12 12	1734 TR-PINE,6 0 1735 TR-PINE,8 0
	1385 TR-OAK,10 10 1386 TR-OAK,12 12	1496 TR-OAK,6,5 11 1497 TR-OAK,6 6	1617 TR-OAK,6 6 1618 TR-OAK,7 7	1736 TR-PINE,7 0 1737 TR-PINE,6 0
	1387 TR-OAK,9 9	1498 TR-OAK,13 13	1619 TR-PINE,7 0	1738 TR-PINE,8 0
	1388 TR-OAK,12 12 1389 TR-PINE,7 7	1499 TR-OAK,10,7,5,5,C 27 1500 TR-OAK,10 10	1620 TR-OAK,8 8 0 0	1739 TR-OAK,7,3D 10 1740 TR-OAK,13 13
	1390 TR-PINE,6 6 1391 TR-OAK,10 10	1501 TR-OAK,8,5 13 1503 TR-OAK,12,9,D 21	1622 TR-PINE,6 0 1623 TR-PINE,7 0	1741 TR-OAK,9,5D 14 0
	1392 TR-OAK,7 7	1504 TR-OAK,10 10	1624 TR-PINE,8 0	1743 TR-PINE,10 0
	1393 TR-OAK,7,10 17 1394 TR-PINE,7 3	1505 TR-OAK,7 7 1506 TR-OAK,10 10	1625 TR-PINE,6 0 1626 TR-PINE,12 12	1744 TR-PINE,12 12 12 1745 TR-PINE,8 0
	1395 TR-OAK,9 9 1396 TR-OAK,13 13	1523 TR-OAK,9,9 18 1524 TR-OAK,7 7	1627 TR-PINE,6 0 1628 TR-PINE,6 0	1746 TR-OAK,18 18 0
	1397 TR-OAK,10 10	1525 TR-OAK,8 8	1629 TR-OAK,21 21	1748 TR-PINE,10 0
	1398 TR-OAK,6 6 1399 TR-OAK,10 10	1526 TR-OAK,18,L 18 1527 TR-OAK,14,L 14	1630 TR-PINE,8 0 1631 TR-PINE,7 0	3007 TR-MAP,4-3D 0 3008 TR-MAP,6-4D 0
	1400 TR-OAK,8,5 8 1401 TR-OAK,8,5 8	1528 TR-OAK,7,3 10 1529 TR-OAK,8 8	1632 TR-PINE,6 0 1633 TR-PINE,6 0	3009 TR-MAP,7 0 3010 TR-OAK,6 7
	1402 TR-OAK,14 14	1530 TR-OAK,6 6	1634 TR-PINE,7 0	3011 TR-OAK,6 6
	1403 TR-OAK,12,9,D 12 1404 TR-OAK,10 10	1531 TR-OAK,10 10 1532 TR-OAK,7,6 13	1635 TR-PINE,6 0 1636 TR-PINE,9 0	3012 TR-SGM,8 0 3013 TR-OAK,6 6
	1405 TR-OAK,9 9 1406 TR-OAK,14,11,9,9,C 25	1533 TR-OAK,6 6 1534 TR-OAK,10 10	1637 TR-PINE,6 0 1638 TR-PINE,8 0	3014 TR-OAK,8 8 3015 TR-OAK,16 16
	1407 TR-OAK,9 9	1535 TR-OAK,9 9	1639 TR-PINE,5,3 0	3016 TR-SGM,7 0
	1408 TR-OAK,9 9 1409 TR-OAK,9 9	1536 TR-OAK,7 7 1537 TR-OAK,7 7	1640 TR-PINE,7 0 1641 TR-PINE,6 0	3017 TR-OAK,6 6 0 0
	1410 TR-OAK,36,L 4 1411 TR-OAK,11 11	1538 TR-OAK,9 9 1539 TR-OAK,9 9	1642 TR-PINE,10 0 1643 TR-OAK,10 10	3019 TR-OAK,6 6 0 0
	1412 TR-OAK,10 10	1540 TR-OAK,10 10	1644 TR-PINE,7 0	3021 TR-SGM,9-7D 16
I SHAM SHAM SHAM SHAM SHAM SHAM SHAM SHAM	1413 TR-OAK,12 12 1414 TR-OAK,10 10	1541 TR-OAK,8,2 10 1542 TR-OAK,7 7	1645 TR-PINE,7 0 1646 TR-PINE,9 0	3022 TR-OAK,7 7 3023 TR-OAK,6 6
ASH PAIN	1415 TR-OAK,11 11 1416 TR-OAK,7 7	1543 TROAK, 8, 6, 6, 4, C 24	1647 TR-PINE,6 0 1648 TR-PINE,6 0	3024 TR-SGM,7 0 3025 TR-SGM,11,9,5,T,10,D 24
	1417 TR-OAK,6 6	1544 TR-OAK,10 10 1545 TR-OAK,10,4,3,T 17	1649 TR-OAK,21,19,D,L 40	3026 TR-OAK,8 8
	1427 TR-PINE,8 8 1 1428 TR-PINE,7 7	1546 TR-OAK,6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1650 TR-PINE,9 0 1651 TR-PINE,7 0	3027 TR-SGM,9 0 3028 TR-MAP,6 0
	1429 TR-OAK,12 12 1430 TR-OAK,8 8	1548 TR-PINE,6 0	1652 TR-PINE,7 0	3029 TR-OAK,4,4D 8
	1431 TR-OAK,17 17	1549 TR-PINE,9 0 1550 TR-PINE,7 0	1653 TR-OAK, 7, 6, 5, 3, C 21 0 0	3031 TR-OAK,13 13
	1432 TR-OAK,11 11 15 1433 TR-OAK,15,L 15	1551 TR-OAK,6,5,4,3,C 18 1552 TR-OAK,10,5,D 15	1660 TR-OAK,15,12,D 27 1661 TR-OAK,7 7	3032 TR-OAK,9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	1434 TR-OAK,25 25 1435 TR-OAK,9 5	1553 TR-PINE,6 0	1662 TR-OAK,8 8	3034 TR-OAK,14 14
	1436 TR-OAK,7 7	1554 TR-PINE,7 0 1555 TR-PINE,6 0	1679 TR-OAK+8 8 1680 TR-OAK+10 10	3035 TR-OAK,7 7 3036 TR-OAK,9 9
	1437 TR-OAK,9 9 1438 TR-OAK,9,7 9	1556 TR-PINE,6 0 1557 TR-OAK,12 12	1681 TR-PINE+14 14 14 1682 TR-PINE+9 0	3037 TR-OAK,7 7 3038 TR-OAK,8 8
	1439 TR-OAK,8,8 8 1440 TR-OAK,8 8	1558 TR-PINE,7 0	1690 TR-OAK,12,12,D 24	3039 TR-OAK,9 9
	1441 TR-OAK,12 12	1559 TR-PINE,9 0 1560 TR-PINE,8 0	1691 TR-OAK,12 12 1692 TR-OAK,7 7	3040 TR-OAK,22 22 0
	1442 TR-MAP,7,6,3,2,C 7 1443 TR-OAK,12 12	1561 TR-PINE,7 0 1562 TR-PINE,7 0	1693 TR-OAK,6 6 1694 TR-OAK,11,8,6,4,C 29	3042 TR-SGM,7 0 3043 TR-SGM,6 0
oe	1444 TROAK,7 7 1445 TROAK,7 7	1565 TR-PINE,10 0	1695 TR-OAK,11 11	3044 TR-SGM,7 0
fm — fm	1446 TR-OAK,12,8,7,T 12	1566 TR-OAK,15 15 0	1696 TR-OAK,6,6 12 1697 TR-OAK,6 6	3045 TR-OAK,13 13 3046 TR-OAK,11 11
	1447 TR-PINE,7 7 1448 TR-PINE,8 8	1568 TR-OAK,12 12	1698 TR-OAK,8 8	3047 TR-OAK,10 10
	1449 TR-OAK,6 6	1569 TR-PINE,8 0 1570 TR-OAK,11 11	1699 TR-OAK,11 11 1700 TR-PINE,6 6	3048 TR-OAK,5-4-3T 12 3049 TR-SGM,23-9D 32
LEGEND	1450 TR-OAK,10,3,2,T 13 1451 TR-OAK,6 6	1571 TR-OAK,13 13 1572 TR-PINE,8 0	1701 TR-OAK,7 7 1702 TR-OAK,7 7	3050 TR-OAK,7-5D 12 3051 TR-OAK,7 7
And the second s	1452 TR-OAK,10 10 1453 TR-OAK,7,6 13	1573 TR-PINE,7 0	1703 TR-OAK,6 6	3052 TR-OAK,13 13
TREES TO REMAIN  TREES TO REMOVE	1454 TR-PINE,7 7	1574 TR-OAK,12,7,7,T 26 1575 TR-OAK,12 12	1704 TR-OAK,7 7 1705 TR-OAK,8 8	3053 TR-OAK,11-4D 15 3054 TR-OAK,3-3D 6

Tree	Tree and DBH		Live Oak	Bald Cypress	Souhtern Magnolia	Othertrees	Tree	Tree and DBH		Live Oak	Bald Cypress	Souhtern Magnolia	Other trees
Number			over 12"	Inches	Inches	over 12"DBH	Number		less 11"	over 12 "	Inches	Inches	over 12"DBH
3055	TR-OAK,11	11					3162 3163	TR-SGM,9	11				0
3056 3057	TR-OAK,9 TR-OAK,6-4-3T	9	13				3163	TR-OAK,11 TR-OAK,12	''	12			
3058	TR-OAK,12		12				3165	TR-OAK,13-7-3T		23			
3059	TR-OAK,17		17				3166	TR-OAK,7-4D	11				
3066	TR-OAK,8	8					3167	TR-OAK,8	8				
3067	TR-OAK,7	7					3168	TR-OAK,7	7	- 40			
3068 3069	TR-OAK,11 TR-SGM,12	11				12	3169 3170	TR-OAK,12 TR-OAK,9	9	12			
3070	TR-OAK,6	6				12	3171	TR-MAP,7-3D	-				0
3071	TR-OAK,19		19				3172	TR-OAK,8	8				
3072	TR-OAK,9	9					3173	TR-OAK,9	9				
3073	TR-OAK,12		12				3174	TR-OAK,11	11				
3074	TR-OAK,6	6					3175	TR-OAK,15		15			
3075 3076	TR-SGM ,9-6-5T					20	3176 3177	TR-OAK,10 TR-OAK,7	10 7				
3076	TR-SGM,7-4D TR-SGM,11-4					11 15	3178	TR-OAK,11-7D	<u> </u>	18			
3078	TR-OAK,7	7					3179	TR-OAK,6-3D	9				
3079	TR-SGM ,12-7D					19	3180	TR-OAK,12		12			
3080	TR-SGM,8					0	3181	TR-OAK,11	11				
3081	TR-OAK,6-4D	10					3182	TR-OAK,11	11				
3082	TR-OAK,5-3-3T	11					3183	TR-OAK,10	10	1.1			
3083	TR-SGM,9-7-4-4C		24			0	3184 3185	TR-OAK,14 TR-OAK,11	11	14			
3084 3085	TR-SGM,10 TR-OAK,6	6				0	3186	TR-SGM,10	''				0
3086	TR-MAP, 6-5-4T	+ -				15	3187	TR-SGM,7-6D					13
3087	TR-SGM,13					0	3188	TR-SGM,7					0
3088	TR-OAK,6	6					3189	TR-SGM,6					0
3089	TR-OAK,14-11D		14				3190	TR-SGM,8-4D					12
3090	TR-OAK,14-14DL		28				3191 3192	TR-OAK,5-4-3-3C TR-OAK,8-4-4-4C		15 20			
3091	TR-OAK,8	8					3192	TR-OAK, 14		14			
3092 3093	TR-OAK,6 TR-OAK,7	6 7					3193	TR-OAK,10	10	'-			
3093	TR-OAK,7	11					3195	TR-OAK,9	9				
3095	TR-OAK,7	7					3196	TR-OAK,38L		38			
3096	TR-OAK,7	7					3197	TR-OAK,9	9				
3097	TR-OAK,12		12				3198	TR-OAK,8-3D	8				
3098	TR-OAK,6	6					3199	TR-OAK,7	7				
3099	TR-OAK,7-5-2T		14				3200 3201	TR-OAK,9 TR-OAK,10-7-6-5,C	9	28			
3100	TR-OAK,7-6-3T		16 12				3201	TR-OAK, 7-6-6-4, C		23			
3101 3102	TR-OAK,12 TR-OAK,12		12				3203	TR-OAK,10	10				
3103	TR-OAK,7	7	12				3204	TR-OAK,7	7				
3104	TR-OAK,6-6D		12				3205	TR-OAK,17		17			
3105	TR-OAK,8-5D		13					Totals	2942	3894			760
3106	TR-OAK,6-5-4-3C		18										
3107	TR-OAK,11	11					TREE CALCULAT	that 50 % of the oaks su	irveyed are	Live Oak	s)		
3108 3109	TR-OAK,11 TR-OAK,5-4-4-3C	11	16				(See sheet L1 show	ving live oak and other t	rees propo	sed and th	neir total in	iches)	
3110	TR-OAK,9-8-7T		24				LIVE OAKS REMO	VED - LIVE OAKS PLA	<u>NTED</u> = (3	,894"/2) - 2	246" = 1,7	01"	
3111	TR-OAK,19		19				OTHER TREES O	/ER 12" + NON-LIVE O	AKS OVER	2 12" DRH	REMOVE	D - OTHER	TREES DI ANTE
3112	TR-OAK,14		14				(760"/3) + [(3894/2		VIIIO O VEI	CIZ DDII	TEMOVE	.D OTTLET	TREESTERIN
3113	TR-OAK,14		14					REDIT AND TREE FUN		NT =			
3114	TR-OAK,7	7					1,701" - 513.5" = 1	,187.5" * \$188 = \$223,2	250				
3115 3116	TR-OAK,6 TR-OAK,12-8D	6	20										
3117	TR-OAK,8	8	20										
3118	TR-OAK,13		13										
3119	TR-OAK,17		17										
3120	TR-OAK,14		14										
3130	TR-OAK,9	9											
3131	TR-OAK,8-7-6-5C TR-OAK,11	44	26										
3132 3133	TR-OAK,11	11	16										
3134	TR-SGM,6		'-			0							
3135	TR-OAK,9	9											
3136	TR-OAK,11	11											
3137	TR-OAK,6	6											
3138	TR-OAK,13		13										
3139	TR-SGM,7-6-6-4C					23							
3140 3141	TR-OAK,9 TR-OAK,8	9											
3141	TR-OAK,12		12										
3143	TR-OAK,8-4D		12										
3144	TR-OAK,7	7											
3145	TR-OAK,13		13										
3146	TR-OAK,6	6											
3147	TR-SGM ,12-11D					23							
3148	TR-OAK,11	11											
3149	TR-SGM,9	9											
3150 3151	TR-OAK,8 TR-OAK,6	8											
3151	TR-OAK,10	10											
3153	TR-OAK,9	9											
3154	TR-OAK,9	9											
3155	TR-OAK,11	11											
3156	TR-SGM,6					0							
3157	TR-SGM,7					0							
3158	TR-SGM,9 TR-SGM,9					0							
3150	, <b>_</b>			1	i								
3159 3160	TR-OAK,8	8											

3161 TR-OAK,11 11

Tree Number	Tree and DBH	Live Oak less 11"	Live Oak over 12 "	Bald Cypress Inches	Souhtern Magnolia Inches	Other tr over 12"
3162	TR-SGM,9					0
3163	TR-OAK,11	11				
3164	TR-OAK,12		12			
3165	TR-OAK,13-7-3T		23			
3166	TR-OAK,7-4D	11				
3167	TR-OAK,8	8				
3168	TR-OAK,7	7				
3169	TR-OAK,12		12			
3170	TR-OAK,9	9				
3171	TR-MAP,7-3D					0
3172	TR-OAK,8	8				
3173	TR-OAK,9	9				
3174	TR-OAK,11	11				
3175	TR-OAK,15		15			
3176	TR-OAK,10	10				
3177	TR-OAK,7	7				
3178	TR-OAK,11-7D		18			
3179	TR-OAK,6-3D	9				
3180	TR-OAK,12		12			
3181	TR-OAK,11	11				
3182	TR-OAK,11	11				
3183	TR-OAK,10	10				
3184	TR-OAK,14		14			
3185	TR-OAK,11	11				
3186	TR-SGM,10					0
3187	TR-SGM,7-6D					13
3188	TR-SGM,7					0
3189	TR-SGM,6					0
3190	TR-SGM,8-4D					12
3191	TR-OAK,5-4-3-3C		15			
3192	TR-OAK,8-4-4-4C		20			
3193	TR-OAK,14		14			
3194	TR-OAK,10	10				
3195	TR-OAK,9	9				
3196	TR-OAK,38L		38			
3197	TR-OAK,9	9				
3198	TR-OAK,8-3D	8				
3199	TR-OAK,7	7				
3200	TR-OAK,9	9				
3201	TR-OAK,10-7-6-5,C		28			
3202	TR-OAK,7-6-6-4,C		23			
3203	TR-OAK,10	10				
3204	TR-OAK,7	7				
3205	TR-OAK,17		17			
	Totals	2942	3894			760

	114-0-47, 13-7-51	1	1	1	
3166	TR-OAK,7-4D	11			
3167	TR-OAK,8	8			
3168	TR-OAK,7	7			
3169	TR-OAK,12		12		
3170	TR-OAK,9	9			
3171	TR-MAP,7-3D				0
3172	TR-OAK,8	8			
3173	TR-OAK,9	9			
3174	TR-OAK,11	11			
3175	TR-OAK,15		15		
3176	TR-OAK,10	10			
3177	TR-OAK,7	7			
3178	TR-OAK,11-7D		18		
3179	TR-OAK,6-3D	9			
3180	TR-OAK,12		12		
3181	TR-OAK,11	11			
3182	TR-OAK,11	11			
3183	TR-OAK,10	10			
3184	TR-OAK,14		14		
3185	TR-OAK,11	11			
3186	TR-SGM,10				0
3187	TR-SGM,7-6D				13
3188	TR-SGM,7				0
3189	TR-SGM,6				0
3190	TR-SGM,8-4D				12
3191	TR-OAK,5-4-3-3C		15		
3192	TR-OAK,8-4-4-4C		20		
3193	TR-OAK,14		14		
3194	TR-OAK,10	10			
3195	TR-OAK,9	9			
3196	TR-OAK,38L		38		
3197	TR-OAK,9	9			
3198	TR-OAK,8-3D	8			
3199	TR-OAK,7	7			
3200	TR-OAK,9	9			
3201	TR-OAK,10-7-6-5,C		28		
3202	TR-OAK,7-6-6-4,C		23		
3203	TR-OAK,10	10			
3204	TR-OAK,7	7			
3205	TR-OAK,17		17		
	Totals	2942	3894		760

Tree Number 536 539 540 541 562 563 564 565 566 567 568 569 733 1113 1114 1115 1162 1163	Tree and DBH  TR-OAK+32  TR-OAK+37  TR-SGM+14+12+11+11  TR-OAK+10  TR-PINE+10  TR-PINE+12  TR-PINE+6  TR-OAK+16  TR-OAK+12  TR-PINE+10  TR-PINE+10  TR-PINE+10  TR-PINE+10	<12" D.B.H.	12"-18" D.B.H.	19"-30" D.B.H.	30"+ D.B.H. 32 37	D.BH 12"+  48	
536 539 540 541 562 563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-OAK+37  TR-SGM+14+12+11+11  TR-OAK+10  TR-PINE+10  TR-PINE+12  TR-PINE+6  TR-OAK+16  TR-OAK+16  TR-OAK+12  TR-PINE+10  TR-PINE+10  TR-PINE+9  TR-PINE+10		D.O.H.	van.	32		
539 540 541 562 563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-OAK+37  TR-SGM+14+12+11+11  TR-OAK+10  TR-PINE+10  TR-PINE+12  TR-PINE+6  TR-OAK+16  TR-OAK+16  TR-OAK+12  TR-PINE+10  TR-PINE+10  TR-PINE+9  TR-PINE+10	10					
540 541 562 563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-SGM+14+12+11+11 TR-OAK+10 TR-PINE+10 TR-PINE+12 TR-PINE+6 TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+10 TR-PINE+9 TR-PINE+10	10			31		
541 562 563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-OAK+10 TR-PINE+10 TR-PINE+12 TR-PINE+6 TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10	10					
562 563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-PINE+10 TR-PINE+12 TR-PINE+6 TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10	10				0	
563 564 565 566 567 568 569 733 1113 1114 1115 1162	TR-PINE+12 TR-PINE+6 TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10					0 I	
564 565 566 567 568 569 733 1113 1114 1115 1162	TR-PINE+6 TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10				I		
565 566 567 568 569 733 1113 1114 1115 1162	TR-OAK+16 TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10				ļ	12	
566 567 568 569 733 1113 1114 1115 1162	TR-OAK+12 TR-PINE+10 TR-PINE+9 TR-PINE+10		1			0	
567 568 569 733 1113 1114 1115 1162	TR-PINE+10 TR-PINE+9 TR-PINE+10			16			
568 569 733 1113 1114 1115 1162	TR-PINE+9 TR-PINE+10		12				
569 733 1113 1114 1115 1162	TR-PINE+10					0	
733 1113 1114 1115 1162						0	
1113 1114 1115 1162						0	
1114 1115 1162	TR-PINE+7					0	
1115 1162	TR-PINE+12					12	
1162	TR-OAK+13+9+D			22			
	TR-PINE+8					0	
1163	TR-OAK+12		12				
	TR-OAK+18		18				
1164	TR-OAK+7	7					
1165	TR-SGM+15					15	
1166	TR-MAP+6					0	
1167	TR-OAK+15+11+3+T			29			
1231	TR-OAK+13		13				
1232	TR-OAK+10	10					
1233	TR-MAP+7+2					0	
1234	TR-MAP+7					0	
1235	TR-OAK+7	7				-	
1236	TR-MAP+7	•				0	
1301	TR-OAK+18		18			+ -	
1304	TR-PINE+6		.5			0	
1305	TR-OAK+14+4+D		18			+ -	
1305	TR-OAK+6	6	10				
1306	TR-OAK+9	9	-	-			
1307	TR-OAK+9	9	14	-			
1308	TR-OAK+6	6	14				
1310	TR-OAK+6	6					
1311	TR-OAK+11+7+6+T			24			
1311	TR-OAK+6+3	9		24			
1312	TR-PINE+7	<del></del>				0	
	TR-PINE+18					18	
1335			-			10	
1336	TR-PINE+10						
1337	TR-PINE+8						
1338	TR-PINE+7						
1371	TR-PINE+9						
1373	TR-PINE+7+3						
1374	TR-PINE+6						
1375	TR-PINE+7						
1376	TR-OAK+7	7			44		
	TR-OAK+21+8+7+5+C				41		
1378	TR-PINE+7					0	
1379	TR-OAK+10	10					
1380	TR-OAK+12		12				
1381	TR-OAK+8	8	1				
1470	TR-OAK+12		12				
1471	TR-OAK+16		16				
1472	TR-OAK+10	10					
1473	TR-OAK+9	9					
1474	TR-OAK+10	10					
1475	TR-PINE+6					0	
1476	TR-OAK+9	9					
1477	TR-PINE+7					0	
1478	TR-PINE+8					0	
1479	TR-PINE+7					0	
1480	TR-PINE+9					0	
1502	TR-OAK+12		12				
1507	TR-OAK+12		12				
1508	TR-PINE+24					24	
1509	TR-OAK+29			29			
1510	TR-OAK+6	6					
1511	TR-OAK+9	9					
1563	TR-PINE+9					0	
1564	TR-PINE+10					0	
1668	TR-OAK+14+11+D			25			
1669	TR-OAK+12		12				
1670	TR-OAK+11	11					
1671	TR-OAK+6+4	10					
1672	TR-OAK+10	10					
1673	TR-OAK+7	7					
1674	TR-OAK+12+4+D		16				
1675	TR-OAK+8	8					
1676	TR-OAK+13		13				
1677	TR-OAK+12		12				
1678	TR-OAK+7	7	<del></del>				
	TOTAL	•	222	145	110	129	
						CREDIT	TOTAL
	18: LIVE OAK		111			1 🗆 1	111
	18 ALL OTHERS 30: LIVE OAK		111	72.5		1 □0.5 1 □1.25	55.5 90.62
	30: LIVE OAK 30 ALL OTHERS			72.5		1 □1.25 1 □0.75	90.625 54.375
TREES 30+ LI			<u></u>	L	55	1 □1.50	82.5
TREES 30+ A	LLOTHERS PECIES 12" +	129			55	1 □1 1 □0.5	55 64.5

TREES TO REMAIN

Bald Cypre agnolia In '-18''   19 B.H.   [		"+ DBH 12"-1	
	3	7 48	
		0	
		12 0	
2	16		
		0	
		0	
	22	12	
12		0	
3			
		15 0	
	29		
		0	
		0	
3		0	
		0	
	24		
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		18	
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		1	
		0	
		0	
+		0	
		0	
		0	
		24	
	29	24	
	25	0	
	25		
F			
	145 1	10 129	
_		CREDIT 1 □1 1 □0.5	TOTAL 111 55.5
	72.5	1 0.3	90.625

*T-5* 

OF XX

		· · · · · · · ·			
PERCENTAGE	COMMON NAME	NATIVE	SIZE	QΥ	TOTAL
29%	Eagleston Holly	哥	4	69	276
4%	Southern Red Cedar	<b>€</b>	4	9	36
10%	Muskogee Crape Myrtle	<b>∃</b>	6	23	138
8%	Southern Magnolia	<b>₹</b>	5	19	95
17%	Southern Live Oak	ES ES	6	41	246
8%	Cabbage Palmetto	YES	3	19	57
10%	Bald Cypress	Æ	5	24	120
15%	Winged ⊞m	YES	5	36	180
			TOTAL	240	1148

OVEF	RALL	PLANT SCHEDULE				
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY
TREES						
0	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	4" Cal. / 10` Ht.	69
(°)	JS	Juniperus silicicola	Southern Red Cedar	YES	4" Cal. / 10` Ht.	9
	LM	Lagerstroemia indica x fauriei 'Muskogee'	Muskogee Crape Myrtle	YES	6" Cal./ 12` clear trunk	23
(·)	MG	Magnolia grandiflora	Southern Magnolia	YES	5" Cal. / 14`-16` Ht.	19
$\overline{(\cdot)}$	QV	Quercus virginiana	Southern Live Oak	YES	6" Cal. / 14` Ht.	41
MAN AN A	ss	Sabal palmetto	Cabbage Palmetto	YES	12` Ct.	19
3 + C	TD	Taxodium distichum	Bald Cypress	YES	5" Cal. / 14`-16` Ht.	24
+	UA	Ulmus alata	Winged Elm	YES	5" Cal. / 14`-16` Ht.	36
OLUD: IDC	•					
SHRUBS	IV	llex vomitoria	Yaupon Holly	YES	24" Ht. 36" O.C.	258
$\overline{\bullet}$	VO	Viburnum obovatum	Walter's Viburnum	YES	24" Ht. 36" O.C.	215
SHRUB AR	DEAC					
SI INUD AR	MC	Muhlenbergia capillaris	Pink Muhly Grass	YES	24" Ht. / 36" OC.	247

PLAN	IT SC	CHEDULE BUFFER R	OADWAY 17			
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY
TREES						
0	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	14
	LM	Lagerstroemia indica x fauriei 'Muskogee'	Muskogee Crape Myrtle	YES	4" Cal. / 14` Ht.	16
	MG	Magnolia grandiflora	Southern Magnolia	YES	3" Cal. / 14` C.T.	13
$\overline{(\cdot)}$	QV	Quercus virginiana	Southern Live Oak	YES		3
WWW WAY WAY WAY WAY WAY WAY WAY WAY WAY	SS	Sabal palmetto	Cabbage Palmetto	YES		6
SHRUBS						
$\odot$	vo	Viburnum obovatum	Walter's Viburnum	YES	24" Ht. 36" O.C.	199

### BUFFER REQUIREMENTS

PROPERTY FRONTING U.S HIGWAY 17

-CANOPY TREES : 1434 L.F. / 50 = 28.68 ≈ 29 CANOPY TREES REQUIRED

PROPOSED 16 AND EXISTING 17 TREES TO REMAIN= 33 CANOPY TREES.
-NON-CANOPY OR UNDERSTORY TREE : 4 TREES / 100 L.F. = 1434 L.F. / 25 = 57.36 ≈ 57 NON-CANOPY TREES REQUIRED PROPOSED 36 NON-CANOPY TREES.

-SHRUBS : 9 SHRUBS / 100 L.F. = 1434 L.F. / 11.11 = 129.06 ≈ 129 SHRUBS REQUIRED PROPOSED 199 SHRUBS.

YMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY
TREES			,			
0	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	17
	LM	Lagerstroemia indica x fauriei 'Muskogee'	Muskogee Crape Myrtle	YES	4" Cal. / 14` Ht.	7
	MG	Magnolia grandiflora	Southern Magnolia	YES	3" Cal. / 14` C.T.	6
$\overline{(\cdot)}$	QV	Quercus virginiana	Southern Live Oak	YES		14
White with the second s	ss	Sabal palmetto	Cabbage Palmetto	YES		12
2) + C	TD	Taxodium distichum	Bald Cypress	YES		24
+	UA	Ulmus alata	Winged Elm	YES	3" Cal. / 10` Ht.	36
SHRUBS	•			•		•
(°)	IV	Ilex vomitoria	Yaupon Holly	YES	24" Ht. 36" O.C.	252
<u>Č</u>	VO	Viburnum obovatum	Walter's Viburnum	YES	24" Ht. 36" O.C.	14
SHRUB AF	REAS					
	мс	Muhlenbergia capillaris	Pink Muhly Grass	YES	24" Ht. / 36" OC.	247

### INTERIOR LANDSCAPE AREA: The trees shall be and equal proportion of shade (canopy and understory trees. At minimum, 15% of the site shall be landscaped.

SILT FENCE AREA = 13.65 ACRES X 15% = 2.04 ACRES INTERNAL LANDSCAPE REQUIRED.

PARKING AREA = 151,377 /43,560 = 3.47 ACRES. PARKING ISLANDS = 18,446 / 43560 = 0.42 ACRES INTERNAL LANDSCAPE PROPOSED = 4.60 ACRES TOTAL CANOPY TREES = 80 PROPOSED

TOTAL NON CANOPY = 36 PROPOSED. EXISTING 46 TREES TO REMAIN.

5 SHRUBS REQUIRED PER EACH PROPSED TREE = 116 TREES X 5 = 580 SRHUBS REQ. PROPOSED 620 SHRUBS.

PLANT SCHEDULE BUFFER A							
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY	
TREES							
	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	5	
$\overline{(\cdot)}$	QV	Quercus virginiana	Southern Live Oak	YES		3	

BUFFER A:
-CANOPY TREES: 1/50 L.F. = 271 L.F./50 L.F. = 5 CANOPY TREES REQUIRED PROPOSED 3 AND EXISTING 2 TREES OFF-SITE = 5 CANOPY TREES.

-NON-CANOPY OR UNDERSTORY TREE : 1/50 L.F. = 271 L.F. / 50 = 5 NON-CANOPY TREES REQUIRED PROPOSED 5 NON-CANOPY TREES.

PLANT SCHEDULE BUFFER B							
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY	
TREES							
$\bigcirc$	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	6	
$\bigcirc$	QV	Quercus virginiana	Southern Live Oak	YES		3	

BUFFER B:
-CANOPY TREES: 1/50 L.F. = 319 L.F./50 L.F.= 6 CANOPY TREES REQUIRED PROPOSED 3 AND EXISTING 1 TREES OFF-SITE= 4 CANOPY TREES (CAN'T PLANT ON EASEMENT). -NON-CANOPY OR UNDERSTORY TREE : 1/50 L.F. = 319 L.F. / 50 = 6 NON-CANOPY TREES REQUIRED PROPOSED 6 NON-CANOPY TREES.

PLAN	PLANT SCHEDULE BUFFER C							
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY		
TREES	_							
	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	21		
6	JS	Juniperus silicicola	Southern Red Cedar	YES	3" Cal. / 8` Ht.	9		
	QV	Quercus virginiana	Southern Live Oak	YES		5		

BUFFER C:
-CANOPY TREES: 1/50 L.F. = 1,337 L.F./50 L.F.= 27 CANOPY TREES REQUIRED
PROPOSED 14 AND EXISTING 10 TREES OFF-SITE= 24 CANOPY TREES

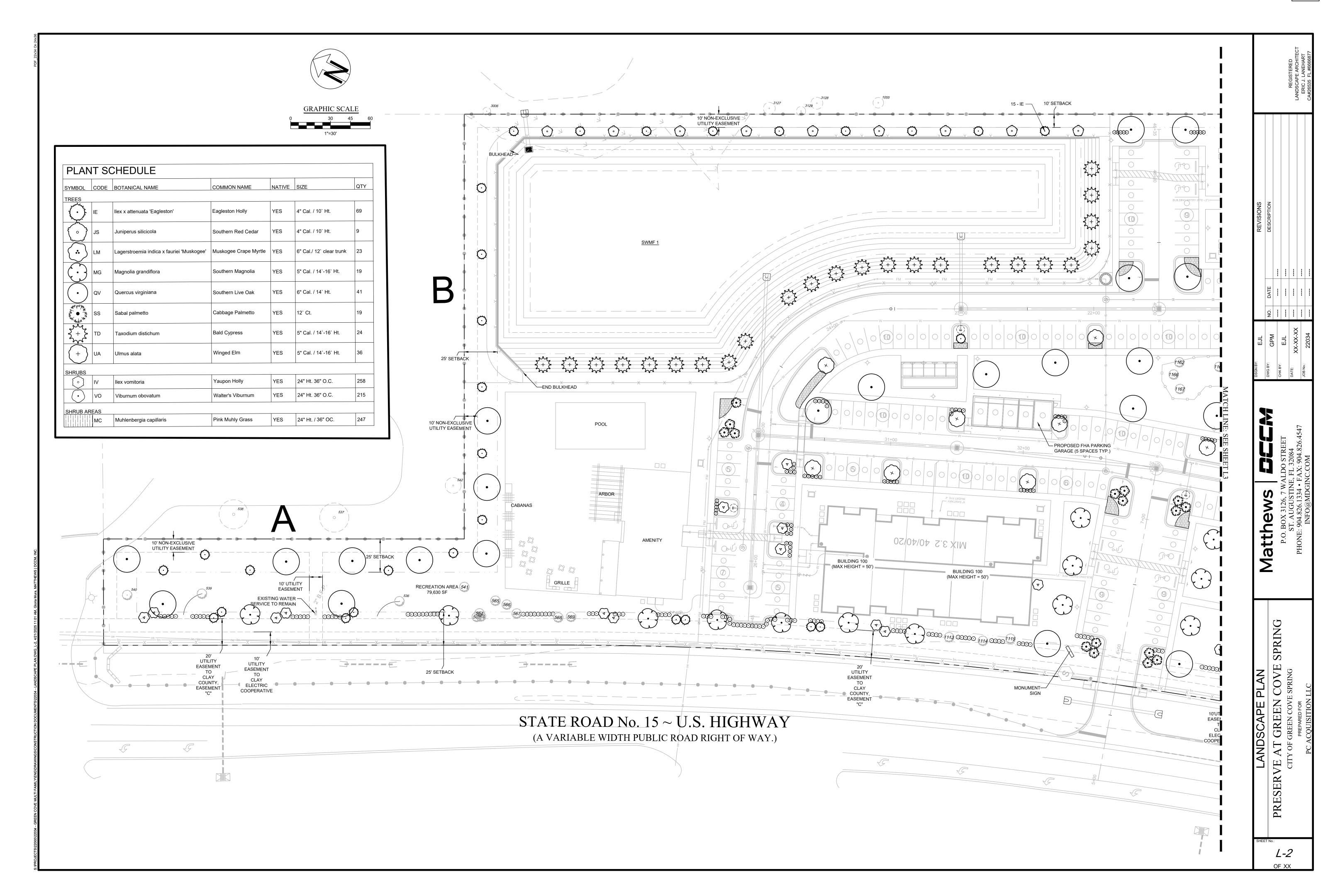
-NON-CANOPY OR UNDERSTORY TREE : 1/50 L.F. = 1,337 L.F. / 50 = 27 NON-CANOPY TREES REQUIRED PROPOSED 21 NON-CANOPY TREES.

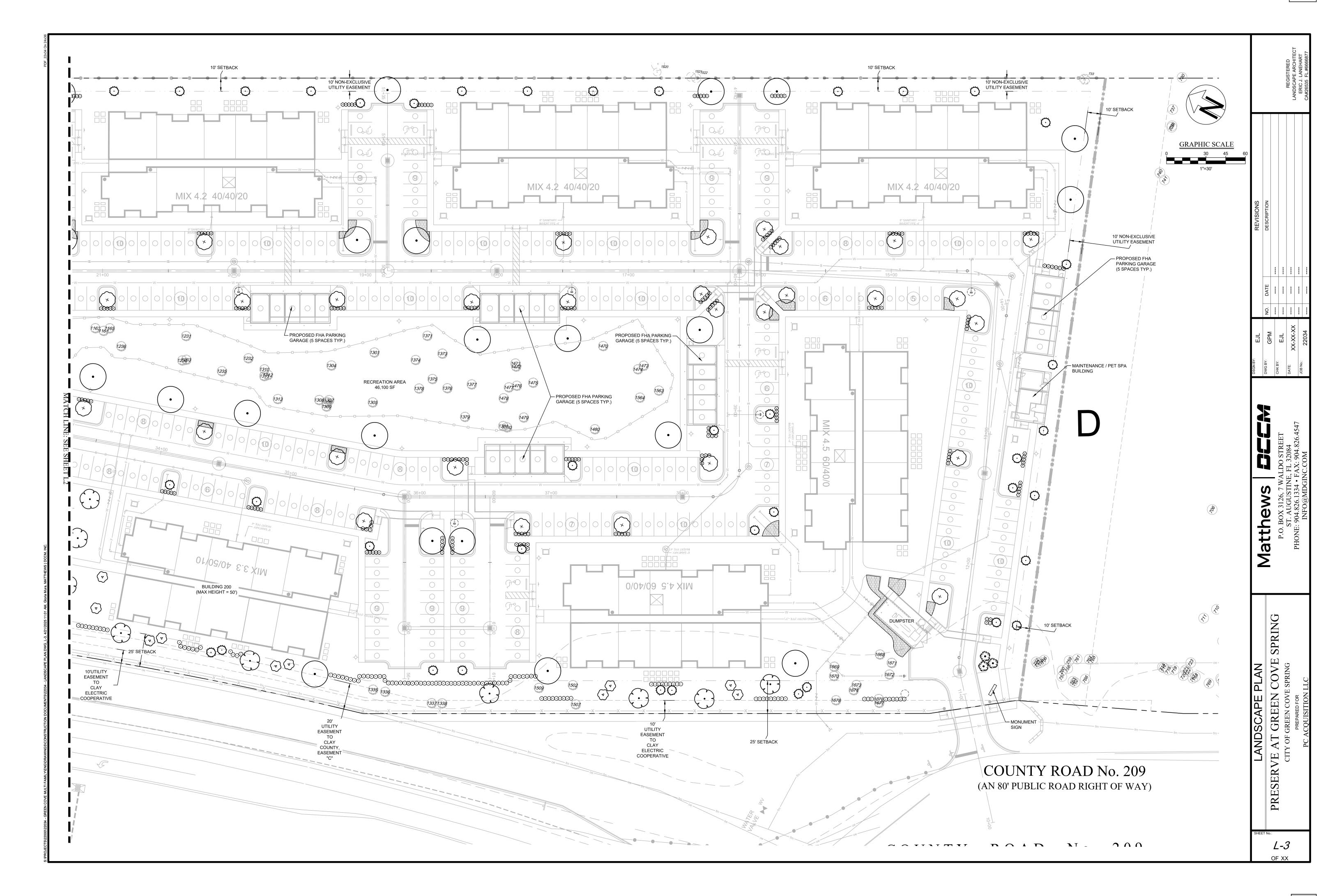
PLANT SCHEDULE BUFFER D							
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	NATIVE	SIZE	QTY	
TREES							
0	IE	llex x attenuata 'Eagleston'	Eagleston Holly	YES	2" Cal. / 10` Ht.	6	
$\bigcirc$	QV	Quercus virginiana	Southern Live Oak	YES		2	

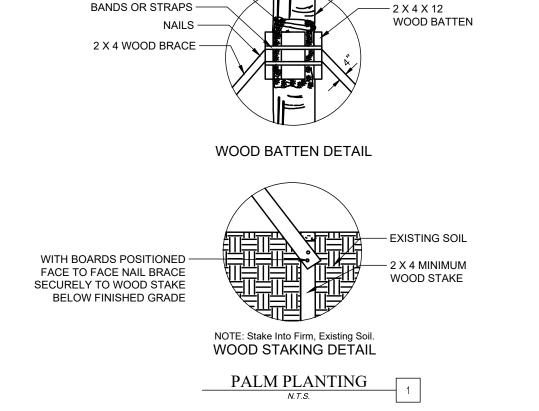
BUFFER D:
-CANOPY TREES: 1/50 L.F. = 477 L.F./50 L.F.= 10 CANOPY TREES REQUIRED

PROPOSED 2 CANOPY TREES
-NON-CANOPY OR UNDERSTORY TREE : 1/50 L.F. = 477 L.F. / 50 = 10 NON-CANOPY TREES REQUIRED PROPOSED 6 NON-CANOPY TREES.

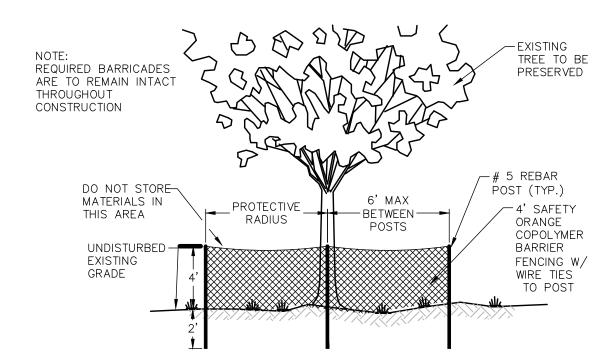
L-1







BURLAP LAYERS (FIVE) -

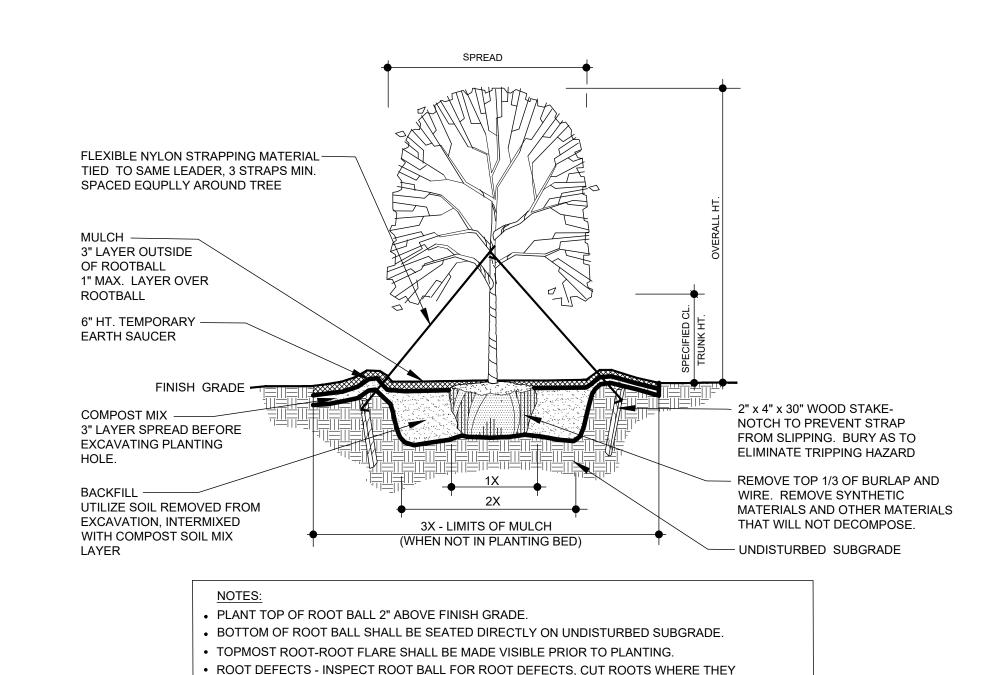


ALL PROTECTED TREES, PRESERVED UNDERSTORY VEGETATION, AND TREES RETAINED FOR TREE CREDIT SHALL BE PROTECTED FROM INJURY DURING ANY LAND CLEARING AND CONSTRUCTION PROCESS IN THE FOLLOWING MANNER.

- 1. THE MINIMUM UNDISTURBED AREA SHALL BE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT. DURING DEVELOPMENT ACTIVITY, ENCROACHMENT INTO THE UNDISTURBED AREA FOR PROPOSED ACTIVITY DESCRIBED IN CC LDC 6-2(5)(E), MAY BE PERMITTED UP TO 25% OF THE RADIUS OR UP TO 50% OF THE RADIUS ON ONE SIDE BUT NOT CLOSER THAN 6 FEET TO THE TRUNK OF THE TREE IN ALL EVENTS.
- 2. A TEMPORARY BARRIER SHALL BE CONSTRUCTED TO PREVENT DISTURBANCE OF THE SOIL EQUAL TO MINIMUM UNDISTURBED AREA. THE BARRIERS SHALL BE IN PLACE PRIOR TO LAND CLEARING AND REMAIN IN PLACE
- 3. THE DEVELOPER SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT, STORAGE OR DISPOSAL OF MATERIALS OR WASTE MATERIALS SUCH AS PAINT, SOLVENTS, ASPHALT, CONCRETE, MORTAR, OR ANY OTHER MATERIAL THAT MAY ENDANGER THE HEALTH OF TREES OR VEGETATION WITHIN THE MINIMUM UNDISTURBED
- 4. THE MINIMUM UNDISTURBED AREA SHALL BE MAINTAINED AT ITS ORIGINAL GRADE WITH NO TRENCHING OR CUTTING OF ANY ROOTS, AND THERE SHALL BE NO STORAGE OF FILL OR COMPACTION OF SOIL. IN NO EVENT SHALL MOTORIZED VEHICLES OR EQUIPMENT BE ALLOWED TO PARK ON OR TRAVERSE THAT AREA WITHIN THE MINIMUM UNDISTURBED AREA OF THE PROTECTED TREES, NOR SHALL ANY DIRT OR OTHER MATERIALS BE
- 5. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS OR PERMITS SHALL BE FASTENED TO A
- 6. ALL CLEARING AND GRUBBING WITHIN PROTECTED TREE AREA WILL BE DONE WITH HAND TOOLS ONLY. 7. ALL ROOT SYSTEMS OUTSIDE THE PROTECTIVE RADIUS WHICH OCCUR IN AREAS OF PROPOSED IMPROVEMENTS

TREE PROTECTION FENCING / MIN UNDISTURBED AREAS 2

SHALL BE PRUNED BY A QUALIFIED TREE SURGEON PRIOR TO EXCAVATION



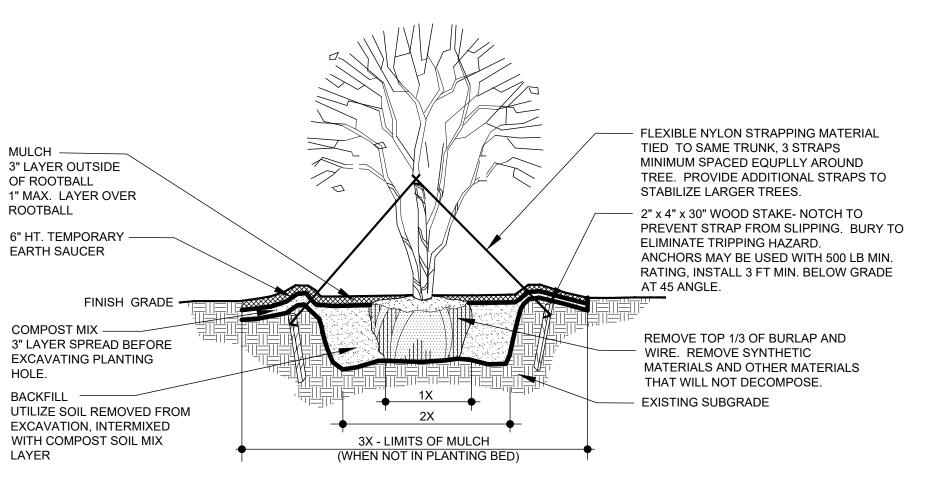
BEGIN TO KINK OR CIRCLE. ROOT BALL SHALL COMPLY WITH FLORIDA GRADES AND STANDARDS.

TREE PLANTING - SINGE TRUNK

N.T.S.

3

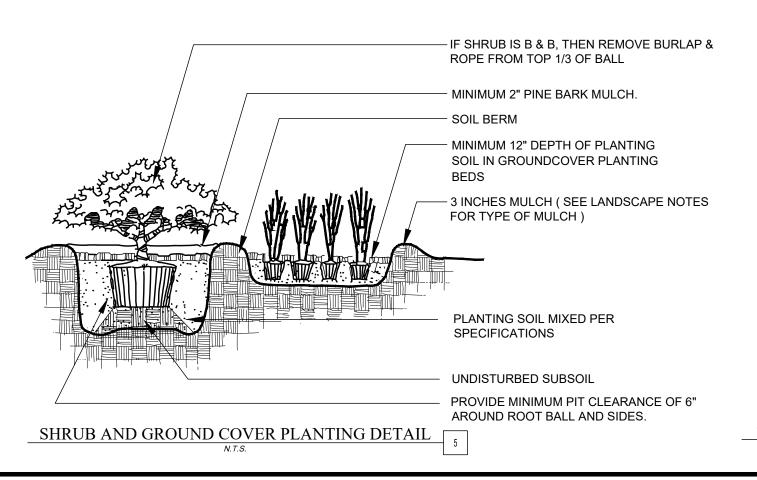
STAKE ABOVE FIRST STRONG BRANCHES TO PROVIDE FIRM SUPPORT.



• PLANT TOP OF ROOT BALL 2" ABOVE FINISH GRADE. • BOTTOM OF ROOT BALL SHALL BE SEATED DIRECTLY ON UNDISTURBED SUBGRADE. TOPMOST ROOT-ROOT FLARE SHALL BE MADE VISIBLE PRIOR TO PLANTING. ROOT DEFECTS - INSPECT ROOT BALL FOR ROOT DEFECTS, CUT ROOTS WHERE THEY BEGIN TO KINK OR CIRCLE. ROOT BALL SHALL COMPLY WITH FLORIDA GRADES AND STANDARDS. • STAKE ABOVE FIRST STRONG BRANCHES TO PROVIDE FIRM SUPPORT. MULTIPLE STEM TREE PLANTING

ATS

4



**EDGE OF PAVEMENT OR CURB**  EDGE OF BEDLINE NOTE: LOCATE PLANTS IN A TRIANGULAR PATTERN AS SHOWN, SPACED EQUIDISTANT FROM EACH OTHER (AT SPACING SPECIFIED IN THE PLANT LIST).

SHR<u>UB/GROUND COVER SPACING PLAN</u> 6

### PLANTING NOTES

- 1. The LANDSCAPE CONTRACTOR is responsible for verifying project site conditions and all quantities indicated on these plans before commencing any work. LANDSCAPE CONTRACTOR shall notify the LANDSCAPE ARCHITECT if soil conditions are poorly drained to determine is substitution of materials is necessary.
- 2. All plant material shall be Florida Grade No. 1 or better nursery grown in accordance to Florida Grades and Standards.
- 3. All plant material shall be container grown or B&B. B&B materials shall be "hardened off" root pruned during field production and shall be dug at least several weeks before.
- Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insects, eggs or larvae and shall have healthy, well developed root systems. They shall be free from physical damage or adverse conditions that would prevent thriving growth.
- 5. Substitution of plant materials will not be permitted unless authorized in writing by the LANDSCAPE ARCHITECT. If proof is submitted that any plant specified in not obtainable, a proposal will be considered for use of the nearest equivalent size or variety with corresponding adjustment of contract
- 6. LANDSCAPE CONTRACTOR shall bear final responsibility for proper surface drainage of planted areas. Any discrepancy in the drawings, obstruction on the site, or prior to work done by any other party, which the CONTRACTOR feels precludes establishing proper drainage shall be brought to the attention of the LANDSCAPE ARCHITECT for correction or relief of said responsibility.
- 7. Planting beds shall be cut or edged to form a uniform clean line between beds and lawn areas.
- 8. After all plant material in a plant bed area has been installed and approved, the areas between plants shall be raked to an even grade to conform to premulching finish grades. All planting beds and plant saucers shall then be uniformly covered with a minimum three (3) inches of #2 grade or better of PINE BARK MINI NUGGETS.
- Before fertilization a soil and/or foliar nutrient analysis shall be performed to determine whether phosphorus fertilizer with 30% slow release nitrogen will be required. All planting bed areas shall be fertilized.
- 10. The LANDSCAPE CONTRACTOR is responsible for all fine grading preparation for planting. APPLY PRE-EMERGENT HERBICIDE to beds prior to planting.
- 11. Rough grades will be established by the owners general contractor at approximately 3 inches below curbs, sidewalks, hardscape amenities, mowing strips and abutments. All materials shall be a minumim 30" from buildings or
- 12. The LANDSCAPE CONTRACTOR is responsible for fully maintaining all plant material on site during and after planting, until the work is accepted by the LANDSCAPE ARCHITECT and/or owner.
- 13. The LANDSCAPE ARCHITECT, owner or owners representative shall have the right to reject any and all work which in his opinion does not meet with the requirements of the specifications at any stage of the project operation.
- 14. There will be special care to all existing trees to be retained on site to avoid construction damage.
- 15. Plant material soil shall be "native" soil that was removed from the planting hole. If soil is badly contaminated, good quality soil shall be used as replacement after contaminated soil has been completely removed from
- 16. Sod shall be laid end to end and side to side in a staggered line to form a uniform layer. All uneven edges shall be squarely trimmed to allow close and firm fitting of each piece.
- 17. Sod all disturbed areas within silt fence. Sod shall be ARGENTINE BAHIAGRASS. Grass for sodding shall be freshly cut in squares one foot wide by two feet long. Sod shall be healthy, free of insects and weeds, in naturally flourishing conditions. Dry, brown and unfresh sod will be rejected. A. Prior to rolling sod spread a 1" layer of debris and weed free sand to sod surface. Roll freshly laid sod using a lightweight turf roller. Provide a true and even surface without any displacement of the sod or deformation. Where sodding on slopes, stagger the setting of the sod pieces to avoid a continuous seam along the line of flow. Tamp the outer pieces of sod to produce a featheredge effect. Peg sod at locations where the sod may slide. Drive pegs through sod blocks into firm earth, at intervals approved by the Engineer. Remove any sod as directed by the Engineer.
- 18. After sodding is completed, the entire areas shall be watered by hand or irrigation system each day for two weeks. After approximately one month of installation, sodded areas shall then be top dressed with a 15-0-15 commercial slow-release fertilizer at a rate of 6.67 pounds per 1,000 square feet of area in an evenly broad-case pattern.
- 19. All plants shall be guaranteed by the LANDSCAPE CONTRACTOR to be healthy plants and in flourishing condition of active growth for ninety (90) days from final inspection and acceptance. All trees shall be guaranteed an additional one year from final inspection and acceptance.

Ø

# Preserve at Green Cove Springs Planned Unit Development

City of Green Cove Springs, Florida

March 8, 2022 Revised April 11, 2022

#### **Team Roster**

#### **Owners:**

J.P. Hall RevocableTrust, Virginia Hall, as Trustee; Virginia Hall Revocable Trust; CHS, LLC; Lyman G. Hall

2321 Egremont Drive Orange Park, Florida 32073

### **Applicant:**

### PC Acquisition, LLC

Walter M. Hall, III, Eric Conkright, John Cattano 3475 Piedmont Road NE, Suite 1125 Atlanta, Georgia 30305 (404) 496-4100

### **Transportation:**

### **Chindalur Traffic Solutions, Inc.**

Rajesh Chindalur 8833 Perimeter Park Boulevard, Suite 103 Jacksonville, Florida 32216 (904) 619-3368

### Legal:

### Rogers Towers, P.A.

Ellen Avery-Smith, Esq. 100 Whetstone Place, Suite 200 St. Augustine, Florida 32086 (904) 825-1615

#### **Exhibit List:**

Exhibit "A" – Legal Description of the Property Exhibit "B" – Conceptual Development Plan

#### A. Development Summary

This application proposes to rezone approximately **14** acres that is a portion of Clay County Parcel No. **38-06-26-016499-007-00** (the "**Property**") from Light Industrial (Clay County) to Planned Unit Development ("**PUD**") in the City of Green Cove Springs. The Property is owned by John Bishop, as Trustee, et al. (the "**Owner**"), and is under contract for purchase by PC Acquisition, LLC (the "**Applicant**"). A legal description of the Property is attached as **Exhibit "A**".

The requested PUD rezoning application is a companion to applications to annex the Property into the City of Green Cove Springs and to change the Future Land Use Map designation from Industrial (Clay County) to Mixed-Use in the City. The PUD is consistent with the proposed City Future Land Use Map ("FLUM") designation set forth in the City of Green Cove Springs Comprehensive Plan.

The Property is located east of U.S. Highway 17, north of County Road 209 South, and west of the current corporate limits of Green Cove Springs. The Clay County Port is located to the east of the site.

The Applicant will provide access roads and drives, utilities, recreational facilities and other infrastructure to serve the PUD.

Unless specified otherwise in this PUD text and the PUD ordinance approving the same, the project will comply with applicable provisions of the City of Green Cove Springs Land Development Code (the "Code").

### **B.** The Property

The Property includes approximately 14 acres. Wetlands will be delineated pursuant to requirements of the St. Johns River Water Management District ("District") and Florida Department of Environmental Protection ("FDEP"), and any proposed wetland impacts will be permitted by the District and Corps. A conceptual development plan for the Property is illustrated on the Conceptual Development Plan attached as <u>Exhibit "B"</u>. The Conceptual Development Plan is subject to modification based on comments from applicable governmental agencies and final site planning and engineering.

### **C.** Residential Development

The Property will include a maximum of 278 multi- family (apartment) residential units (the "**Project**"). There are no wetlands within the Property, so the entire approximately 14 acres is developable.

The Property will include private recreational facilities and recreational areas to serve the proposed residential development. Temporary construction offices and trailers, and essential services including driveways/internal streets, water, sewer, gas, telephone, stormwater management facilities, and other improvements customary in a multi-family residential development will be permitted within of the project.

Minimum required living areas for the multi-family units are:

Studio/Efficiency Apartment: 700 square feet

One bedroom: 750 square feet Two bedroom: 1,100 square feet Three bedroom: 1,200 square feet

#### D. Non-residential Development

There will be no non-residential development within the Property except for uses ancillary to the residential development described in Section C hereof.

### E. Site Development Criteria

- 1. <u>Setbacks:</u> The minimum building setbacks are as follows:
  - a. Property <u>setbacks</u>: A minimum of 25 feet from the right-of-way of U.S. Highway 17 and the northern property boundary and ten (10) feet from the southern and eastern property boundaries.
  - b. <u>Distance between buildings</u>: 30 feet (excluding ancillary structures (i.e., garage enclosures, maintenance buildings, etc.).
- 2. <u>Maximum building height</u>: Building height shall not exceed 50 feet for buildings located adjacent to U.S. Highway 17 and shall not exceed 59 feet for buildings not located adjacent to U.S. Highway 17, as such building locations are depicted on the Conceptual Development Plan.
- 3. <u>Maximum impervious surface ratio</u>: 70 percent for the Property (the entire PUD).
- 4. <u>Maximum lot coverage by buildings</u>: 70 percent for the Property (the entire PUD).
- 5. Density. Maximum 20 units per acre.

6. Parking: Minimum on-site parking spaces for the Project will be provided as follows:

Dwelling Units	Number of Units	Spaces per Unit	Total
Studio	20	1.0	20
1 Bedroom	84	1.0	84
2 Bedrooms	122	2.0	244
3 Bedrooms	34	2.0	68
Garage Enclosures			30
Employees & Guests			11
Total	260		457
Parking Ratio			1.75

Parking spaces will be nine (9) feet wide by 18 feet long, and drive aisles will be 24 feet wide. Parking can be provided in surface lots or enclosed garages.

- 7. <u>Signage</u>. On-site signs shall be permitted within the Property. Project signage shall be identified as part of site plan approval and shall meet the applicable requirements of Code Sections 125-13 and 125-14 except as follows:
  - a. At each of the project entrances along U.S. Highway 17 and County Road 209 South, the Applicant shall be permitted one (1) ground sign, with a maximum of 45 square feet of advertising display area. These signs will not exceed 12 feet in height. The generation location of these signs will be depicted on construction plans. The Project signs may be lighted or illuminated. The Applicant may construct a fence, masonry wall or berm or install landscaping and/or vegetation (or provide a combination thereof) to compliment the entrance feature.
  - b. Construction and/or advertising signs shall be allowed as on-site temporary signs. Such signs must be removed within 30 days after the last unit is sold. The signs may be two (2) sided with each face limited to 16 square feet.
  - c. Various locational, directional, model home and traffic control signs shall be allowed on site to direct traffic and for identification of sales offices, recreation areas, etc. Such signs will be a maximum of six (6) square feet in size.

### G. Infrastructure

- 1. <u>Drainage</u>: A master stormwater management system shall be owned, constructed and maintained by the Property Owner. The stormwater management system will be constructed in accordance with the requirements of the City of Green Cove Springs and the St. Johns River Water Management District, including the construction of pond sides that slope gently into the ponds for safety purposes. The conceptual master stormwater plan for the entire PUD shall be approved prior to the City's approval of the first final plat.
- 2. <u>Site Access</u>: Vehicular access within the Property connects off-site to U.S. Highway 17 and County Road 209 South in the locations depicted on the Conceptual Development Plan.
- 3. <u>Pedestrian Circulation</u>: A six (6)-foot-wide sidewalk will be constructed along U.S. Highway 17 and County Road 209 adjacent to the Property. Internal project pedestrian circulation will be provided via sidewalks, which will be a minimum of five (5) feet in width.
- 4. Parks, Open Space and Recreational Facilities: The Project will provide private parks and recreational facilities, as depicted on the Conceptual Site Plan. Recreational facilities may include an amenity center, swimming pool, playground, walking trials, multi-purpose trials and others to serve the Project residents.
- 5. <u>Solid Waste Collection</u>: Solid waste collection will be provided by a Cityapproved contractor.
- 6. <u>Utilities:</u> All utilities within the Project shall be underground, to the extent feasible. The City will provide water, sewer and electric service to the Project. The Applicant will submit an underground electric layout for the project to the City for approval prior to final Construction Improvement Plan approval. The Applicant shall provide a non-exclusive utility easement in favor of the City and other applicable utility providers around the perimeter of the Property, in the location depicted on the Conceptual Site Plan. The Applicant will work with the owner of the adjacent Masonic Lodge parcel regarding either the relocation of the existing water line and meter located within the Property that serve the Lodge parcel, or the provision of an easement over the existing water line and meter.
- 7. Transportation Systems: All transportation systems will comply with applicable provisions of City Code Chapter 113, Article II, Division 2.

### H. Buffering and Landscaping

- 1. <u>Perimeter Buffer</u>: A natural or landscaped buffer a minimum of ten (10) feet wide shall be located along the perimeters of the Property.
- 2. Landscaping. Tree mitigation and landscaping will comply with applicable provisions of Code Chapter 113, Article VII. A conceptual landscape plan will be provided as part of site plan approval.
- 3. <u>Upland Buffers</u>: An averaged 25-foot natural vegetative upland buffer shall be required and maintained between developed area and contiguous wetlands. The 25 feet shall be measured from the State jurisdictional wetland line.

### I. Temporary Uses

Development of the site and construction of the improvements will require temporary uses such as construction trailers, leasing offices, temporary signage and temporary access. Temporary construction and sales trailers will be removed no later than 45 days following the issuance of a certificate of occupancy for the last building constructed on the Property. The Applicant shall be permitted to erect temporary on-site construction and leasing signage on the Property.

#### J. Accessory Uses

Standard residential accessory uses will be allowed within the residential building areas of the site, including but not limited to decks, swimming pools, patios, air conditioning units, walkways and sidewalks.

Accessory uses such as private garages and storage buildings; home occupations in compliance with applicable provisions of City Code Section 117-789; model homes; guardhouses; air conditioning units and related heating/cooling units; swimming pools and pool equipment; pool pump house; trash compacter; mail kiosk; fences, walls or hedges; gazebos and other open-air structures; boardwalks, docks and other similar uses shall be permitted within the Property. Accessory uses shall comply with the applicable development criteria set forth in Section E of this PUD text.

#### K. Project Phasing

The project will be constructed in one (1), ten (10)-year phase. Construction will be commenced by 2025 and shall be completed within three (3) years. For purposes of this PUD, "commencement" shall mean securing approved construction drawings. "Completion" shall be defined as the installation of horizontal infrastructure and City approval of as-builts.

### L. Ownership Agreement

The Applicant, on behalf of itself and its successors and assigns, hereby agrees and stipulates to proceed with the proposed development in accordance with the PUD ordinance for this application as adopted by the Green Cove Springs City Council. The Applicant also agrees to comply with all conditions and safeguards established by the City of Green Cove Springs with respect to this Planned Unit Development application.

### Exhibit "A"

#### **Legal Description of Property**

A PARCEL OF LAND CONSISTING OF A PORTION OF LOTS 3, 4 AND 5, BLOCK 13, CLINCH ESTATE, ACCORDING TO PLAT BOOK 1, PAGES 31 THROUGH 34 OF THE PUBLIC RECORDS OF CLAY COUNTY FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SAID LOT 3; THENCE ON THE NORTH LINE THEREOF, SOUTH 68°04T4" WEST, A DISTANCE OF 304.53 FEET, TO THE MOST NORTHWESTERLY CORNER OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 718, PAGE 126 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA; RUN THENCE SOUTH 28°13T5" EAST, ALONG THE WESTERLY LINE OF SAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 718, PAGE 126, OF THE PUBLIC RECORDS OF CLAY COUNTY, FLORIDA. A DISTANCE OF 1,104.56 FEET, TO THE POINT OF BEGINNING.

FROM THE POINT OF BEGINNING THUS DESCRIBED, CONTINUE SOUTH 28°13T5" EAST, ALONG THE AFORESAID WESTERLY LINE OF SAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 718, PAGE 126. OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA, A DISTANCE OF 1,337.15 FEET, TO A POINT ON THE NORTHERLY LINE OF THAT NON-EXCLUSIVE EASEMENT TO TECO PEOPLES GAS, (TEMPORARY EASEMENT), AS PER OFFICIAL RECORDS BOOK 3167, PAGE 1557 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA; RUN THENCE, SOUTH 69°38'54" WEST, ALONG THE AFORESAID NORTHERLY LINE OF THAT NON-EXCLUSIVE EASEMENT TO TECO PEOPLES GAS, (TEMPORARY EASEMENT), AS PER OFFICIAL RECORDS BOOK 3167, PAGE 1557 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA, A DISTANCE OF 478.21 FEET, TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF "COUNTY ROAD No. 209", (AN 80 FOOT PUBLIC ROAD RIGHT-OF-WAY, AS PRESENTLY ESTABLISHED); RUN THENCE, ALONG THE AFORESAID EASTERLY RIGHT-OF-WAY LINE OF "COUNTY ROAD No. 209", (AN 80 FOOT PUBLIC ROAD RIGHT-OF-WAY, AS PRESENTLY ESTABLISHED), THE FOLLOWING THREE (3) **COURSES AND DISTANCES:** 

COURSE No. 1: RUN THENCE, NORTH 23°43'25" WEST, A DISTANCE OF 2.21 FEET, TO A POINT OF INTERSECTION IN SAID RIGHT-OF-WAY LINE;

COURSE No. 2: RUN THENCE, NORTH 36°44'27" WEST, A DISTANCE OF 67.07 FEET, TO A POINT;

COURSE No. 3: RUN THENCE, NORTH 28°13'56" WEST, A DISTANCE OF 430.86 FEET, TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF "STATE ROAD No. 15–U.S. HIGHWAY No. 17", (A VARIABLE WIDTH PUBLIC

ROAD RIGHT-OF-WAY, AS PRESENTLY ESTABLISHED; PRESENTLY); RUN THENCE, ON THE EASTERLY RIGHT-OF-WAY LINE OF SAID "STATE ROAD No. 15–U.S. HIGHWAY No. 17", THE FOLLOWING TWO (2) COURSES AND DISTANCES:

COURSE No. 1: RUN THENCE, NORTHWESTERLY, ALONG AND AROUND THE ARC OF A CURVE, BEING CONCAVE WESTERLY, AND HAVING A RADIUS OF 2,988.79 FEET, THROUGH A CENTRAL ANGLE OF 13°36'55" TO THE LEFT, AN ARC DISTANCE OF 710.23 FEET, TO THE POINT OF TANGENCY OF LAST SAID CURVE, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 21°26'31" WEST, 708.56 FEET;

COURSE No. 2:RUN THENCE, NORTH 28°14'52" WEST, ALONG THE TANGENCY OF LAST SAID CURVE, A DISTANCE OF 340.34 FEET, TO A POINT, BEING THE MOST SOUTHWESTERLY CORNER OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 1523, PAGE 773 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA; RUN THENCE, NORTH 61°42'00" EAST, ALONG THE SOUTHERLY LINE OF SAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 1523, PAGE 773 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA, A DISTANCE OF 80.07 FEET, TO A POINT, BEING THE MOST NORTHWESTERLY CORNER OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 1410, PAGE 756 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA; RUN THENCE, ALONG THE WESTERLY, AND THEN SOUTHERLY BOUNDARY LINE OF SAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 1410, PAGE 756 OF THE PUBLIC RECORDS OF SAID CLAY COUNTY, THE FOLLOWING TWO (2) COURSES AND DISTANCES:

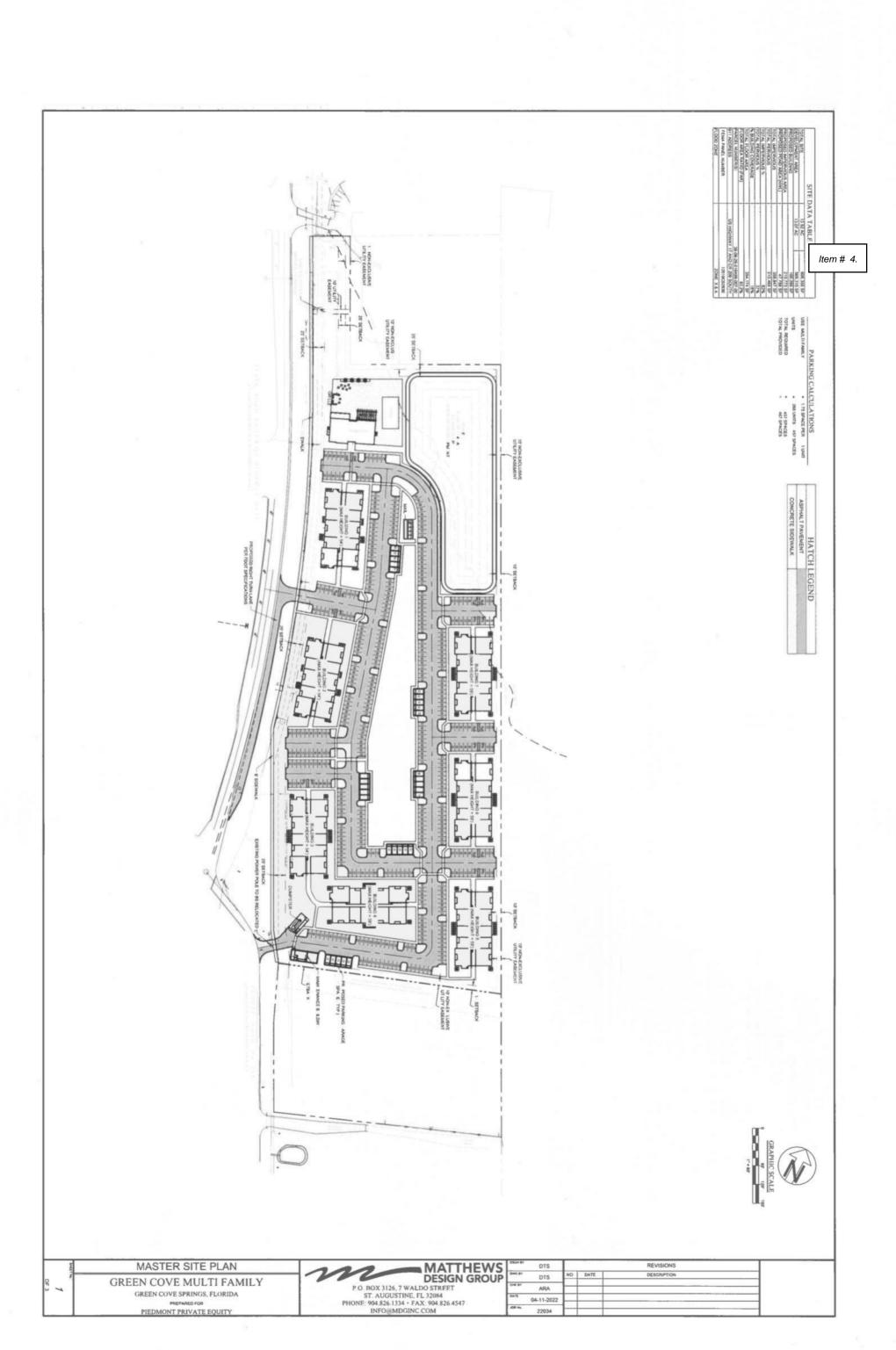
COURSE No. 1: RUN THENCE, SOUTH 28°13T4" EAST, A DISTANCE OF 271.77 FEET, TO A POINT;

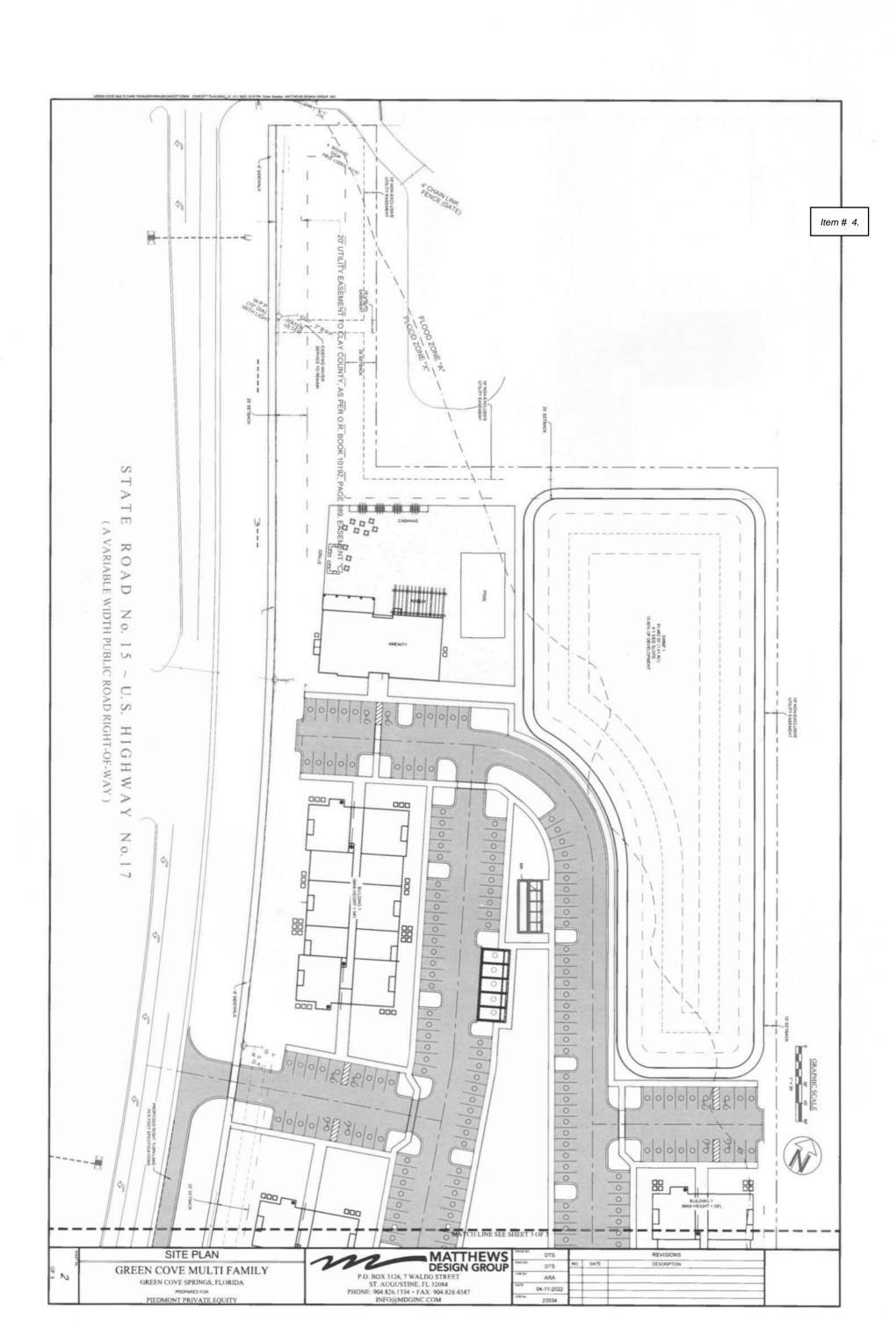
COURSE No. 2: RUN THENCE, NORTH 61°46'45" EAST, A DISTANCE OF 320.01 FEET, TO THE AFORESAID WESTERLY LINE OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 718, PAGE 126 OF THE CURRENT PUBLIC RECORDS OF SAID CLAY COUNTY, FLORIDA, AND THE POINT OF BEGINNING.

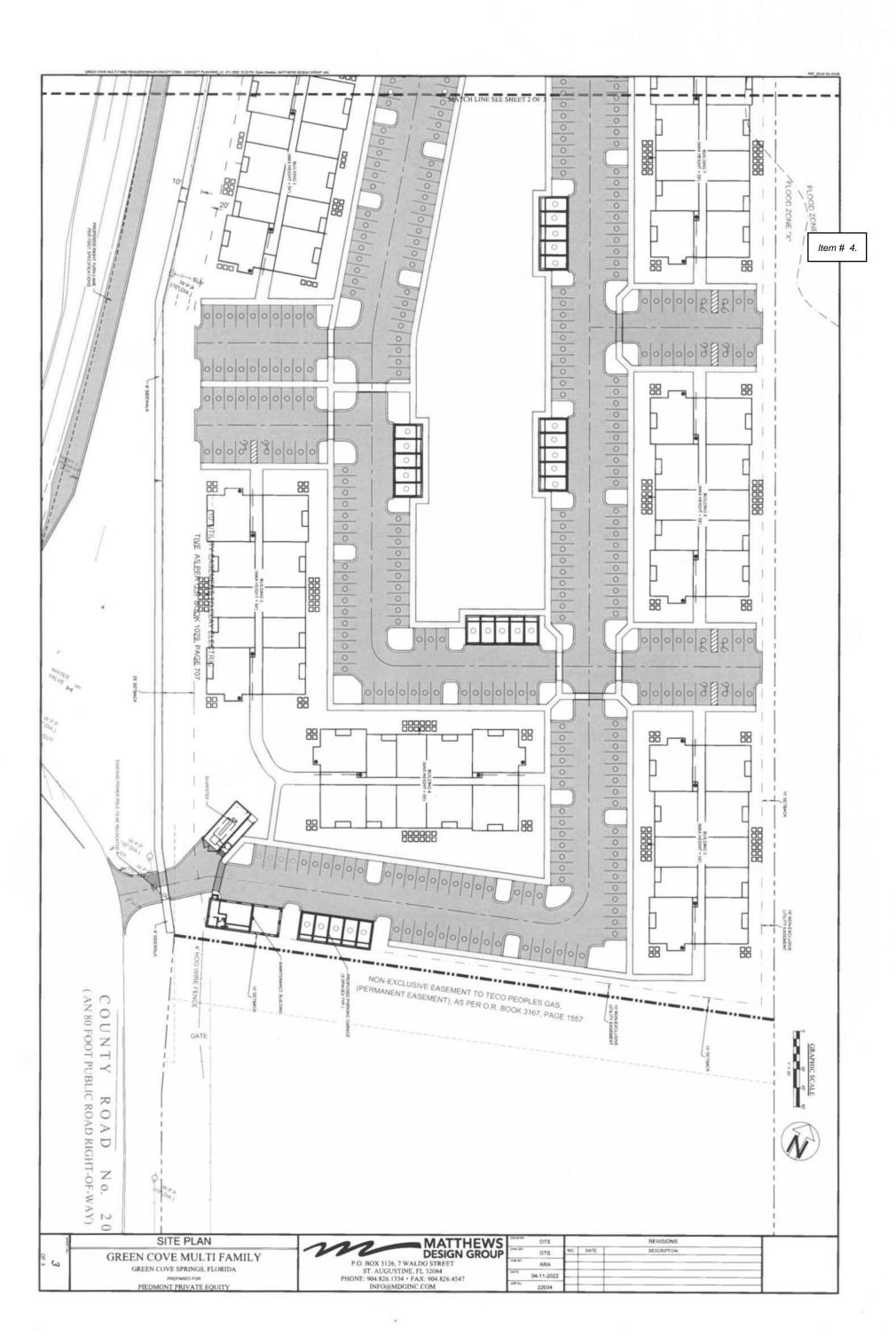
THE LANDS THUS DESCRIBED CONTAINED 606,663 SQUARE FEET, OR 13.92 ACRES, MORE OR LESS, IN AREA.

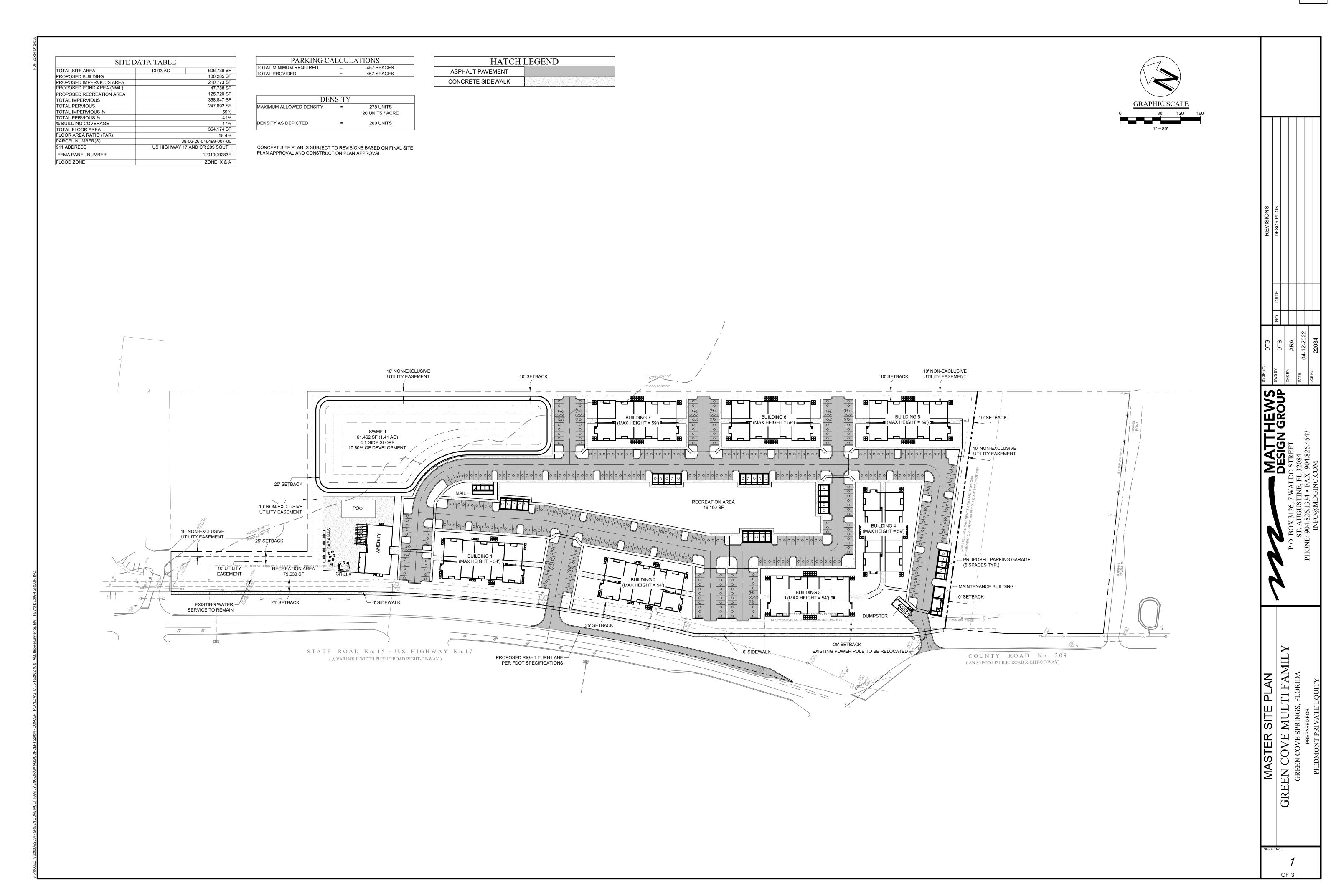
### Exhibit "B"

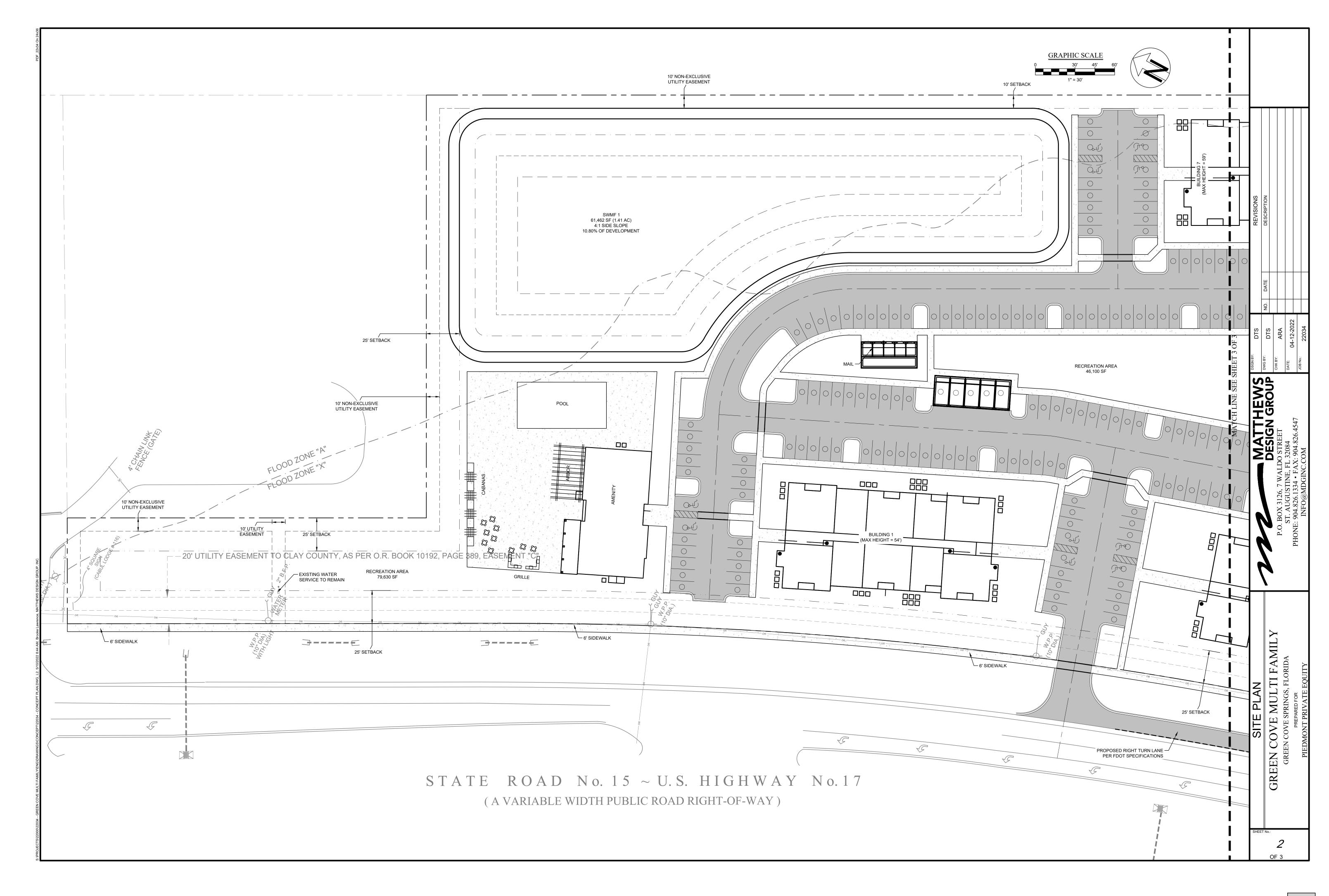
### **Conceptual Development Plan**

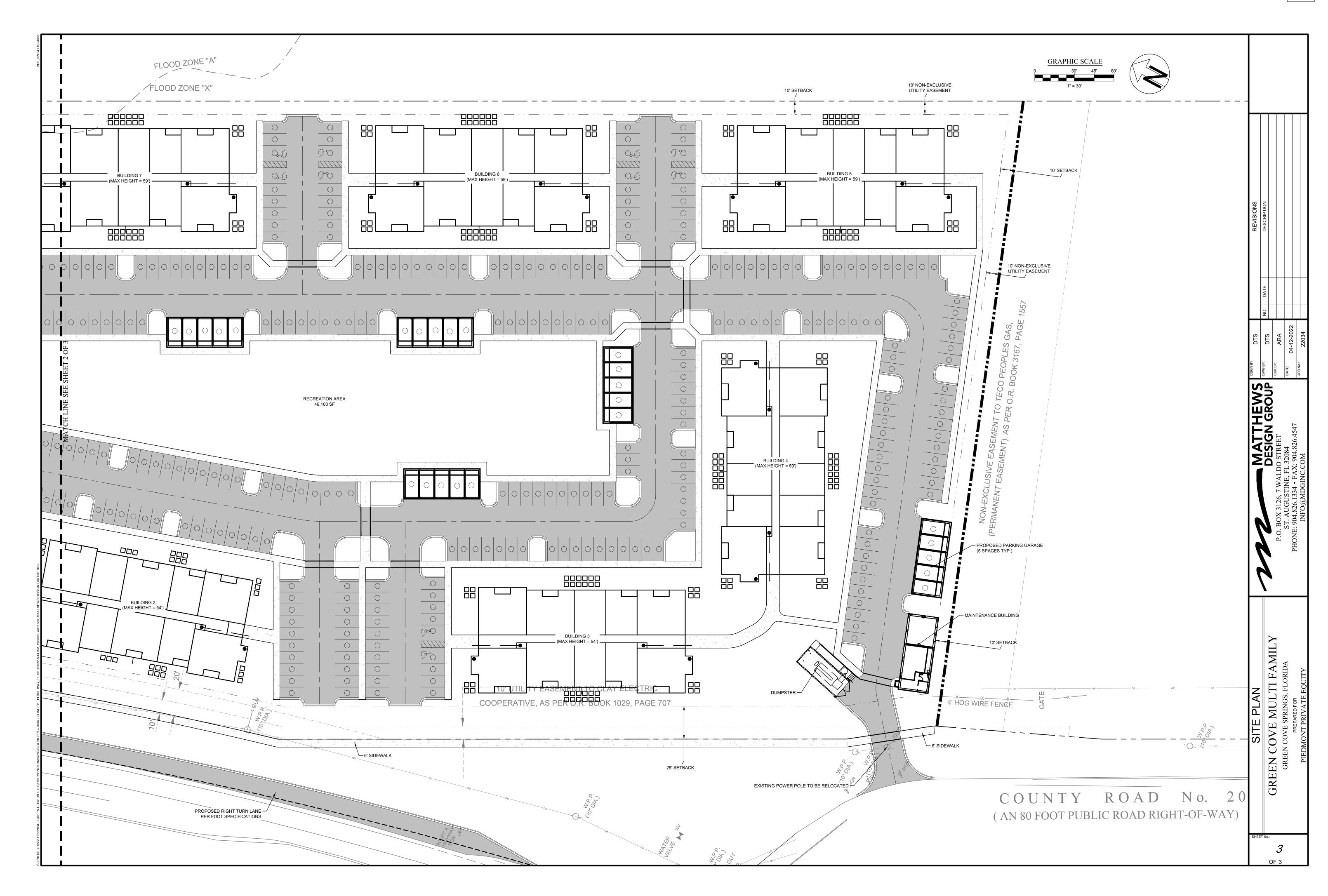










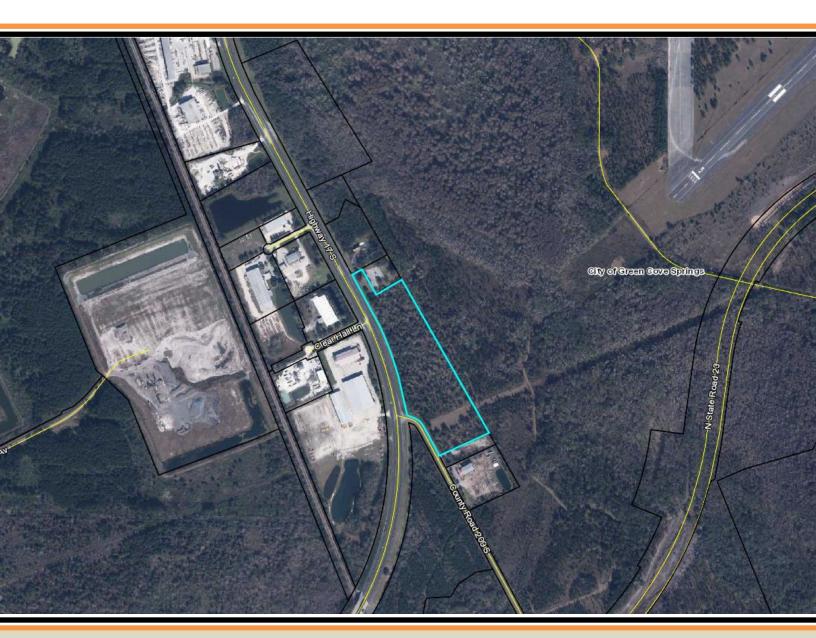


#### Item # 4.

# **Preserve at Green Cove Springs**

City of Green Cove Springs, Florida

# **Traffic Impact Analysis**



**Prepared for:** 

PC Acquisitions, LLC



Prepared by:



Chindalur Traffic Solutions, Inc. 8833 Perimeter Park Boulevard, Suite 103 Jacksonville, FL 32216 904.619.3368

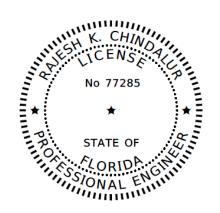
Project No.: 11 Page 115 7 Date: 05/16/2022

#### PROFESSIONAL ENGINEER CERTIFICATE

I, Rajesh Ramn K. Chindalur, PE #77285, certify that I currently hold an active license in the state of Florida and am competent through education or experience to provide engineering services in the civil discipline contained in this plan, print, specification, or report.

PROJECT:	Preserve at Green Cove Springs – Traffic Impact Analysis								
LOCATION:	City of Green Cove Springs, Clay County, Florida								
CLIENT:	PC Acquisitions, LLC								

I further certify that this plan, print, specification, or report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. Moreover, if offered by a corporation, partnership, or through a fictitious name, I certify that the company offering the engineering services, Chindalur Traffic Solutions, Inc., 8833 Perimeter Park Boulevard, Suite 103, Jacksonville, Florida 32216, holds an active certificate of authorization #30806 to provide engineering service.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VIRIFIED ON ANY ELECTRONIC COPIES.

CHINDALUR TRAFFIC SOLUTIONS, INC. 8833 PERIMETER PARK BOULEVARD, SUITE 103 JACKSONVILLE, FL 32216 CERTIFICATE OF AUTHORIZATION #30806 RAJESH RAMN K. CHINDALUR, P.E. NO. 77285

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THIS DOCUMENT IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

Item # 4. **Table of Contents Summary and Conclusions** 1 Introduction 3 3 **Trip Generation** US 17 and CR 209 South Existing Conditions 3 Study Area Segments and Intersections 3 Planned and Programmed Improvements 3 3 Project Traffic Distribution and Assignment **Future Traffic Volumes** 4 Roadway Segment Analysis 4 **Intersection Capacity Analysis and Access Intersections** 4 **Figures** Figure 01 **Location Map** Figure 02 US 17 and CR 209 South Existing Conditions Figure 03 Roadway Segments Project Traffic Distribution and Assignment Figure 04 Year 2022 Peak Hour Traffic Volumes at Study Intersections Figure 05 Year 2027 Background Traffic Volumes Figure 06 Project Traffic Distribution and Assignment at Study Intersections Year 2027 Build-Out Conditions Traffic Volumes Figure 07 **Tables** Table 01 **Trip Generation** Table 02 Study Area Segments and Existing Conditions Project Traffic Distribution and Assignment Table 03 Table 04 **Roadway Segment Analysis** Table 05 **HCM Delay and LOS Summary Attachments** Attachment A Conceptual Site Plan Attachment B Methodology Document Attachment C Planned and Programmed Improvements (Source: FDOT) Attachment D **Travel Demand Model Plots** Historical AADT and Trends Analysis Plots Attachment E Traffic Counts Data and FDOT Season Factors Attachment F

Attachment G

Attachment H

Attachment H1

Attachment H2

Attachment H3

Right Turn Lane Criteria and Guidance

Year 2027 Background Conditions HCM Worksheets

Year 2027 Build-Out Conditions HCM Worksheets

**HCM Worksheets** 

Year 2022 HCM Worksheets

#### **Summary and Conclusions**

A multi-family residential development that is anticipated to include 260 dwelling units is proposed for construction in the City of Green Cove Springs, FL. The proposed development will be located on the northeast quadrant of US 17 and CR 209. Access to the proposed development will be provided via a right-in-right-out driveway on US 17 and a second driveway on CR 209. Please note that the zoning allows for a maximum of 278 dwelling units. However, based on the current site plan a maximum of 260 dwelling is proposed for construction.

US 17 is a four-lane divided highway with a posted speed of 60 miles per hour (mph) and CR 209 South is a two-lane undivided roadway with a posted speed of 55 mph.

The proposed residential development is anticipated to generate 1,742 Daily trips which includes 103 AM peak and 132 PM peak trips.

The study area will include all the roadway segments and intersections where in the project traffic is anticipated to be equal to or greater than five percent (5%) of the roadway segment adopted LOS maximum service volume (MSV).

Project traffic distribution percentages on the study roadway segments using the interim year 2025 NERPM ABv3 travel demand model run.

The proposed development is anticipated to be constructed and occupied by the end of year 2025. However, the traffic impact analysis will be performed under the year 2027 conditions. The future traffic volumes on the study roadway segments were estimated by applying a growth rate to the year 2019 and 2022 traffic volumes. The growth rate was estimated by performing trends analysis of the study roadway segments historical AADT.

The roadway segment will be considered impacted if the project traffic assignment (new trips) is equal to or greater than 5% of its adopted LOS maximum service volume (MSV). A study area roadway segment will be considered adversely impacted if that roadway segment is impacted (project new trips 5% of its adopted LOS MSV) and the total traffic (Existing trips + Reserved Trips + New Project Traffic) exceed 100% of the roadway segments adopted LOS MSV.

None of the study roadway segments are anticipated to be either impacted or adversely impacted under the build-out conditions of the proposed development. Additionally, all the study roadway segments are anticipated to continue operating at LOS D or better under the year 2027 background and project build-out conditions, except for the segment of US 17 between the City of Green Cove Springs City Limits to SR 16 West/Ferris Street. The segment of US 17 between the City of Green Cove Springs City Limits to SR 16 West/Ferris Street is anticipated to operate at LOS F under the year 2027 background and build-out conditions of the proposed development.

Please note that the proposed First Coast Expressway and other proposed roadway improvements (Clay County Programmed Bonded Roadway Improvements) are anticipated to reduce traffic volumes on US 17 roadway segments within the City of Green Cove Springs.

Based on the discussions with FDOT staff, the project access on US 17 will be a right-inright-out just north of CR 209 intersection and a full access roadway connection on CR 209 South just east of US 17. The above-mentioned access locations are shown in previously mentioned

- The need for a northbound right turn lane on US 17 at the proposed project access driveway
- Adequacy of the existing southbound left turn lane on US 17 at CR 209 South intersection

site plan. FDOT staff require the access evaluation to determine the following:

A northbound right turn lane is anticipated to be warranted on US 17 at the proposed Project Access Driveway. As per the guidance included in Chapter 212 of the FDOT Design Manual and the FDOT Median Handbook, for a roadway with a posted speed of 60 mph (design speed of 65 mph), a right turn lane should include 460 feet deceleration and taper distance.

All the critical movements are currently operating at LOS D or better and are anticipated to continue operating at LOS D or better under the future year 2027 background and year 2027 buildout conditions of the proposed development.

The existing southbound left turn on US 17 at CR 209 South is approximately 430 feet long (250 feet full width turn lane + 180 feet taper distance). The 95<sup>th</sup> percentile queue length on the southbound left turn is anticipated to be no greater than 50 feet. Hence, the existing southbound left turn lane on US 17 at CR 209 South is anticipated to be adequate under the build-out conditions of the proposed development.

#### Introduction

A multi-family residential development that is anticipated to include 260 units is proposed for construction in the City of Green Cove Springs, FL. The proposed development will be located on the northeast quadrant of US 17 and CR 209. Access to the proposed development will be provided via a right-in-right-out driveway on US 17 and a second driveway on CR 209. A copy of the site plan provided by Matthews Design Group, Inc. is included as Attachment A. Please note that the zoning allows for a maximum of 278 dwelling units. However, based on the current site plan a maximum of 260 dwelling is proposed for construction.

The methodology used in this study is consistent with the methodology document provided to the City of Green Cove Springs on 05/10/2022. A copy of the methodology provided to the staff is included as Attachment B.

#### **Trip Generation**

Trip generation and for the proposed residential portion of the development will be estimated using the rates and equations included in the Trip Generation Manual, 11th Edition published by the ITE. Attached Table 01 summarizes the Daily, AM and PM peak trips anticipated by the proposed development. As shown in this table, the proposed residential development is anticipated to generate 1,742 Daily trips which includes 103 AM peak and 132 PM peak trips.

#### **US 17 and CR 209 South Existing Conditions**

US 17 is a four-lane divided highway with a posted speed of 60 miles per hour (mph) and CR 209 South is a two-lane undivided roadway with a posted speed of 55 mph. Figure 02 shows the existing conditions on US 17 and CR 209 at the proposed project access locations.

#### **Study Roadway Segments and Intersections**

Since the proposed development is anticipated to generate a total of 132 PM peak trips, the study area will include all the roadway segments and intersections where in the project traffic is anticipated to be equal to or greater than five percent (5%) of the roadway segment adopted LOS maximum service volume (MSV). Table 02 shows the existing conditions of the roadway segments within the vicinity of the proposed development. The existing conditions data for the study roadway segments were obtained from the FDOT traffic counts and Clay County Transportation Analysis Spreadsheet. As shown in this table, all the study roadway segments are currently operating at LOS D or better.

#### **Planned and Programmed Roadways:**

The County Capital Improvement Plan (CIP), FDOT Planned and Programmed Improvements and NFTPO LRTP will be reviewed to determine any planned and programmed roadways within study roadway segments. Attachment C includes a list of planned and programmed roadways within Clay County in addition to the First Coast Expressway between existing SR 23/Old Jennings Road to US 17.

#### **Project Traffic Distribution & Assignment:**

Project traffic distribution percentages on the study roadway segments using the interim year 2025 NERPM ABv3 travel demand model run. Attachment D includes copies of the travel

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demand model plots. Table 03 summarizes the project traffic distribution and assignment on the roadway segments in the vicinity of the proposed development. Figure 03 shows project traffic distribution and assignment on the study roadway segments.

#### **Future Traffic Volumes:**

The proposed development is anticipated to be constructed and occupied by the end of year 2025. However, the traffic impact analysis will be performed under the year 2027 conditions. The future traffic volumes on the study roadway segments were estimated by applying a growth rate to the year 2019 and 2022 traffic volumes. The growth rate was estimated by performing trends analysis of the study roadway segments historical AADT. The historical AADT of the study roadway segments was obtained from the FDOT Traffic Counts Online Portal. Attachment E includes copies of the historical AADT, and the trends analysis of the study roadway segments.

#### **Roadway Segment Analysis:**

The segment analysis of the study area roadway segments will be performed to determine any impacts and adverse impacts due to the additional trips from the proposed development. The roadway segment will be considered impacted if the project traffic assignment (new trips) is equal to or greater than 5% of its adopted LOS maximum service volume (MSV). A study area roadway segment will be considered adversely impacted if that roadway segment is impacted (project new trips 5% of its adopted LOS MSV) and the total traffic (Existing trips + Reserved Trips + New Project Traffic) exceed 100% of the roadway segments adopted LOS MSV.

**Table 04** summarizes the roadway segments analysis of the study roadway segments. As shown in this table, none of the study roadway segments are anticipated to be either impacted or adversely impacted under the build-out conditions of the proposed development. Additionally, all the study roadway segments are anticipated to continue operating at LOS D or better under the year 2027 background and project build-out conditions, except for the segment of US 17 between the City of Green Cove Springs City Limits to SR 16 West/Ferris Street. The segment of US 17 between the City of Green Cove Springs City Limits to SR 16 West/Ferris Street is anticipated to operate at LOS F under the year 2027 background and build-out conditions of the proposed development.

Please note that the proposed First Coast Expressway and other proposed roadway improvements (Clay County Programmed Bonded Roadway Improvements) are anticipated to reduce traffic volumes on US 17 roadway segments within the City of Green Cove Springs.

#### **Intersection Capacity Analysis and Access Intersections:**

Based on the discussions with FDOT staff, the project access on US 17 will be a right-in-right-out just north of CR 209 intersection and a full access roadway connection on CR 209 South just east of US 17. The above-mentioned access locations are shown in previously mentioned site plan. FDOT staff require the access evaluation to determine the following:

- The need for a northbound right turn lane on US 17 at the proposed project access driveway
- Adequacy of the existing southbound left turn lane on US 17 at CR 209 South intersection

Page 05

Since the project traffic is not anticipated to be equal or greater than the study roadway segments' adopted LOS maximum service volume (MSV), intersection analysis other than the above stated intersections is not anticipated to be required.

Existing Traffic Volumes: AM peak and PM peak hour traffic volumes at the above stated study intersections were obtained on April 26<sup>th</sup>, 2022. These counts were further adjusted with a season factor of 1.19 to account for seasonal variations. This season factor was obtained from the Florida Department of Transportation (FDOT) traffic counts online portal. Attachment F includes copies of the traffic counts data and the FDOT season factors. Figure 04 shows the year 2022 peak hour traffic volumes at the above stated study intersections.

Year 2027 Background Traffic Volumes: The year 2027 background traffic volumes at the above stated study intersections were estimated by applying a growth factor of 1.30 to the year 2022 traffic volumes. This growth factor was estimated by performing trends analysis of the historical AADT on US 17 north of CR 209 South (included in previously stated Attachment E). The year 2027 background conditions peak hour traffic volumes at the study intersections are shown in Figure 05.

Project Traffic Distribution and Assignment: Project traffic assignment at the above stated study intersections were established by applying the project traffic distribution obtained from the travel demand model run to the peak hour net external trips shown in previously stated Table 01. Figure 06 shows the AM peak and PM peak project traffic assignment at the above stated study intersections.

Year 2027 Build-out Traffic Volumes: The year 2027 build-out traffic volumes include the year 2027 background traffic volumes and the peak hour project related traffic assignment at the study intersections. Figure 07 includes the year 2027 build-out conditions AM peak and PM peak hour traffic volumes at the study intersections.

Right Turn Lane Evaluation: The need for a northbound right turn lane on US 17 at the proposed project access roadway was evaluated using the right turn lane criteria included in the in the FDOT Access Management Guidebook (Attachment G). As shown in previously stated Figure 07, about 30 northbound right turns are anticipated on US 17 which is very close to the right turn lane threshold of 35 peak hour turns. Hence, a northbound right turn lane is anticipated to be warranted on US 17 at the proposed Project Access Driveway. As per the guidance included in Chapter 212 of the FDOT Design Manual and the FDOT Median Handbook, for a roadway with a posted speed of 60 mph (design speed of 65 mph), a right turn lane should include 460 feet deceleration and taper distance.

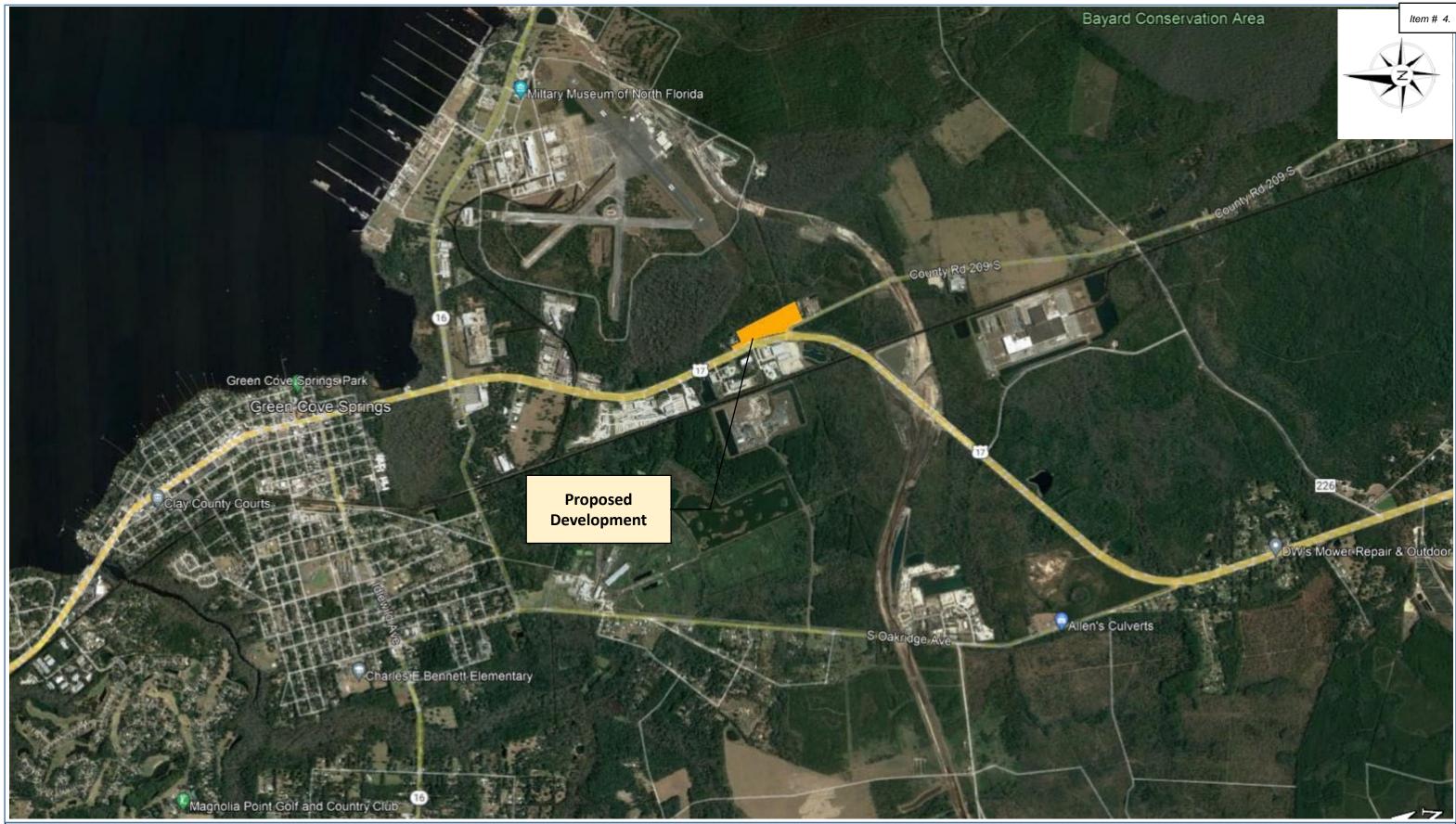
Intersection Capacity Analysis: Intersection capacity analysis of the study intersections under the year 2022 existing conditions, year 2027 background and year 2027 build-out conditions was performed using the Synchro 11 software. This software uses the HCM 6 criteria and methodology to determine the LOS and delay at un-signalized intersections. Table 05 summarizes the delay and LOS for all the critical movements at the study intersections. As shown in this table, all the critical movements are currently operating at LOS D or better and are anticipated to continue operating at

Page 06

Item # 4.

LOS D or better under the future year 2027 background and year 2027 build-out conditions of the proposed development. Attachment H includes copies of the HCM Worksheets.

This table also summarizes the 95<sup>th</sup> percentile queue length on the southbound left turn at the US 17 and CR 209 South intersection under the existing, year 2027 background and year 2027 build-out conditions. The existing southbound left turn on US 17 at CR 209 South is approximately 430 feet long (250 feet full width turn lane + 180 feet taper distance). As shown in this table, the 95<sup>th</sup> percentile queue length on the southbound left turn is anticipated to be no greater than 50 feet. Hence, the existing southbound left turn lane on US 17 at CR 209 South is anticipated to be adequate under the build-out conditions of the proposed development.

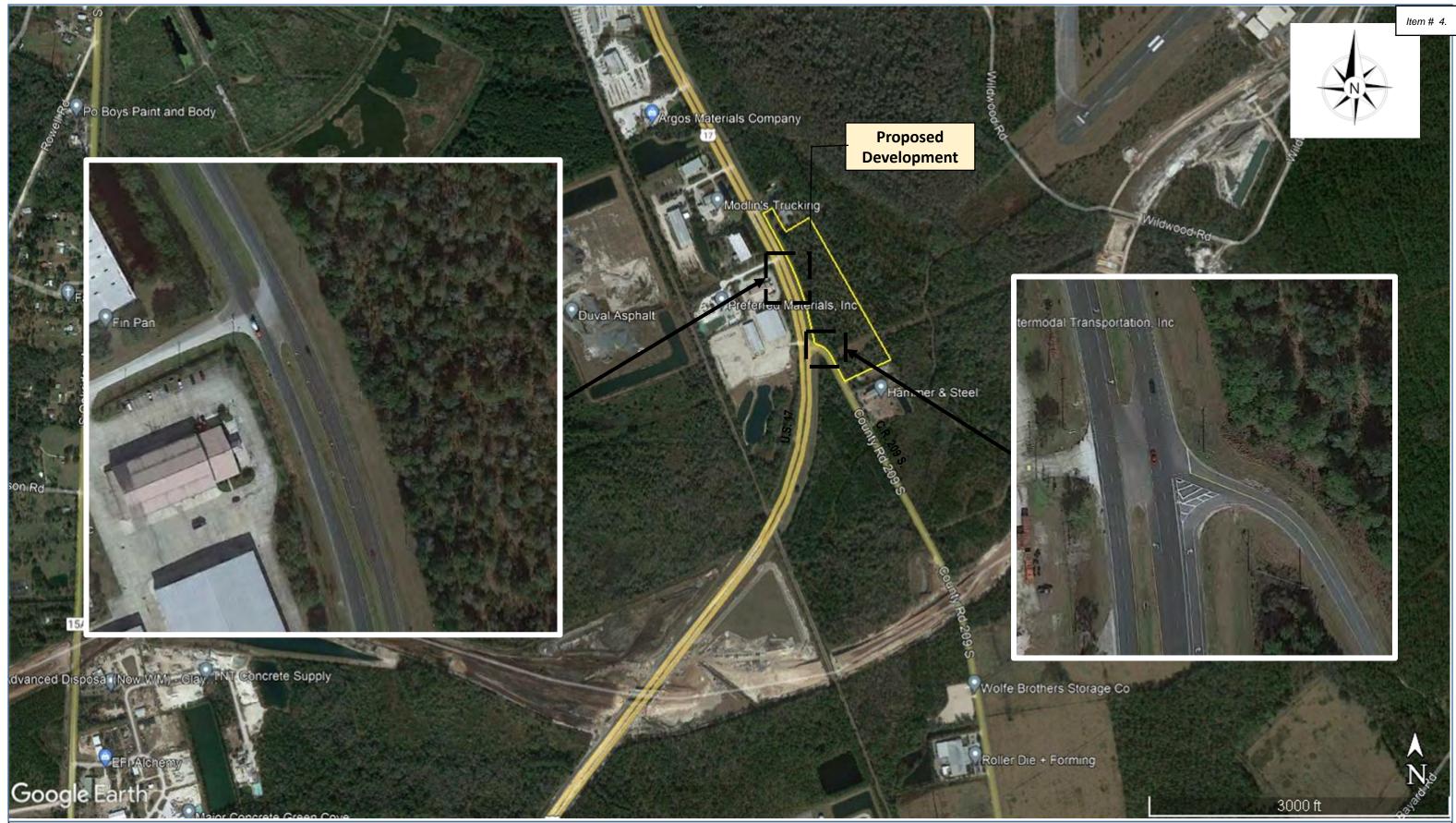




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Figure 01 – Location Map

Preserve at Green Cove Springs – Traffic Impact Study
City of Green Cove Springs, Clay County, Florida

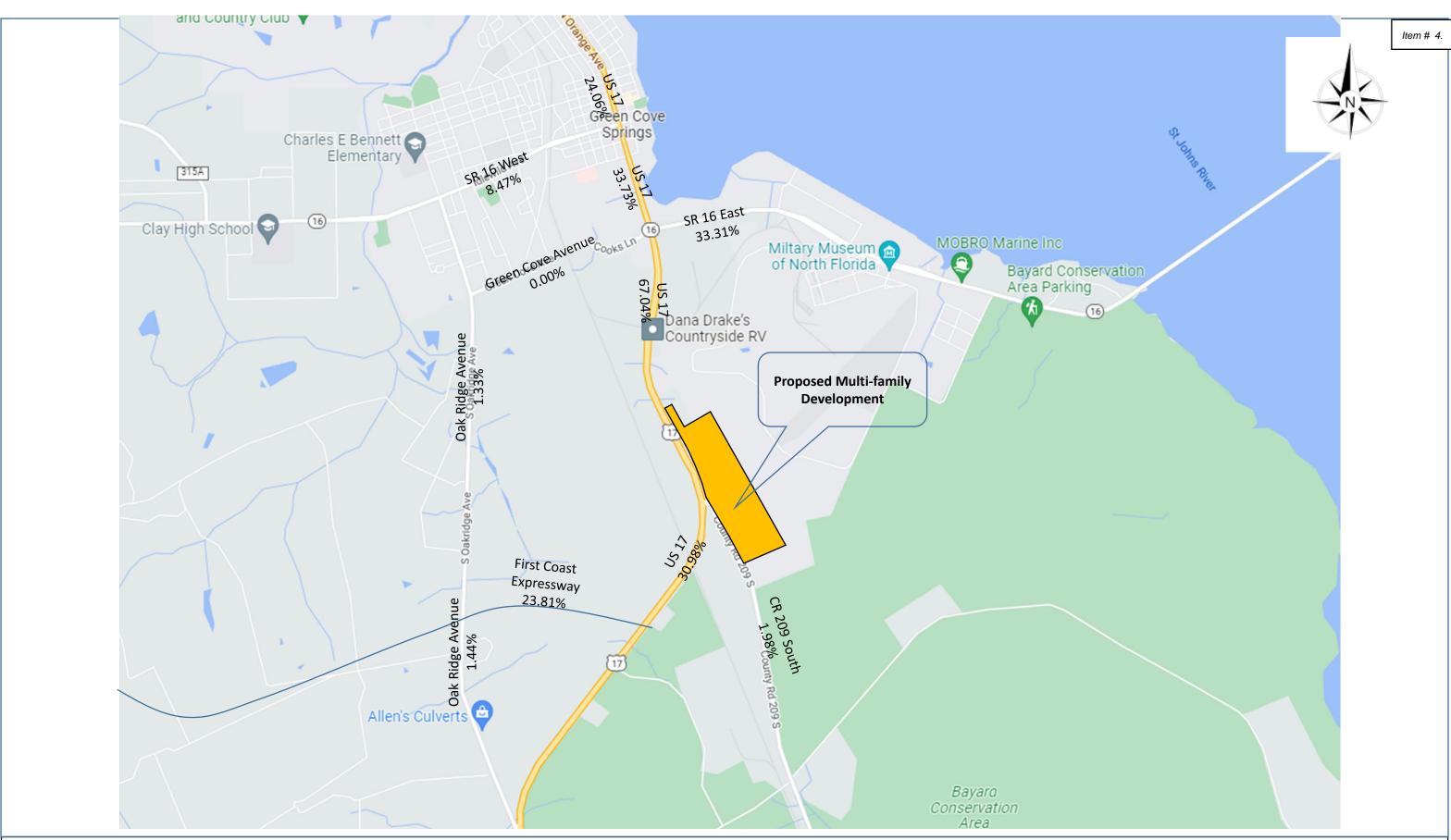




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Figure 02 – Existing Conditions

Preserve at Green Cove Springs – Traffic Impact Study
City of Green Cove Springs, Clay County, Florida

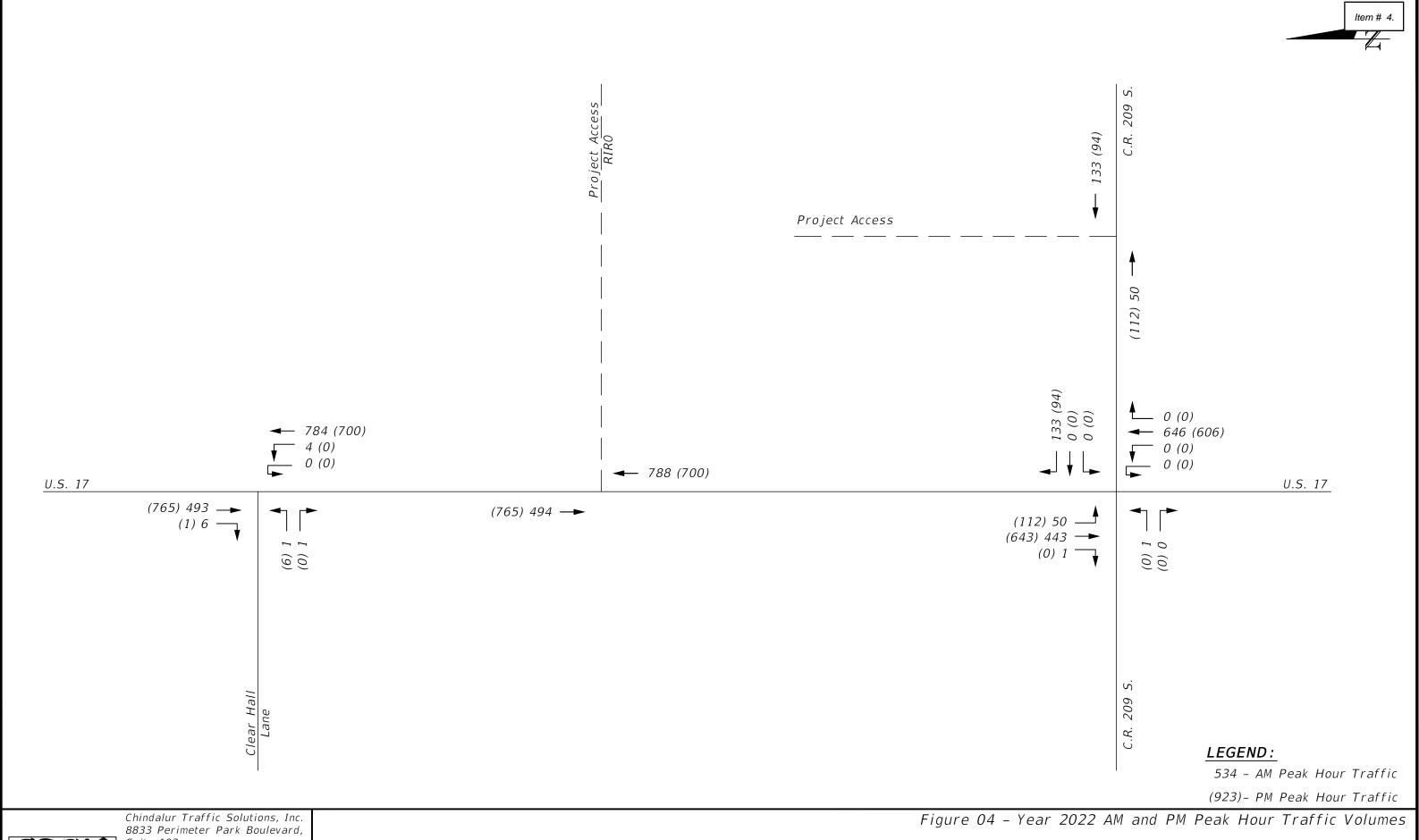




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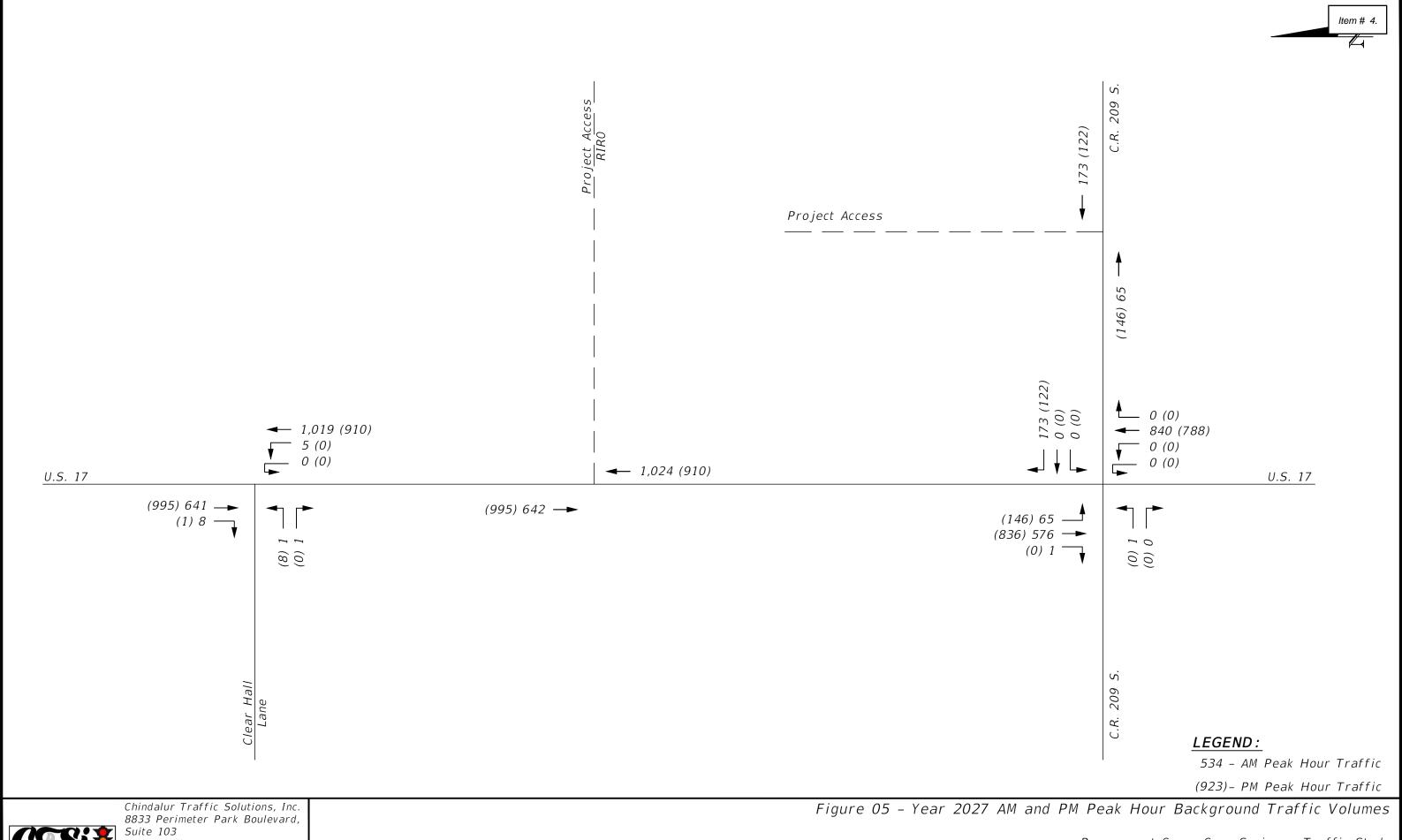
Figure 03 – Project Traffic Distribution and Assignment

Preserve at Green Cove Springs – Traffic Impact Study City of Green Cove Springs, Clay County, Florida

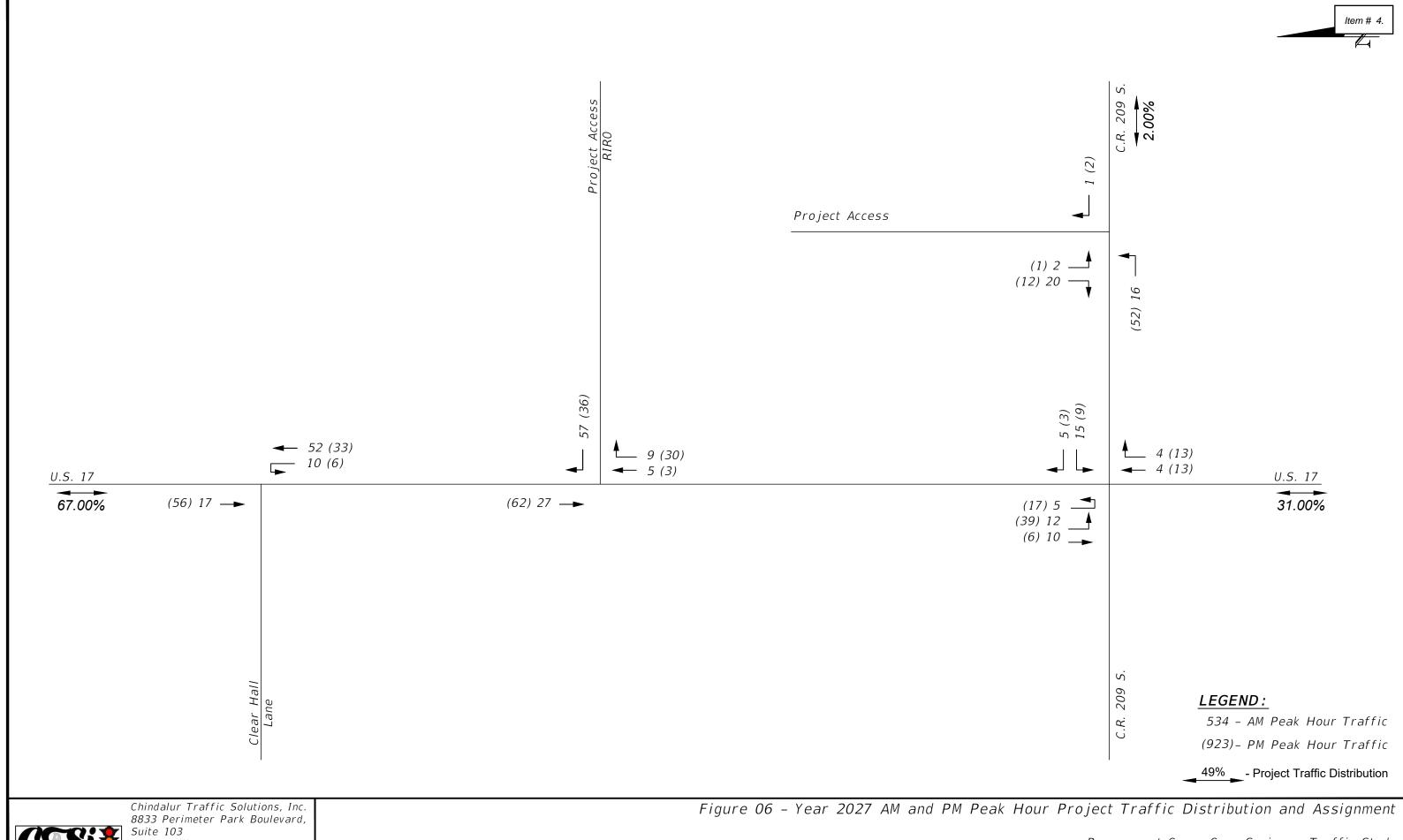


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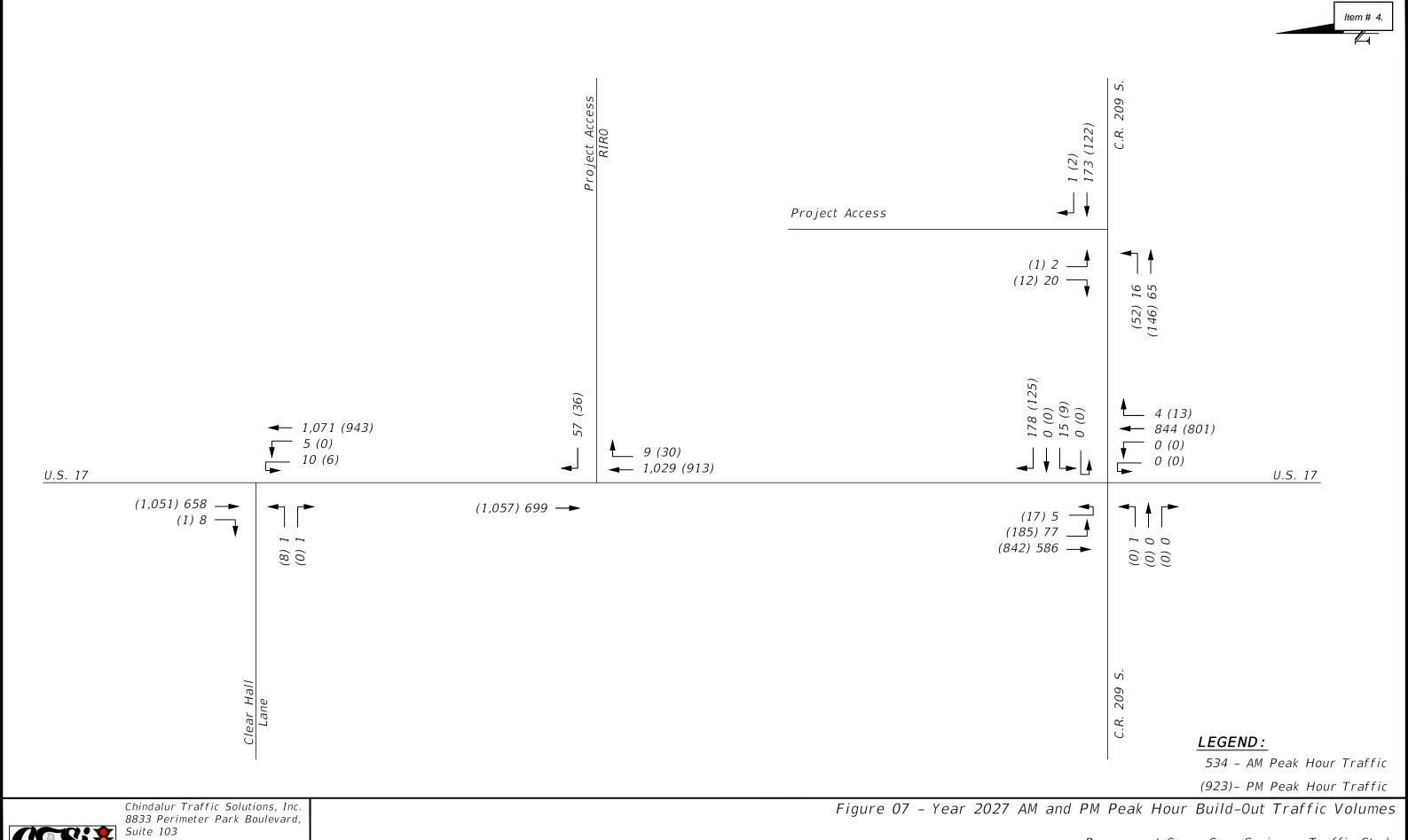
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Preserve at Green Cove Springs - Traffic Study
Clay Count

Table 01 **Trip Generation** Preserve at Green Cove Springs TIA, The City of Green Cove Springs, FL

ITE Land				Time	Rate or	Percent	Traffic	Р	roject Trips	
Use Code	Description	Quantity	Units	Period	Period Equation Er		Exiting	Total	Entering	Exiting
220	Multi-family Residential	260	Dwelling	Daily	T = 6.41(X) + 75.31	50%	50%	1,742	871	871
	(Apartments)		Units	AM Peak	T = 0.31(X) + 22.85	24%	76%	103	25	78
				PM Peak	T = 0.43(X) + 20.55	63%	37%	132	83	49

Source: Trip Generation Manual, 11th Edition, ITE

Note: Please note that the zoning allows for a maximum of 278 dwelling units.

However, based on the current site plan a maximum of 260 dwelling is proposed for construction.

Chindalur Traffic Solutions, Inc.

Table 02
Roadway Characteristics Inventory
Preserve at Green Cove Springs TIA, The City of Green Cove Springs, FL

					Adopted LOS Peak							Year 2019 Peak Hour		Year 2022 Peak Hour	Existing Conditions	Existing
			Speed	Adopted	Hour	Length		Facility	Area		2019 ADT	Traffic	Growth	Traffic	V/C	Conditions
Roadway	Segment	Agency	Limit	LOS	MSV	(Miles)	Lanes	Туре	Туре	Source	Collected	Volumes	Rate	Volumes	Ratio	LOS
US 17	Green Cove Springs to SR 16 West	FDOT	35	D	2,920	1.26	4 - DIV	Prin. Arterial	Urban	FDOT	24,000	2,160	4.07%	2,435	83.39%	D
US 17	SR 16 West to SR 16 East	FDOT	55	D	3,580	0.63	4 - DIV	Prin. Arterial	Urban	FDOT	21,500	1,935	3.93%	2,172	60.67%	D
US 17	SR 16 East to CR 209	FDOT	55	D	3,580	1.61	4 - DIV	Prin. Arterial	Transition	FDOT	14,100	1,269	5.37%	1,485	41.48%	С
US 17	CR 209 to CR 226	FDOT	55	D	3,580	3.18	4 - DIV	Prin. Arterial	Transition	FDOT	10,900	981	1.14%	1,015	28.35%	С
US 17	CR 226 to Putnam County Line	FDOT	60	В	4,460	10.20	4 - DIV	Highway	Rural	FDOT	12,803	1,152	6.01%	1,372	30.76%	С
SR 16	Oak Ridge Avenue to US 17	FDOT	35	D	2,774	1.12	4-Un Div	Major Arterial	Urban	FDOT	11,500	1,035	4.13%	1,169	42.14%	С
SR 16	US 17 to Slow Tide Road	FDOT	45	E	3,070	1.26	4 - Div	Highway	Transition	FDOT	19,694	1,772	5.92%	2,106	68.60%	D
Oak Ridge Avenue	SR 16 to Green Cove Avenue	GCS	35	D	1,161	0.59	2	Minor Collector	Urban	FDOT	2,200	198	5.26%	231	19.90%	С
Oak Ridge Avenue	Green Cove Avenue to US 17	GCS	35	D	1,161	3.1	2	Minor Collector	Urban	FDOT	2,200	198	5.26%	231	19.90%	С
Green Cove Avenue	US 17 to Oak Ridge Avenue	GCS	25	D	1,161	1.14	2	Local Road	Urban	FDOT	1,600	144	3.85%	161	13.87%	С
First Coast Expressway	SR 16 to US 17	FDOT	65	D	6,700	6.45	4 - DIV	Freeway	Urban	FDOT	-	-	2.00%	-	0.00%	С
CR 209	East of US 17	Clay County	55	D	2,110	1.69	2	Highway	Rural	All Traffic Data	_	-	0.00%	174	8.25%	С

Attachment B - FDOT Traffic Counts Data

Chindalur Traffic Solutions, Inc.

Table 03
Project Traffic Distribution and Assignment
Preserve at Green Cove Springs TIA, The City of Green Cove Springs, FL

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Roadway From/To		Adopted LOS Peak Hour MSV	Residential Project Traffic Distribution	Residential Project Traffic Assignment	Project Traffic % of MSV	
US 17	Green Cove Springs to SR 16 West	2,920	24.06%	32	1.10%	
US 17	SR 16 West to SR 16 East	3,580	33.73%	45	1.26%	
US 17	SR 16 East to CR 209	3,580	67.04%	88	2.46%	
US 17	CR 209 to CR 226	3,580	30.98%	41	1.15%	
US 17	CR 226 to Putnam County Line	4,460	7.18%	9	0.20%	
SR 16	Oak Ridge Avenue to US 17	2,774	8.47%	11	0.40%	
SR 16	US 17 to Slow Tide Road	3,070	33.31%	44	1.43%	
Oak Ridge Avenue	SR 16 to Green Cove Avenue	1,161	1.33%	2	0.17%	
Oak Ridge Avenue	Green Cove Avenue to US 17	1,161	1.45%	2	0.17%	
Green Cove Avenue	US 17 to Oak Ridge Avenue	1,161	0.00%	-	0.00%	
First Coast Expressway	SR 16 to US 17	6,700	23.81%	31	0.46%	
CR 209	East of US 17	2,110	1.98%	3	0.14%	

Attachment D - Travel Demand Model Plots

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Table 04
Roadway Characteristics Inventory
Preserve at Green Cove Springs TIA, The City of Green Cove Springs, FL

					Adopted		Year 2022	Existing	Year 2027	Year 2027					Year 2027	Year 2027	Roadway	
					LOS Peak		Peak Hour	Conditions	Background	Background	Year 2027	Residential	Project	Roadway	Build-Out	<b>Build-Out</b>	Segment	Year 2027
			Speed	Adopted	Hour	Growth	Traffic	V/C	Peak Hour	Peak Hour	Background	Project Traffic	Traffic	Segment	Peak Hour	Traffic	Adversely	Build-Out
Roadway	Segment	Agency	Limit	LOS	MSV	Rate	Volumes	Ratio	Traffic Volumes	V/C Ratio	LOS	Assignment	% of MSV	Impacted	Traffic Volumes	% of MSV	Impacted	LOS
US 17	Green Cove Springs to SR 16 West	FDOT	35	D	2,920	4.07%	2,435	83.39%	2,973	101.82%	F	32	1.10%	No	3,005	102.91%	No	F
US 17	SR 16 West to SR 16 East	FDOT	55	D	3,580	3.93%	2,172	60.67%	2,634	73.58%	D	45	1.26%	No	2,679	74.83%	No	D
US 17	SR 16 East to CR 209	FDOT	55	D	3,580	5.37%	1,485	41.48%	1,929	53.88%	D	88	2.46%	No	2,017	56.34%	No	D
US 17	CR 209 to CR 226	FDOT	55	D	3,580	2.00%	1,015	28.35%	1,121	31.31%	С	41	1.15%	No	1,162	32.46%	No	С
US 17	CR 226 to Putnam County Line	FDOT	60	В	4,460	6.01%	1,372	30.76%	1,837	41.19%	С	9	0.20%	No	1,846	41.39%	No	С
SR 16	Oak Ridge Avenue to US 17	FDOT	35	D	2,774	4.13%	1,169	42.14%	1,431	51.59%	D	11	0.40%	No	1,442	51.98%	No	D
SR 16	US 17 to Slow Tide Road	FDOT	45	E	3,070	5.92%	2,106	68.60%	2,808	91.47%	D	44	1.43%	No	2,852	92.90%	No	D
Oak Ridge Avenue	SR 16 to Green Cove Avenue	GCS	35	D	1,161	5.26%	231	19.90%	298	25.67%	С	2	0.17%	No	300	25.84%	No	С
Oak Ridge Avenue	Green Cove Avenue to US 17	GCS	35	D	1,161	5.26%	231	19.90%	298	25.67%	С	2	0.17%	No	300	25.84%	No	С
Green Cove Avenue	US 17 to Oak Ridge Avenue	GCS	25	D	1,161	3.85%	161	13.87%	194	16.71%	С	-	0.00%	No	194	16.71%	No	С
First Coast Expressway	SR 16 to US 17	FDOT	65	D	6,700	2.00%	-	0.00%	-	0.00%	С	31	0.46%	No	31	0.46%	No	С
CR 209	East of US 17	Clay County	55	D	2,110	2.00%	174	8.25%	192	9.10%	С	3	0.14%	No	195	9.24%	No	С

Note: A minimum of 2.0% Growth Rate was applied to US 17, First Coast Expressway and CR 209

Chindalur Traffic Solutions, Inc.

Table 05
Intersection Capacity Analysis - HCM Delay and LOS Summary
Preserve at Green Cove Springs TIA, The City of Green Cove Springs, FL

				AM F	Peak	PM Peak			
		Traffic			95th Percentile			95th Percentile	
Intersection	Approach	Control	Delay	LOS	Queue (Feet)	Delay	LOS	Queue (Feet)	
Year 2022 Existing Conditions	1				1			1	
US 17 at Clear Hall Lane	NBL	Yield	8.60	Α	0	0.00	Α	0	
	EB	Stop	15.9	С	0	17.5	С	25	
US 17 at CR 209 South	NDI	Viola	0.00	^	1 0	0.00	^	1 0	
05 17 at CR 209 South	NBL	Yield	0.00	A	0	0.00	A	0	
	SBL	Yield	9.9	A	25	9.5	A	25	
	EB	Stop	18.80	С	0	0.00	A	0	
	WB	Stop	12.5	В	25	11.4	В	25	
Year 2027 Background Conditions									
US 17 at Clear Hall Lane	NBL	Yield	9.10	Α	0	0.00	Α	0	
	EB	Stop	19.6	С	0	22.6	С	25	
	1	1							
US 17 at CR 209 South	NBL	Yield	0.00	Α	0	0.00	Α	0	
	SBL	Yield	11.2	В	25	10.8	В	25	
	EB	Stop	26.70	D	25	0.00	Α	0	
	WB	Stop	15.5	С	50	13.1	В	25	
Year 2027 Build-Out Conditions									
US 17 at Clear Hall Lane	NBL	Yield	11.60	В	25	18.70	С	25	
	EB	Stop	20.7	С	25	24.4	C	25	
US 17 at Proposed Project Access Driveway	WBR	Stop	15.40	С	25	13.90	В	25	
LIC 17 at CD 200 Cauth	NDI	Viold	0.00	^	1 0	0.00	^	1 0	
US 17 at CR 209 South	NBL SBL	Yield	0.00 12.3	A B	0 25	0.00	A B	0 50	
		Yield			_	12.8			
	EB	Stop	29.00	D	25	0.00	A	0	
	WB	Stop	19.1	С	75	16.3	С	50	
CR 209 South at Project Access Driveway	EBL	Yield	7.60	А	0	7.60	А	25	
=====	SB	Stop	9.4	Α	25	9.2	A	0	

Attachment H - HCM Worksheets

Chindalur Traffic Solutions, Inc.

### Attachment A

Project Site Plan Source: Matthews Design Group, Inc.

SITE	DATA TABLE				
TOTAL SITE AREA	13.93 AC	606,739 SF			
PROPOSED BUILDING		100,285 SF			
PROPOSED IMPERVIOUS AREA		210,773 SF			
PROPOSED POND AREA (NWL)		47,788 SF			
PROPOSED RECREATION AREA		125,720 SF			
TOTAL IMPERVIOUS		358,847 SF			
TOTAL PERVIOUS	247,892 S				
TOTAL IMPERVIOUS %		59%			
TOTAL PERVIOUS %		41%			
% BUILDING COVERAGE		17%			
TOTAL FLOOR AREA		354,174 SF			
FLOOR AREA RATIO (FAR)		58.4%			
PARCEL NUMBER(S)	31	3-06-26-016499-007-00			
911 ADDRESS	US HIGHWAY 1	7 AND CR 209 SOUTH			
FEMA PANEL NUMBER		12019C0283E			
FLOOD ZONE		ZONE X & A			

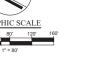
LCUI	LATIONS
=	457 SPACES
=	467 SPACES
	=

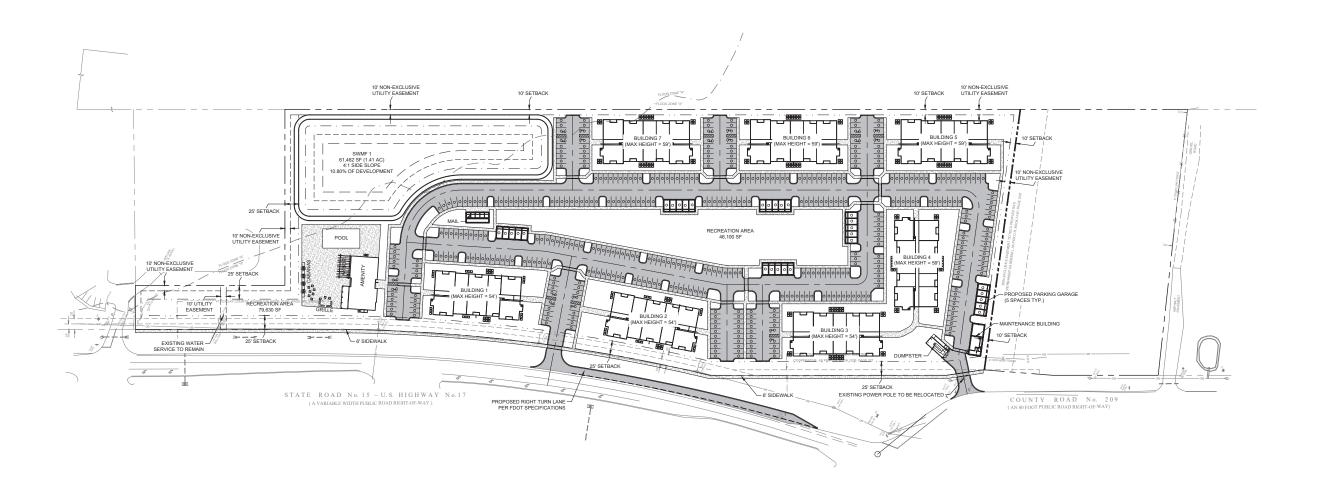
Ι	DENSITY	
MAXIMUM ALLOWED DENSITY	=	278 UNITS
		20 UNITS / ACRE
DENSITY AS DEPICTED	=	260 UNITS

CONCEPT SITE PLAN IS SUBJECT TO REVISIONS BASED ON FINAL SITE PLAN APPROVAL AND CONSTRUCTION PLAN APPROVAL

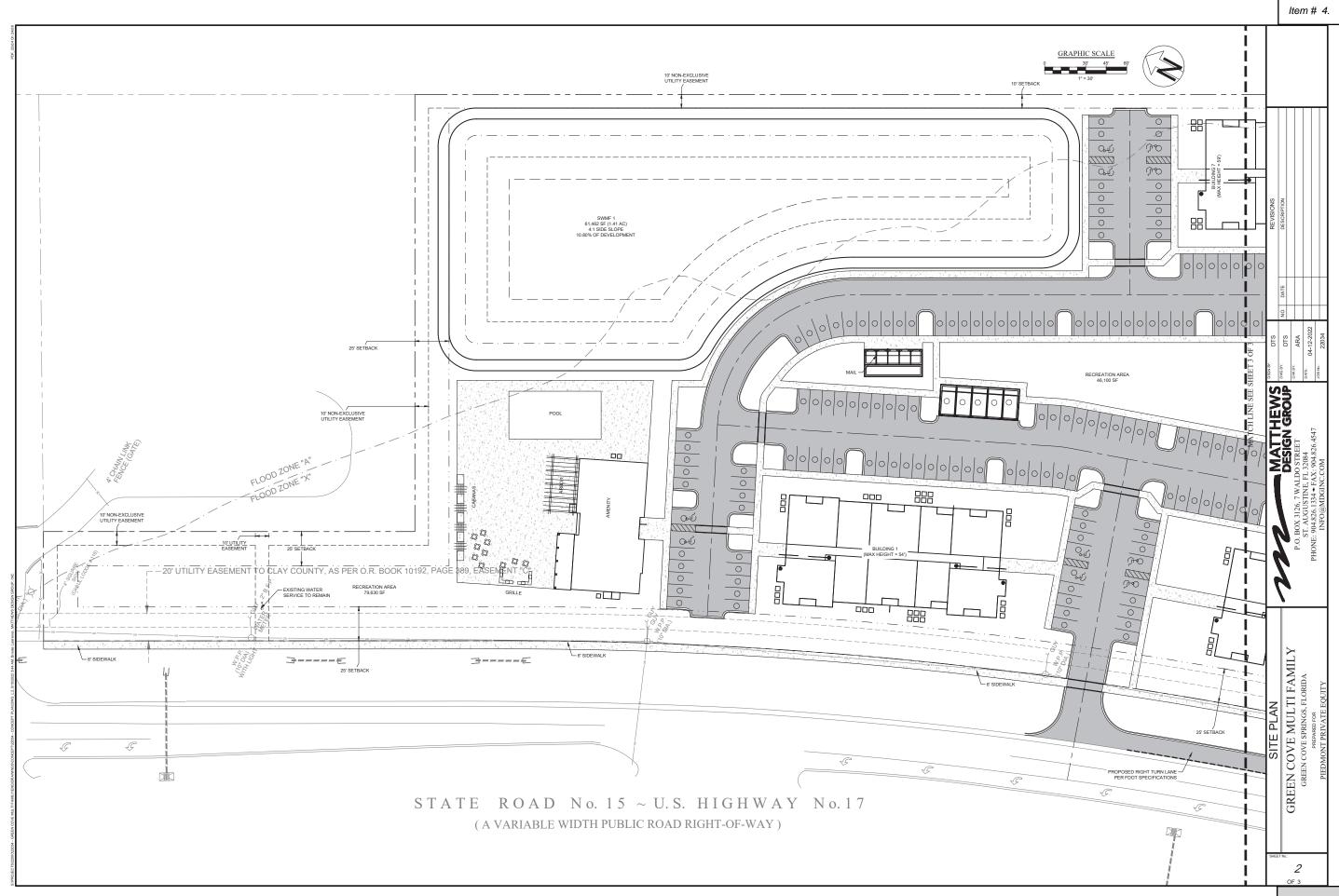
HATCH LEGEND									
ASPHALT PAVEMENT									
CONCRETE SIDEWALK									

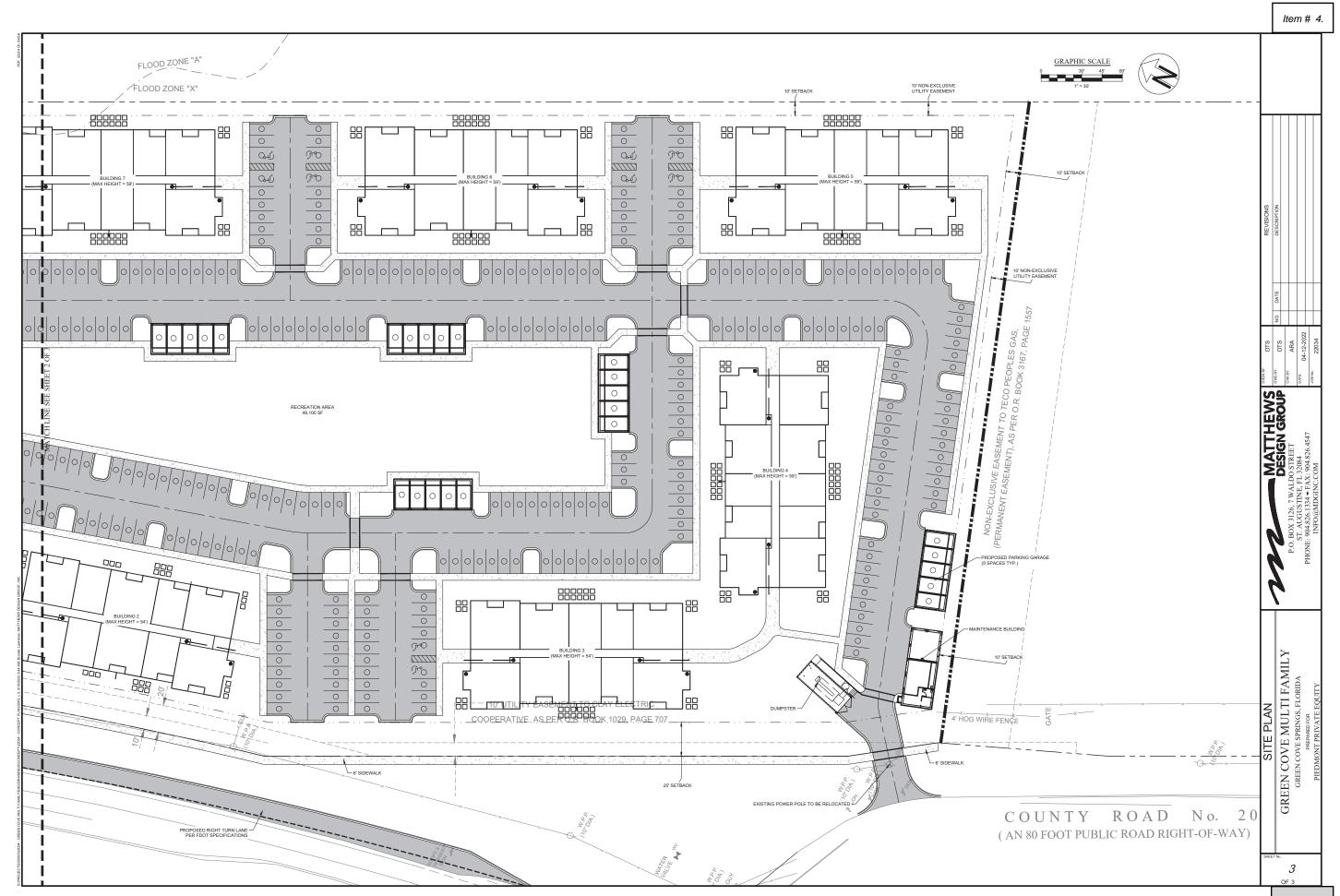






MASTER SITE PLAN
GREEN COVE MULTI FAMILY
GREEN COVE SPRINGS, FLORIDA





## Attachment B

Methodology Document

Item # 4.

**To: Mr. Michael Daniels, AICP**Planning and Zoning Director
City of Green Cove Springs, FL

From: Rajesh K. Chindalur, P.E., PTOE
Project: Green Cove Springs – Multi-family
Client: PC Acquisitions, LLC
Project No.: 1146-220-007

Date: 05/03/2022

#### Introduction:

A multi-family residential development that is anticipated to include 260 units is proposed for construction in the City of Green Cove Springs, FL. The proposed development will be located on the northeast quadrant of US 17 and CR 209. Access to the proposed development will be provided via a right-in-right-out driveway on US 17 and a second driveway on CR 209. The following methodology will be adopted to complete the traffic impact study (TIS) to determine the impacts of the proposed development. A copy of the site plan provided by Matthews Design Group, Inc. is included as **Attachment A**.

#### Trip Generation:

Trip generation and for the proposed residential portion of the development will be estimated using the rates and equations included in the Trip Generation Manual, 11<sup>th</sup> Edition published by the ITE. Attached **Table 01** summarizes the Daily, AM and PM peak trips anticipated by the proposed development. As shown in this table, the proposed residential development is anticipated to generate 1,742 Daily trips which includes 103 AM peak and 132 PM peak trips.

#### Study Roadway Segments and Intersections:

Since the proposed development is anticipated to generate a total of 132 PM peak trips (greater than the 50 PM peak trips threshold), the study area will include all the roadway segments and intersections where in the project traffic is anticipated to be equal to or greater than five percent (5%) of the roadway segment adopted LOS maximum service volume (MSV). **Table 02** shows the existing conditions of the roadway segments within the vicinity of the proposed development. The existing conditions data for the study roadway segments were obtained from the FDOT traffic counts and Clay County Transportation Analysis Spreadsheet.

#### Planned and Programmed Roadways:

The County Capital Improvement Plan (CIP), FDOT Planned and Programmed Improvements and NFTPO LRTP will be reviewed to determine any planned and programmed roadways within study roadway segments. The following projects are anticipated to be planned and programmed roadways:

First Coast Expressway – SR 16 to US 17

#### **Project Traffic Distribution & Assignment:**

Project traffic distribution percentages on the study roadway segments using the interim year 2025 NERPM\_ABv3 travel demand model run. **Attachment B** includes copies of the travel demand model plots. **Table 03** summarizes the project traffic distribution and assignment on the roadway segments in the vicinity of the proposed development.

#### **Future Traffic Volumes:**

The proposed development is anticipated to be constructed and occupied by the end of year 2025. However, the traffic impact analysis will be performed under the year 2027 conditions. The future traffic volumes on the study roadway segments were estimated by applying a growth rate to the year 2019 and 2022 traffic volumes. The growth rate was estimated by performing trends analysis of the study roadway

Item # 4.

segments historical AADT. The historical AADT of the study roadway segments was obtained from the FDOT Traffic Counts Online Portal. **Attachment C** includes copies of the historical AADT, and the trends analysis of the study roadway segments.

#### **Roadway Segment Analysis:**

The segment analysis of the study area roadway segments will be performed to determine any impacts and adverse impacts due to the additional trips from the proposed development. The roadway segment will be considered impacted if the project traffic assignment (new trips) is equal to or greater than 5% of its adopted LOS maximum service volume (MSV). A study area roadway segment will be considered adversely impacted if that roadway segment is impacted (project new trips 5% of its adopted LOS MSV) and the total traffic (Existing trips + Reserved Trips + New Project Traffic) exceed 100% of the roadway segments adopted LOS MSV. **Table 04** summarizes the roadway segments analysis of the study roadway segments. As shown in this table, none of the study roadway segments are anticipated to be either impacted or adversely impacted under the build-out conditions of the proposed development.

#### **Access Intersections:**

Based on the discussions with FDOT staff, the project access on US 17 will be a right-in-right-out just north of CR 209 intersection and a full access roadway connection on CR 209 South just east of US 17. The above-mentioned access locations are shown in previously mentioned site plan. FDOT staff require the access evaluation to determine the following:

- The need for a northbound right turn lane on US 17 at the proposed project access driveway
- Adequacy of the existing southbound left turn lane on US 17 at CR 209 South intersection

#### **Intersection Capacity Analysis:**

Since the project traffic is not anticipated to be equal or greater than the study roadway segments' adopted LOS maximum service volume (MSV), intersection analysis other than the above stated intersections is not anticipated to be required.

#### **TIA Report:**

A report summarizing the above tasks and the outcome of the analysis will be prepared for submittal to FDOT and the City of Green Cove Springs.

If you have any questions or comments, please give me a call at (904) 422 6923.

Sincerely, Chindalur Traffic Solutions, Inc.

Rajesh K. Chindalur, P.E., PTOE 8833 Perimeter Park Boulevard, Suite 103, Jacksonville, FL 32216 (904) 619-3368 | Chindalur@ctrafficsolutions.com

cc: Mr. John Cattano (cattanoj@aol.com)

Ms. Ellen Avery Smith (eaverysmith@rtlaw.com)

# Attachment C

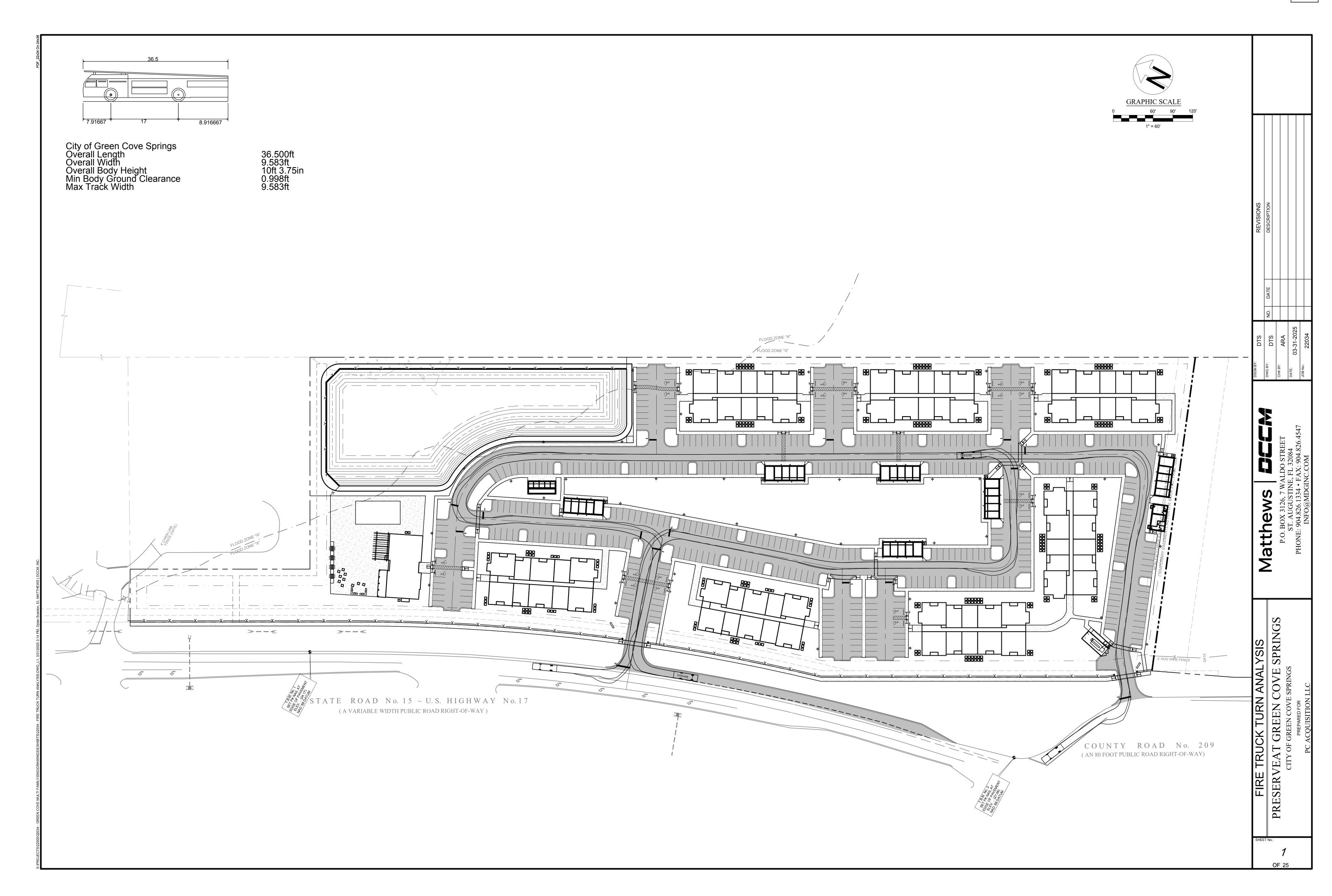
Planned and Programmed Improvements

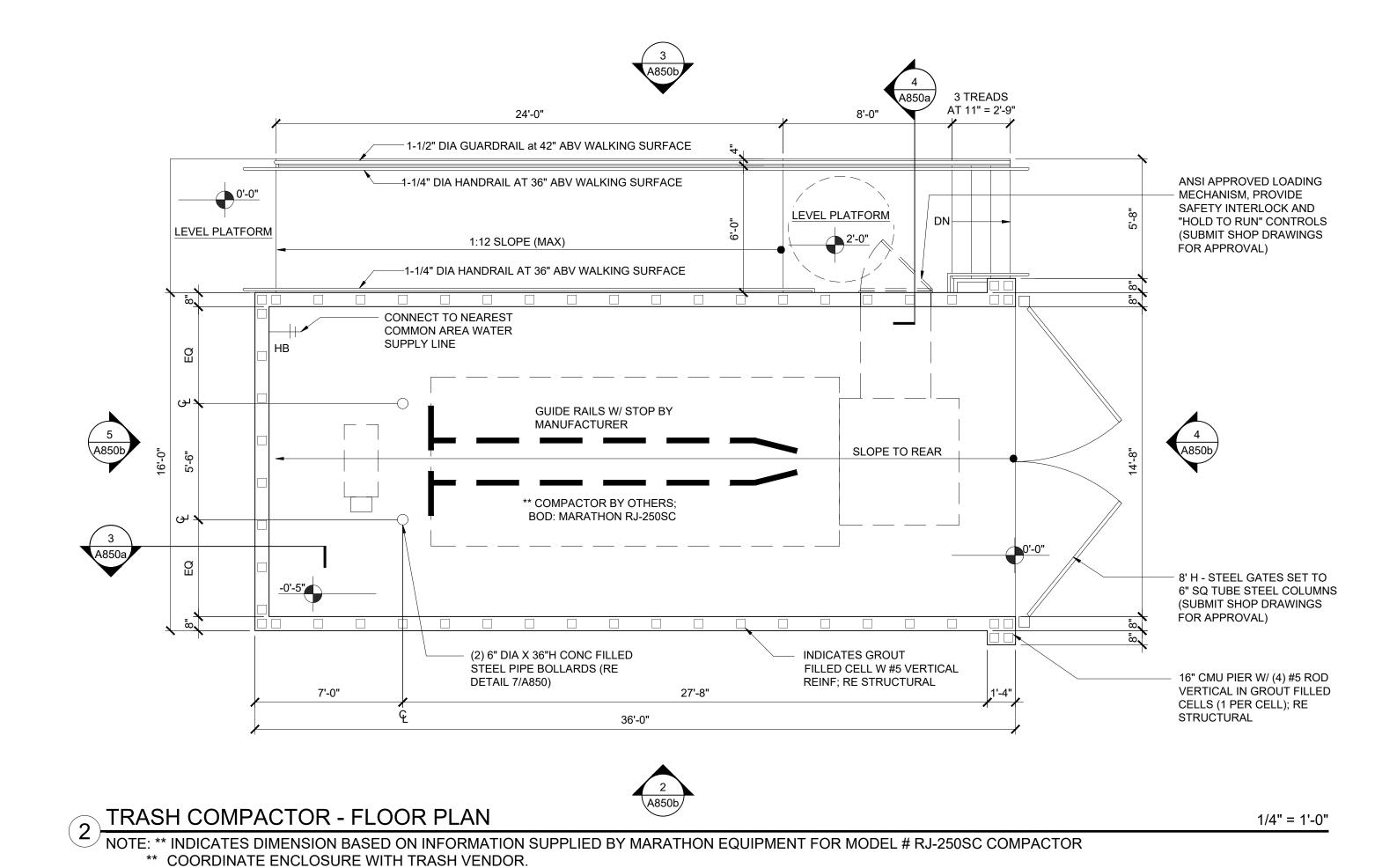
Attachment C Planned and Programmed Improvements in Clay County, Florida **Green Cove Springs Multi-family TIA** 

							Consti	ruction
Project Description	Project Limits	Length	No. Of Lanes	Description	Budeget		Start Date	End Date
Middleburg, CR 218	Cosmos Ave to Pine Tree Lane	2.7	4	Widen from 2 to 4 Lanes	\$	21,116,633.00	Summer 2022	Fall 2024
Lake Asbury CR 209 (Russell Rd)	CR 315B to US 17 and from CR 315 to South of Peter's Creek	1.1	4	Widen from 2 to 4 Lanes	\$	11,318,996.00	Summer 2022	Summer 2024
Lake Asbury CR 209 (Russell Rd),	Sandridge Road to Peter's Creek Bridge	3.1	3	Widen from 2 to 3 Lanes	\$	20,600,481.00	Summer 2023	Fall 2024
Lake Asbury CR739B (Sandridge)	Henley Road to CR 209 (Russell)	2.8	3	Widen from 2 to 3 Lanes	\$	18,933,785.00	Spring 2023	Fall 2024
Middleburg, CR 220	Baxley Road to West of Henley Road	1.2	4	Widen from 2 to 4 Lanes	\$	11,101,379.00	Summer 2022	Fall 2024
Green Cove Springs / Lake Asbury (First Coast Connector)	Maryland Avenue to US 17	1.2	4	Widen from 2 to 4 Lanes	\$	9,604,889.00	Fall 2022	Summer 2024
Green Cove Springs (First Coast Connector)	SR 23 to CR 315/Maryland Ave Intersection	3.3	2	New 2 Lane Roadway	\$	38,553,380.00	Fall 2022	Summer 2024
					\$	131,229,543.00		

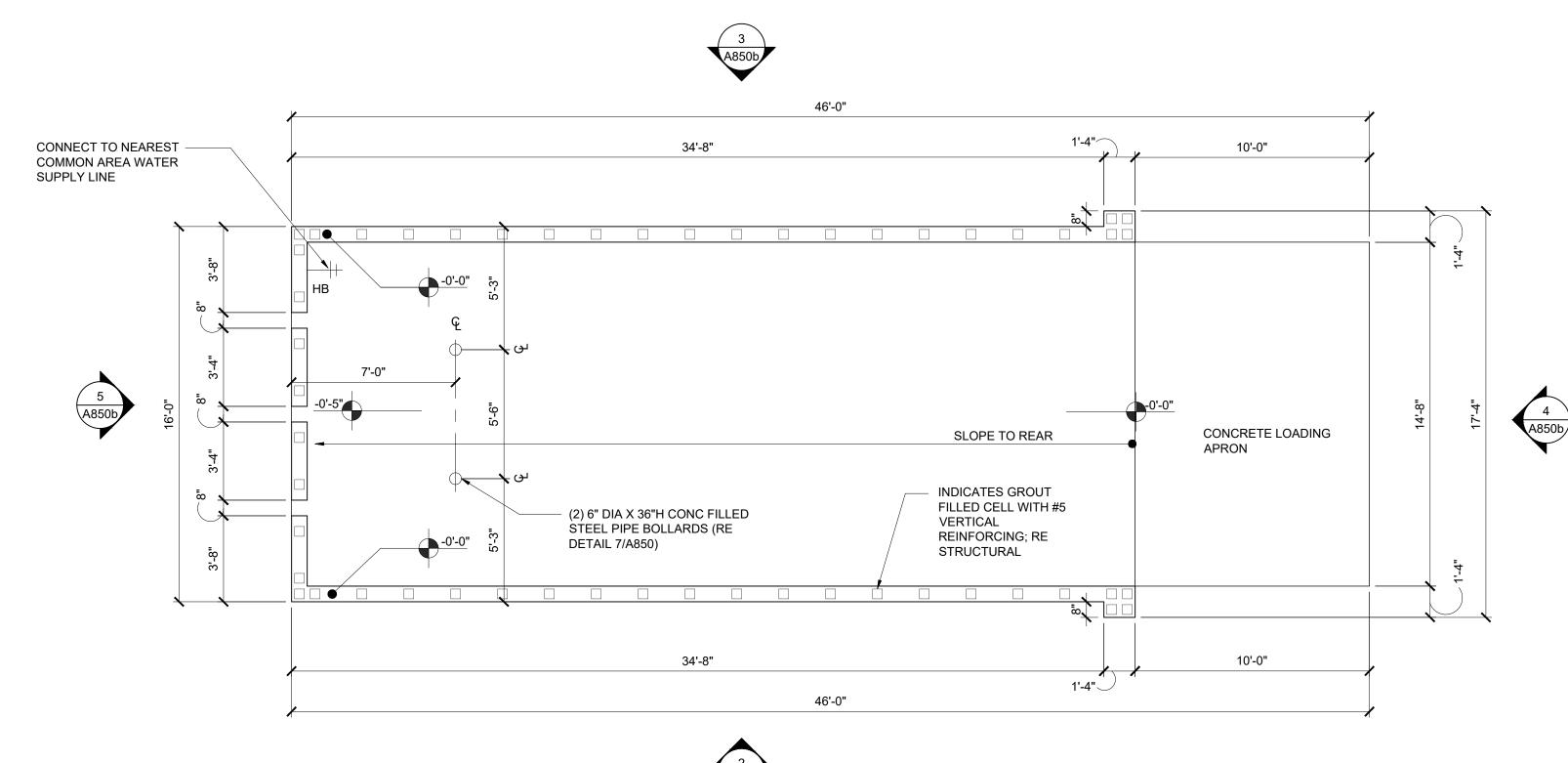
Source: https://www.claycountygov.com/government/bonded-transportation-program

Chindalur Traffic Solutions, Inc.





- ROUNDED CONCRETE CAP STEEL CAP WELDED TO UNFINISHED CMU FACE - SPLIT FACE BLOCK WALL, PAINTED GROUT FILLED, 6" TUBE STEEL GATE POST - REINFORCED CONC SLAB CONCRETE CURB (SEE FOUNDATION PLAN) BEYOND, SEE PLAN FOR CUTOUT LOCATIONS CONC FOUNDATION EXTENDING 6" BEYOND EDGES OF STEEL TUBE; RE STRUCTURAL RE STRUCTURAL



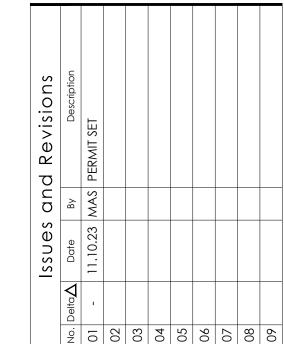


DO NOT SCALE THE DRAWINGS. IF NOT SHOWN, VERIFY CORRECT DIMENSIONS WITH THE ARCHITECT. SCALE NOTED IS FOR FULL "ANSI-D" SIZE PRINTS. CONTRACTOR SHALL CHECK & VERIFY ALL JOB SITE CONDITIONS.

© 2023 G4 Architectural Services LLC.

OF SOUTH KARIE L. KOVACOCY Jacksonville, FL OTERED ARCH 10195





Project Number: 23.5002.00 Drawn By: TJV

Checked By: JAX Project Name:

RENTAL COMMUNITY

TRASH COMPACTOR

Drawing Name:

1/4" = 1'-0"

ENCLOSURE, PLANS AND DETAILS

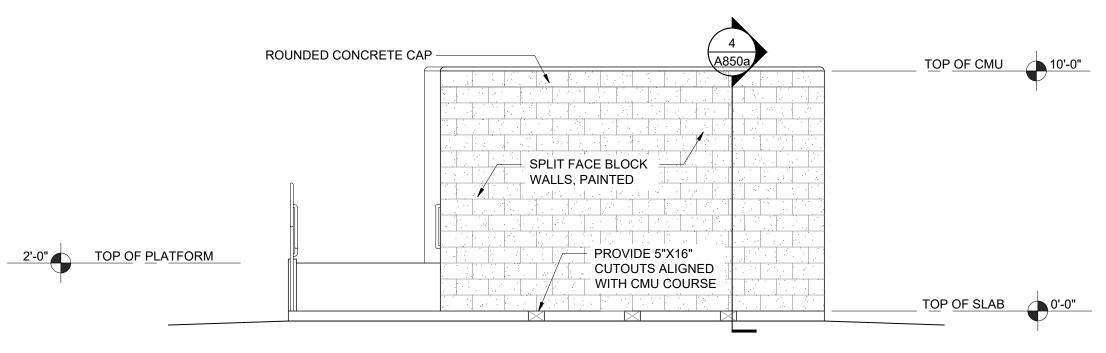
1/4" = 1'-0"

SLAB / WALL SECTION DETAIL

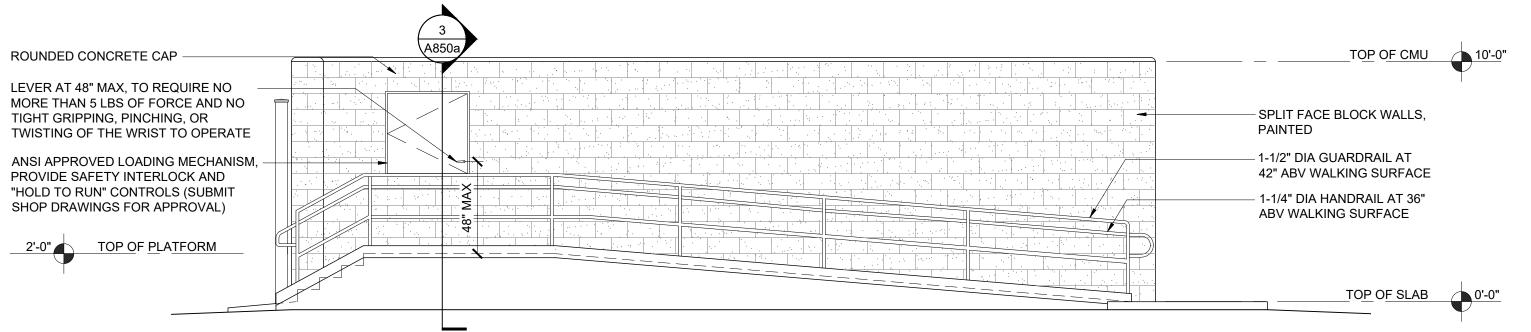
\*\* COORDINATE ENCLOSURE WITH TRASH VENDOR.

1/2" = 1'-0"

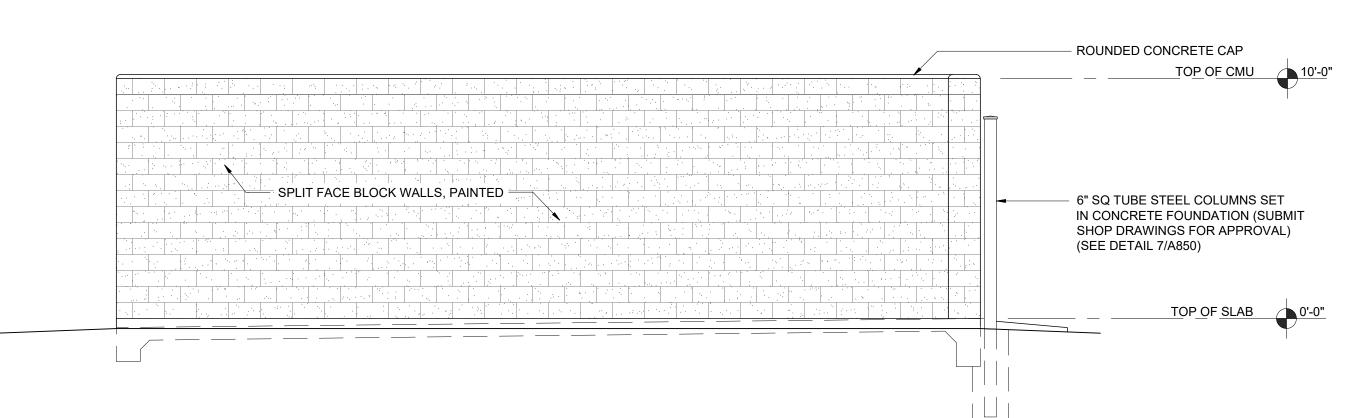
# TRASH COMPACTOR - EXTERIOR ELEVATION 1/4" = 1'-0"



# TRASH COMPACTOR - EXTERIOR ELEVATION 1/4" = 1'-0"



# TRASH COMPACTOR - EXTERIOR ELEVATION



TRASH COMPACTOR - EXTERIOR ELEVATION

1/4" = 1'-0"

1/4" = 1'-0"

Architectural Services, LLC

architecture | interiors | planning

1939 Hendricks Avenue Jacksonville, Florida 32207 904.353.5900 [0] 904.353.5968 [f]

PLANS, DESIGN CONCEPTS, WRITTEN MATERIALS & DRAWINGS ARE NOT TO BE REPRODUCED, ALTERED, COPIED IN ANY FORM OR MANNER, NOR ASSIGNED TO ANY PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF GROUP 4 DESIGN ARCHITECTURAL SERVICES LLC.

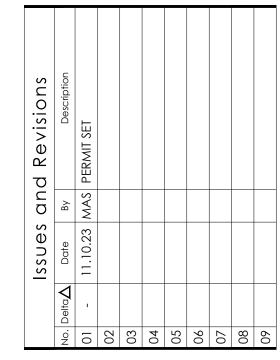
**DO NOT SCALE THE DRAWINGS.** IF NOT SHOWN, VERIFY CORRECT DIMENSIONS WITH THE ARCHITECT. SCALE NOTED IS FOR FULL "ANSI-D" SIZE PRINTS.

CONTRACTOR SHALL CHECK & VERIFY ALL JOB SITE CONDITIONS.

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Project Number: 23.5002.00

Drawn By: TJV

Checked By: JAX

Project Name:

RENTAL COMMUNITY

Drawing Name:

TRASH COMPACTOR



ENCLOSURE, PLANS AND DETAILS



# City of Green Cove Springs Site Plan Application

FOR OFFICE USE ON	LY	Item # 4
P Z File #		nem# 4
Application Fee:	TARREST !	
Filing Date:	Acceptance Date:	
Review Type: SRDT	P&Z CC C	

	Site Plan Application	Review Type: SRD	TO P&ZO CC
١.	PROJECT	required spin coupe	The second second second second second
	Project Name: Preserve at Green Cove Spring	s	AND
	Address of Subject Property: US 17 & CR 209		
	Parcel ID Number(s): 38-06-26-016499-007-01	- De Prior, par A	the model for a \$50 disease to the
	Existing Use of Property: unimproved land		
	Future Land Use Map Designation : mixed-use	or the later with each	bil) is a line of the flow and delegation
	Zoning Designation: PUD		
	Acreage: 13.92		
	APPLICANT	d'a mais time d	
	Applicant's Status	⊠ Agent	
	Name of Applicant(s) or Contact Person(s): Eric Conkrig	ht	Title:
	Company (if applicable): PC Acquisition, LLC		
	Mailing address: 1 Concourse Pkwy, Ste 800	THE RESERVE	AND THE PARTY OF T
		State: GA	ZIP: 30328
	Telephone: ()404-625-6373 FAX: ()	e-mail: er	ic@piedmontpe.com
	If the applicant is agent for the property owner*:		
	Name of Owner (title holder): Virginia S. Hall Revocable Trust, J.P. Hall	Jr Second Amended and Re	estated Revocable Trust, CHS LLC, Lyman G. Hall
	Company (if applicable):		
	Mailing address: 2321 Egremont Drive		
	City: Orange Park	State: FL	ZIP: 32073
			giniashall@msn.com
	* Must provide executed Property Owner Affidavit authorizing the	he agent to act on bel	half of the property owner.
	ADDITIONAL INFORMATION		
	1. Is there any contract for sale of, or options to purchase the sa	ubject property?	☑ Yes ☐ No
	If yes, list names of all parties involved: PC Acquisitio	n, LLC	23,12 (6-6-4) 3 3 3 3
	If yes, is the contract/option contingent or absolute?	☑ Contingent	☐ Absolute

City of Green Cove Springs Development Services Department ◆321 Walnut Street ◆ Green Cove Springs, FL 32043◆(904) 297-7500

- a. Based on size of site:
  - i. For sites <10,000 s.f. \$500
  - ii. For sites >10,000 s.f.- \$1,000 + \$20 per acre
- b. All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees necessary for technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

All 6 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Signature of Applicant	Signature of Co-applicant
Eric Conterialist	
Typed or printed name and title of applicant	Typed or printed name of co-applicant
3/10/2025 Date	Date
	nty of folsyth
The foregoing application is acknowledged before me	this 10 day of MARCH 205 by ERIC
The foregoing application is acknowledged before the	uns day of, 23, 5)
CONTRACT	o me or who has/have produced DRIVERS LICENSE
CONKRIGHT who is/are personally known to	me, or who has/have produced Bic veics Cicling
as identification.	111
as identification.	WW
NOTARY SEAL	
NOTARY SEAL	- coper
NOTARY SEAL	Signature of Notary Public, State of
NOTARY SEAL	Signature of Notary Public, State of
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**Planning & Zoning** 

321 Walnut Street, Green Cove Springs, FL 32043 904-297-7051

#### APPLICATION DEFICIENCY NOTICE

**DATE:** April 21, 2025

APPLICATION REFERENCE: Alex Acree, SPL-25-001 - US HIGHWAY 17

Dear Applicant:

The items you submitted for the above-referenced permit have been reviewed by the City representatives responsible for approving different aspects of your application. Attached to this notice is a list of comments in response to the materials submitted.

Each of the items on the attached list require responses and revised materials be created and resubmitted before any further action can be taken on this permit. A hold is placed on this application and the time it takes you to respond to this list of items is excluded in calculating permit processing timeframes. Once corrected and/or new materials are submitted, your permit processing timeframe will begin again.

A complete response to each of the items on the attached list is required to be submitted **at the same time.** As applicable, a complete response is required to include:

- 1. A written document addressing all of your responses (one paper copy).
- 2. New and/or updated technical reports (one paper copy).
- New and/or corrected plans. Please note that revisions to previously submitted plans
  are required to be identified by clouding, must be noted in a revision list on the plan
  sheet(s), and are required to be incorporated into a full set of revised plans (one paper
  copy).
- 4. A transmittal that itemizes everything being resubmitted (one paper copy).
- 5. A copy of the entire resubmittal must be provided electronically (either on a thumb drive or uploaded via the permit portal).

Your response must be received by our Department within 180 days of the date noted on this letter to avoid this application being withdrawn from consideration. Withdrawn application must be resubmitted as new applications requiring repayment of all applicable fees and processing requirements.

Thank you for your anticipated cooperation in submitting the items requested by staff. We look forward to working with you as this application continues to be processed.

#### APPLICATION DEFICIENCY NOTICE

**DATE:** April 21, 2025

**APPLICATION REFERENCE:** Alex Acree, SPL-25-001

#### FIRE DEPARTMENT COMMENTS - contact Sandra Boike (sandra.boike@claycountygov.com)

- 1. Fire#1 Review NFPA 1:18.4.5.3. Fire Flow requirements. Provide adequate fire hydrants as required based on the needed fire flow. Fire flow requested at SDRT.
- 2. Fire#2 Provide Autoturn analysis for fire truck apparatus be sure to include a vehicle clearance envelope and display. NFPA 1141:5.2 and NFPA 1:18. Access required to be provided with no impediment into parking, landscape features or structures. Apparatus Specifications:

Engine 15 Year- 2021

Make-Pierce

Model- Enforcer

Height - 10' 3.75"

Length- 36'5

Width- 9'7 (mirror to mirror),

9' (Engineers step to Officers step)

Ladder Year- 2017 Make-Pierce Chassis- Arrow XT Height- 123

Length- 406

Width 10 (mirror to mirror)

Fire#3 Where multiple means of access are required, they shall be located as remotely from each other as practical and acceptable to the AHJ. NFPA 1141:5.1.4.4

Fire#4 Will there be gates?

#### STORMWATER CONSULTANT COMMENTS - contact Charlie Sohm (csohm@baxterwoodman.com)

Approved with Conditions: Show rip rap apron for outfall pipe on plans. Also ensure outfall MES and apron are either on subject parcel or have a drainage easement from the neighboring property.

#### **ELECTRIC COMMENTS** - contact Steven Tye (stye@greencovesprings.com)

Approved with Conditions: Coordinate with Steve Tye, Cell:(904)860-9411, GCSE Dept. All electric requirements for all buildings needed to build required UG electric system.

#### **APPLICATION DEFICIENCY NOTICE**

**DATE:** March 24, 2025

**APPLICATION REFERENCE:** Alex Acree, SPL-25-001

**STORMWATER CONSULTANT COMMENTS** - contact Charlie Sohm (csohm@baxterwoodman.com)

Approved with Conditions: Show rip rap apron for outfall pipe on plans. Also ensure outfall MES and apron are either on subject parcel or have a drainage easement from the neighboring property.